3.3.3 Number of papers published per teacher in the Journals notified on UGC -CARE list in the UGC website/Scopus/ Web of Science/ PubMed during the year

Sr.No.	Scopus/WOS/ PubMed ID/UGC Care No.	Publication Type	Publication Title	Author-name	Journal-name	Year
1	2349-8234	UGC-CARE	Ayurvedic management of fibroadenoma - A single case report	Dr Jayashree Deshmukh	Journal of Pharmacognosy and Phytochemistry	Jun-24
2	2349-8234	UGC-CARE	Ayurvedic regimen on Pittaj mutrakrucchra (Lower urinary tract infection) in child	Dr. Kavita Kishor Fadanavis	Journal of Pharmacognosy and Phytochemistry	Jun-24
3	2349-8234	UGC-CARE	Ayurvedic management of male infertility: A case study	Dr Jayashree Deshmukh	Journal of Pharmacognosy and Phytochemistry	Jul-24
4	2349-8234	UGC-CARE	A case study on Amavata (Rheumatoid arthritis)	Dr. Vitonde Y.A.	Journal of Pharmacognosy and Phytochemistry	Aug-24
5	2277-4343	UGC-CARE	Management of Cerebrovascular Accident Through Panchakarma Therapy- A Case Study	Dr. Neralkar U.K	IJRAP	Aug-24
6	2349-8234	UGC-CARE	A review article: Conceptual study for Gridhrasi management	Dr. Naresh R. Nimbalkar Dr. Shrikant G. Deshmukh	Journal of Pharmacognosy and Phytochemistry	Aug-24
7	-	UGC-CARE	Desh ka Prakriti Parikshan- Future scope and new avenues for Ayurveda	Dr. Shrikant G. Deshmukh	CSMSS International Journal of ISM	Aug-24

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Sr.No.	Scopus/WOS/ PubMed ID/UGC Care No.	Publication Type	Publication Title	Author-name	Journal-name	Year
8	2349-8234	UGC-CARE	Evaluation of therapeutic efficacy of Shamana therapy and lifestyle modifications in the management of polycystic ovarian disease: A case study	Dr. Amol Anandrao Havale	Journal of Pharmacognosy and Phytochemistry	Sep-24
9	2349-6002	UGC-CARE	Ayurvedic Management of Pandu A Single Case Study	Dr. Pooja Pardeshi	IJIRT	Sep-24
10	2349-8234	UGC-CARE	Ayurvedic review on Pathya Apathya in Kamala Vyadhi	Dr. Yashashri A Vitonde	Journal of Pharmacognosy and Phytochemistry	Oct-24
11	2320-7329	UGC-CARE	Clinical trial to study the effect of Ramraksha stotra Mantra as. Daivavyapashray Chikitsa in the management of Chittodvega –A pilot study.	Dr. Yashashri A Vitonde	NATIONAL JOURNAL OF RESEARCH IN AYURVED SCIENCE	Oct-24
12	0976-5921	UGC-CARE	Ayurvedic Management of Overweight child with Panchagavya Therapy – A Case Report	Dr. Kavita Kishor Fadanavis	International Journal of Ayurvedic Medicine	Oct-24
13	ISSN NO: 0022-1945	UGC-CARE	A Survey on the Awareness of Periodontal diseases and their Impact on Systemic Health among Ayurvedic Doctors	Dr Jayashri Deshmukh	CSMSS JOURNAL OF INNOVATIVE DENTISTRY (CJID)	Nov-24
14	-	UGC-CARE	Pakshaghat Rehabilitation Through Ayurveda: A Pathway to Better Quality of Life	Dr. M.R. Survase	CSMSS JOURNAL OF INNOVATIVE DENTISTRY (CJID)	Dec-24

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Sr.No.	Scopus/WOS/ PubMed ID/UGC Care No.	Publication Type	Publication Title	Author-name	Journal-name	Year
15	2349-5138	UGC-CARE	Dhatusamya: The Ayurvedic Concept of Homeostasis and its Clinical Significance	Dr. Anjali Hingane	International Journal of Research and Analytical Review	Dec-24
16	2278-4136	UGC-CARE	Role of Ksharsutra in infected Pilonidal Sinus: A Case Study	Dr. B.N. Gadve	Journal of Pharmacognosy and Phytochemistry	JAN. 2025
17	2278-4136	UGC-CARE	A Case Study on Ayurvedic Management of Urethral Stricture in an elderly male through Uttar Basti with Til Taila	Dr. B.N. Gadve	Journal of Pharmacognosy and Phytochemistry	Jan-25
18	E-ISSN 2348-1269	UGC-CARE	Pharmacognostical Study ofAsperagus Racemosus - From the view of Ayurveda and Botanical Approach	Dr. Aparna M. Ghotankar	International Journal of Research and Analyatical Review	Jan-25
19	2456-5601	UGC-CARE	Efficacy of Mahatiktakam Ghrita as Avapeedak Snehapan in the management of Rakta Arsha (First-Degree Bleeding Hemorrhoids): A Study Protocol for a Single-Arm, Open-Label Clinical Trial	Dr. Megha Raosaheb Survase	Journal of Research in Ayurvedic Sciences	Jan-25
20	E-ISSN: 2278-4136	UGC-CARE	Ayurvedic Management of Kaphaj Kasa: A Case Study	Dr. Naresh R. Nimbalkar Dr. Shrikant G. Deshmukh	Journal of Pharmacognosy and Phytochemistry	Feb-25

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Sr.No.	Scopus/WOS/ PubMed ID/UGC Care No.	Publication Type	Publication Title	Author-name	Journal-name	Year
21	E-ISSN: 2278-4136	UGC-CARE	Role of Ayurveda In Premenopausal Syndrome	Dr. Amol Havale	Journal of Pharmacognosy And Phytochemistry	Feb-25
22	2278-4136	UGC-CARE	Role of Nirgundi Tail in the Management of Dushta Vran as a Shodhan and Ropan Karm	Dr. B.N. Gadve	Journal of Pharmacognosy and Phytochemistry	FEB. 2025
23	2278-4136	UGC-CARE	A Complete Analysis and Management of Bhagandar in the recent era.	Dr. B.N. Gadve	Journal of Pharmacognosy and Phytochemistry	FEB. 2025
24	E-ISSN: 2278-4136	UGC-CARE	To study efficacy of Nimba on Yonikanda WSR to pruritus vagina	Dr.. Jayashree S Deshmukh	Journal of pharmacognosy and phytochemistry	Mar-25
25	ISSN: 2455-6211	UGC-CARE	Ayurvedic management of primary desmenorrhea with sahchar tail matrabasti and shankh vati w.s.r. nasti vatadrute vedana – a case report	Dr Jayashree Deshmukh	International Journal of All Research Education & Scientific Methods	Mar-25
26	2278-4136	UGC-CARE	An analysis of Shashti Upkrama by Acharya Shusruta in Vrana Management	Dr. Swapnil More Dr. Swapnil More Dr. B.N. Gadve	Journal of Pharmacognosy and Phytochemistry	Mar-25
27	2320-2882	UGC-CARE	Efficacy of Yashtimadhu Ghrita in the Management of Parikartika (Acute Fissure-in-Ano)	Dr. B.N. Gadve	International Journal of Creative Research thoughts (IJCRT)	Mar-25

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28	eISSN-2321-1563	UGC-CARE	Ayurvedic Management of Diabetic Wound-A Case Study	Dr. Gadve B.N.	Journal of Ayurveda & Holistic Medicine	Mar-24
29	E-ISSN 2348-1269	UGC-CARE	Importance of Yukti (Logical Reasoning) in Ayurvedic Treatment and Research	Dr.Ujwala Upadhyay Dr. Smita Aswar	International Journal of Research and Analyatical Review	Mar-25
30	E-ISSN: 2278-4136	UGC-CARE	Assessing the efficacy of Erandamuladi Niruha Basti in the management polycystic ovarian syndrome in reproductive age women: A pilot study analysis	Dr. Yennawar Sandhya . Dr. Deshmukh JS	Journal of pharmacognosy and phytochemistry	Apr-25
31	E-ISSN: 2278-4136	UGC-CARE	Role of ayurvedic medicines in the management of Pandu Roga: A Case study	Dr. Shrikant Deshmukh	Journal of pharmacognosy and phytochemistry	Apr-25
32	E-ISSN: 2278-4136	UGC-CARE	A Review Article on Aamvat	Dr. Naresh R. Nimbalkar Dr. Shrikant G. Deshmukh	Journal of Pharmacognosy and Phytochemistry	Apr-25
33	E-ISSN: 2278-4136	UGC-CARE	Conceptual Study of Margag Dhatu with Special reference to Vitamin D, Vitamin B12, and Serum Calcium as Margag Dhatu of Asthi	Dr. Avinash M. Deshmukh Dr. Deepali J. Amale	Journal of Pharmacognosy and Phytochemistry	Apr-25
34	E-ISSN: 2278-4136	UGC-CARE	Conceptual Study of Majjadhatu Mulasthan Vikruti in Pakshaghata with Special reference to gait.	Dr. Priyanka Thakare Dr. Vidya Honde	Journal of Pharmacognosy and Phytochemistry	Apr-25

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35	E-ISSN: 2278-4136	UGC-CARE	Management of allergic rhinitis with Nasya and Shaman Aushadhi: A case report	Dr Jayashree Deshmukh	Journal of Pharmacognosy and Phytochemistry	Apr-25
36	ISSN: 2455-6211	UGC-CARE	Ayurvedic Insights into PCOD Management: A Case Study	Dr. Vidya Honde Dr. Priyanka Thakare	International Journal of All Research Education and Scientific Methods (IJARESM)	Apr-25
37	E-ISSN: 2278-4136	UGC-CARE	Comparative Antiseptic activity of Sarjarasa Malahar; when prepared with or without Tuttha: A randomized clinical trial	Dr. Vidya Honde Dr. Priyanka Thakare	Journal of Pharmacognosy and Phytochemistry	May-25
38	ISSN NO: 0022-1945	UGC-CARE	Role of Praval Panchamrut in the management of Amlapitta (Peptic Ulcer) W.S.R. Bhaishajya Ratnavali	Dr. Tushar Sheshrao Dhawali	Journal of Interdisciplinary Cycle Research	May-25
39	E-ISSN: 278-4136	UGC-CARE	Ayurvedic management of Panduroga: A case study	Dr. Amol Badarkhe Dr. Shrikant G Deshmukh	Journal of Pharmacognosy and Phytochemistry	May-25

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Ayurvedic management of fibroadenoma - A single case report

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Abstract
Fibroadenoma is the most prevalent benign tumor of the female breast, and it usually affects young women under 30. In asymptomatic women, it makes up around 25% of all lesions. It is a recently produced growth composed of glandular and fibrous components. It is believed that a specific region of the breast's heightened sensitivity to estrogen causes this tumor to form. The most typical presentation of this tumor was a single, painless lump in the breast that was developing slowly. In modern medicine after a systemic review of available conservative management like hormonal therapy, keeping in mind the side effect of hormonal treatment, surgeries like lumpectomy and mastectomy becomes the ideal option which also has its own physical and psychological impact on women's life. According to Ayurveda, this can be correlated to Granthi explained by many Acharya's which develop due to abnormal vitiation of Dosha and Dushya. According to Acharya Charaka, Granthi can be equated with all types of small-sized glandular or nodular swelling in any part of the body due to benign tumours or cysts. There is no direct reference for Stana Granthi but Mamsaja Granthi occurs in Stana is having a close resemblance with fibroadenoma of the breast. So, in the present study, a patient with fibroadenoma was successfully treated by Ayurvedic management which got the significant result.

Keywords: Ayurved, estrogen, fibroadenoma, granthi, mammography

Introduction
One of the most prevalent benign breast tumors in women under 30 is fibroadenoma. The total incidence of fibroadenoma in the teenage population is 2.2%. They include 44%-94% of biopsied breast lesions and 68% of all breast masses1. Compared to Whites, Blacks are more likely to acquire fibroadenoma earlier in life. Aetiology: It is believed that a focused region of the breast that is more sensitive to estrogen is what causes this tumor to form. It is practically universally acknowledged that fibroadenoma and high oestrogen levels are related in some way.

Pathophysiology [2]
- This lesion invariably has a relation to oestrogen sensitivity, and it occurs predominantly in the 2nd and 3rd decades of life.
- These lesions are encapsulated and tend to be spherical but on occasions, they may be multinodular or somewhat irregular, these typically stop growing when they reach 2 to 3cm in diameter.
- On section, these lesions are composed of uniform, greyish white, fleshy, homogeneous mass with fibrous whorls which tend to bulge from the capsule.
- There may be some minute yellow to pink softer areas. These are classified into two varieties based on their originsa) Pericanalicular variety (hard fibroadenoma) b) Intracanalicular variety (soft fibroadenoma) Oestrogen and progesterone
- Oestrogen predominance over progesterone is considered a causative factor for this.
- Presence of High Levels of serum oestrogen.
- Shortened luteal phase.
- Progesterone level decreased to 1/3rd of the normal and women with progesterone deficiency carry a fivefold risk of premenopausal breast cancer.
- Patients with premenstrual tension syndrome more likely to develop fibrocystic disease of the breast.

Clinical features [3]

a) The pericanalicular type usually occurs in younger girls between 15 and 30 years of age. Intracanalicular affects older groups from 30 to 50 years of age.
b) This tumour most commonly presented as a painless, slowly growing, solitary lump in the breast is often seen in the lower part of the breast and mostly in the upper and outer quadrant of the breast.
c) Multiple fibroadenomas may be present in about 10% of cases.
d) Pain is usually conspicuous by its absence, though it may occasionally be complained of.
e) Though hard variety is known for its slow growth and never attains big size, yet intracanalicular fibroadenoma tends to be larger due to rapid growth.
f) Discharge through the nipple is almost unknown.

Case report

The present case study is about the Ayurvedic management of fibroadenoma i.e., Stana Granthi. A 38-year-old female patient came to OPD with chief complaints of a freely movable lump at upper lateral quadrant of left breast associated with pain in the past 3 years.

Associated complaints - nausea and vomiting, loss of appetite. History of present illness - The patient was normal 3 years back. Then she suddenly developed with freely mobile lump associated with tenderness and slight swelling in the left breast. History of family - Father has DM. Rest nothing significant

Menstrual history

Age of Menarche	13 years
L.M.P.	12/12/2023
Duration of flow	3 to 4 days
Length of the cycle	30 days.
Regularity of the cycle	Regular
Amount of flow	2 pads per day

Ashtavidha Pariksha

Nadi- 78/ min	*Shabda*- Normal
Mala- Regular	*Sparsha*- Normal
Mutra- Regular	*Drik*- Normal
Jihva- Not coated	*Akriti- Madhyama*

General examination

Weight - 70 Kg
BP - 120/70 mmHg
PR- 78/min
TEMP.- 97F

Systemic examination

CVS: S1 S2 heard, No added sounds

Respiratory system: lungs clear

Digestive system: No abnormality detected.

Breast examination

Inspection - Swelling present in the left breast Nipple- normal Skin - normal, localised mild redness was present at the site of pain.

Palpation - Tenderness - present Lump - single lump in superomedial quadrant of left breast at 9 o'clock position.

Treatment plan

1) Kanchnar Guggula 250 Mg Bd with Lukewarm Water
2) Varunadi Kashaya 15 Ml Bd with Lukewarm Water
3) Haridra Khanda 5 Gm Bd with Lukewarm Water
4) Trikatu Churna 3 GM Bd with Lukewarm Water
5) Local application - kanchnar Guggula lepa once a day.

Above mentioned medicines were continued for 2 months.

Pathya Ahara - Protein-rich diet (Split Green gram, Soya bean), Sesame, Black gram, Horse gram, Intake of egg, Plenty of fluids, Seasonal fruits and vegetables. Vihara - Walking, Physical exercise, Meditation.

Apathya Ahara - Oily fried food, Spicy food, Non-vegetarian, Potato and Brinjal, Junk foods. Vihara - Day sleep, Night vigilance (awake). Diagnostic criteria - Patient with classical signs and symptoms of fibroadenoma with mammography reports. Investigation - Breast examination and mammography

Local examination

- Inspection - does not reveal anything particular and the nipple remains always normal, but in some cases, swelling may be visible.
- Palpation - is important. Fibroadenoma is characteristically mobile. Freely mobile solitary lump usually firm inconsistency with a round smooth margin within the breast is nothing but a fibroadenoma.
- The lump is neither fixed to the overlying skin, nor fascia covering pectoralis major. It is not also fixed within the breast and is so freely movable, that is often called a "breast mouse".
- The axillary lymph nodes are not usually enlarged.
- Diagnosis
  - Up to the age of 25 years, clinical diagnosis is enough.
  - Mammography has no place in its routine diagnosis. With increasing age mammography and fine needle aspiration cytology (FNAC) should be performed to exclude malignancy.
  - Ultrasonography is quite helpful in the differential diagnosis of a palpable breast lump.
  - BI-RADS (breast imaging- reporting and data system) is a risk assessment and quality assurance tool developed by the American college of radiology. It applies to mammography, ultrasound and MRI [4].

BIRADS Category	Condition
BIRADS - 0	Incomplete assessment needs additional evaluation
BIRADS - 1	Normal
BIRADS - 2	Benign
BIRADS - 3	Probably benign (2% of fewer chances of malignancy)
BIRADS - 4	Suspicious (2- 95% chances of malignancy)
BIRADS - 5	Malignant (> 95% chances of malignancy)
BIRADS - 6	Biopsy- proven malignancy.

Observation and Results

Before treatment	After treatment
Inspection left lumps - present in left breast Nipple - normal Skin - normal, localised redness was present at the site of pain.	**Inspection** left lumps - reduced within 2 weeks Nipple - normal Skin - normal, localised redness reduced completely.
Palpation Tenderness - present Lump - multiple lumps in Lump upper lateral quadrant of left breast, freely mobile with irregular border.	**Palpation** Tenderness - relieved Lump - less palpable, freely mobile with smooth round border.
Nipple discharge - absent No changes during the menstrual cycle.	Nipple discharge - absent No changes during the menstrual cycle.

Mammography results	
Before treatment	**After treatment**
Done on 23/12/2023 Multicystic sol in left breast upper lateral quadrant- BIRADS 3. Small simple cyst at 9'o' clock position- BIRADS 2	Done on 01/3/2024 Tiny small simple cysts in left breast as described- concern for mild fibrocys- tic changes. BIRADS 2. Previously seen larger 2 'o'clock position cystic sol is not seen now, 9'o' clock small simple cyst also is not visible now.

Remarkable reduction in the size of the lumps was observed and symptoms like pain, swelling and redness reduced within 2 weeks of treatment and mammography also revealed significant results following two months of treatment. The above-said management was found to be more effective and satisfactory without many complications

Discussion

In the Samprapti (pathogenesis) of Stangranthi, Acharya Sushruta said that vitiated Vata etc. Dosha, vitiating Mamsa, Rakta, and Medas mixed with Kapha produce rounded, protuberant, knotty and hard swelling.

Kanchanara Guggulu [5] is a classical Ayurvedic formulation, used to treat Kapha accumulations in the body. In this formulation. Kanchanara, Triphala and Trikatu are mixed with guggulu to eliminate vitiated Kapha from body. This formulation also helps proper function of lymphatic and digestive systems and prevent further Kapha accumulation It also has Deepan, Pachan, Bhedi, Lekhan Tridosha-shamak, anti-oxidant, antiinflammatory, anti-tumor, anti-fibrinolytic, and anti-hypolypidimic properties. Some chemical constituent of the drug like Piperine (Marich) and beta-sitosterol of Kanchnar have anti-tumor property thereby helping in regression in the size of the mass.

Varunadi Kashaya [6] has property of Vatakaphamedohar, Ushna Veerya, KatuTikta Rasa, Katu Vipaka and Shothahara. Due to the KatuTikta Rasa and Lekhan Karma it work as Kleda Upashoshaka.

Haridra Khanda[7] Haridra Khanda has VataKapha Shamaka, Tridoshashamaka properties, which bring vitiated Doshas in normal level. The main content of Haridra Khanda is Haridra (Turmeric). Haridra work as good blood purifier, so it is use in Rakta dushti. Haridra has Tikta Rasa, Katu Vipaka, Ushna Virya and Laghu and Ruksha Gunas, so it work as lekhana Dravya on Apachit Meda. Haridra has anti-inflammatory and anti-allergic property. Haridra is a Kapha lekhana, Medo lekhana, Rakta Shodhaka and Varna lekhan.

Trikatu churna, a combination of *Zinziber officinale*, *Piper nigrum*, *Piper longum*, helps in achieving *nirama avastha* and addressing the pathology of abscess formation[8]. Bilva avaleha serves as both *Agni Deepana* and *Amapachaka* because of its *Kashaya*, *Tikta Rasa*, *Katu Vipaka*, and *Laghu Guna*. *Ushna Veerya* and *Kashaya Rasa* aid in wound healing and granulation.

Conclusion

While therapy approaches have evolved, science is also progressing. The management of Ayurveda thus looks forward to a therapy that offers the most advantages with the fewest negative effects. The case study has demonstrated, once again, the great efficacy of the tried-and-true, age-old ayurvedic treatment for breast fibroadenoma, as evidenced by the pre- and post-treatment mammography findings. Clinical characteristics and mammography reports indicated a remarkable decrease in symptoms and an almost completely disappearing mass in the breast. To sum up, more thorough clinical research investigations are required.

References

1. Lee M, Soltanian HT. Breast fibroadenoma in adolescents: Current perspectives. 2015;6:159-63.
2. Das S. A concise textbook of surgery. The breast, benign neoplasms. 8th ed. Kolkata: Dr. S Das; c2014. p. 601.
3. Das S. A concise textbook of surgery. The breast, benign neoplasms. 8th ed. Kolkata: Dr. S Das; c2014. p. 602.
4. Bell DJ, Weerakkody Y, *et al*. Breast Imaging-Reporting and Data System (BIRADS). 2013.
5. Acharya PS. Sarangadhara Samhita, Dipika Hindi commentary. In: Tripathi B, editor. Madhyama Khanda Chapter-2-Kwathadi Kalpana/128-130. Varanasi: Chaukhamba Surbharati Prakashan; c2013. p. 101.
6. Das G. Bhaishajya Ratnavali, UdardaShitapitta-Kotha Chikitsa Prakarna, 55/13-22. In: Mishra B, editor. 19th ed. Varanasi: Chaukhambha Prakashan; c2008. p. 917.
7. Bhavamishra. Bhavaprakasha, Bhavaprakasha Nighantu, Haritakyadi Varga, 197. In: Mishra B, editor. 11th ed. Varanasi: Chaukhamba Sanskrit Sansthana; c2004. p. 114.
8. Kaushik R, Jain J, Khan D, Azhar, Rai P. Trikatu - a combination of three bioavailability enhancers. Int J Green Pharm. 2018;12.

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Ayurvedic regimen on *Pittaj mutrakrucchra* (Lower urinary tract infection) in child

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Abstract
According to Ayurveda, *Mutrakrucchra* (Dysuria) is a disease of *Mutravaha Srotas* (lower urinary tract infection). The symptoms of different types of *Mutrakrucchra* particularly *Pittaj Mutrakrucchra* consist of *Peeta Mutrata* (yellow color urine), *Sarakta Mutrata* (haematuria), *Sadaha Mutrata* (burning micturition), *Saruja Mutrata* (painful micturition) and *Muhurmuhu Mutrata* (frequent urination). The above-mentioned symptoms have a close resemblance with lower urinary tract infections. Infections confined to Lower UTI commonly cause dysuria with burning micturition, frequency, and urgency. Lower urinary tract infection includes cystitis and urethritis. Hence this attempt of the present article made to define *Pittaja Mutrakrucchhra* in a scientific way W.S.R. LUTI. The disease *Pittaj Mutrakrucchra* is well acknowledged in classical texts of Ayurveda with different treatment methods, which can be synchronous to urinary tract infection on theoretical and clinical symptomatology of the disease.

Keywords: *Pittaj Mutrakrucchra*, UTI, *Ervarubijadi Yog* with *Tandulodak and Chandraprabha Vati*

Introduction
The urinary tract is the third most common site of infection in children after the gut and respiratory tract, involving the lower urinary tract (cystitis, urethritis) or upper urinary tract infection (pyelonephritis) or both [1]. About 2-8% of children develop UTI by the age of 14 years [2]. About 1-3% boys and 3-8% girls suffer with at least one attack of symptomatic UTI by 14yrs of age. In addition, asymptomatic bacteriuria is seen in 1-3% of infants, pre-school children and school-age girls (not boys) [3]. It is an important cause of morbidity and might result in renal damage often in association with vesicoureteral reflux [4]. Etiological factors of *Mutravaha Srotas Dushti* can be taken as *Hetu* of *Mutrakrucchra Roga*. *Nidanas* are classified according to involved *Dosha* causing *Mutrakrucchra*. According to Ayurveda, Pittaj *Mutrakrucchra* due to consumption of *Ushna, Tiksna, Ruksha Ahara* and *Mutra Vegadharana*, less water intake, maintaining poor hygiene leads to aggravation of *Pitta* followed by *Kapha* and *Vata* causes impairment in the functioning of *Basti* (urinary bladder). *Dosha, Dhatu* and *Mala* are the three main entities of our body. For a healthy body one should have equilibrium of *Dosha* and *Dhatu* the same way proper and continuous excretion of *Mala* is of equal importance. *Samprapti* of any disease is a pathogenesis of that particular disease starting from *Hetu* which causes imbalance in *Dosha* and the spread of *Dosha* to parts other than their *Swasthanas* (site). *Mutrakrucchra* is well explained by *Acharya Charak.* Due to *Hetu Sewan* the *Doshas* get vitiated and get lodge in *Basti* which causes defects in functions and structures of *Mutramarga* i.e. the pathway of urine flow resulting in *Mutrakrucchra* disease. Urinary tract infections such as the abnormal color of urine can be compared with *Sarakta* or *Sapeeta Mutrata*, burning sensation while micturition can be compared with *Sadaha Mutrapravrutti*, and pain while micturition can be compared with *Krucchra* or *Sadaha Mutrapravrutti*, Frequency and urgency can be compared with *Muhurmuhu Mutrapravrutti*. Manifestations of dysuria in infants and children, Infants are unable to express their symptoms and hence, the observations made by the mother can at times offer us important clues in diagnosing dysuria in infants. The manifestations in infants are crying while passing urine, touching off and on the hypo-gastric region and genitals by hand, and goose skin.

Prohibitions:- The patient suffering from different types of *Mutrakrucchra* should avoid exercise, suppress the manifested natural urges, dry articles of food pastries, exposure to strong wind, strong rays of the sun, and food having an astringent taste.
Upadravas: Upadravas of *Mutrakruchhra* in general are explained by *Acharya Kashyapa.* Those are *Karshya, Arati, Aruchi, Anavasthiti, Thrishna, Shoola,* and *Vishada* [5].

The case study discussed here is of 8-year-old female child, who had recurrent episodes of burning micturition and frequently received modern treatment but had temporary relief and relapses were frequent. Then she came to Ayurvedic OPD and was given an Ayurvedic regimen (*Ervarubijadi Yog* with *Tandulodak and Chandraprabha Vati*). The child had significant relief from signs and symptoms of recurrent episodes of UTI. The recurrence of the disease was found markedly reduced. Ayurvedic management proved to be beneficial in this case of recurrent UTI.

Case Study

Aims and Objective: To evaluate the role of Ayurvedic Regimen in the management of *Pittaj Mutrakrucchra*.

Study Design: Present study is a single case study conducted in the department of *Kaumarbhritya* of CSMSS Ayurved College, Kanchanwadi Chatrapati Sambhajinagar Maharashtra.

Materials and Methods

Case Report: A 8 years old female, living in Chatrapati Sambhajinagar, presented in the Outpatient Department (OPD) of CSMSS Ayurved College Kanchanwadi on 07/12/2023 with complaints of *Saruja* (painful), *Sadaha* (burning micturition), *Muhurmuhu Mutrapravritti* (increased frequency of urination) with *Peeta Mutrata* (dark yellow), persistent urge to urine. These symptoms have been recurring on and off for the past 1-2 months. So she came to OPD to take an Ayurvedic regimen.

History of Present Illness: Patient was healthy before 2 months. But suddenly she suffered with first episode of UTI with the above complaints. Further, she had recurrent episodes of burning micturition. Within 2 months she had 4-5 episodes of LUTI.

History of Past Illness: H/O recurrent episodes since 1-2 months. No H/O any other major illness or any surgery.

Drug History: Frequent use of antibiotics for the last 2 months.

Family History: NAD
Birth History: Non-specific

General Examination

Table 1: Showing general examination

General Appearance	Fair
Temp.	98.6 0F
Pulse	92/min
RR	20/min
Height	126 cm
Weight	27 kg

Physical Examination

Table 2: Showing *Ashtavidha Parikshan*

Nadi	***Pittapradhan-vaat***
Mala	2 times/day
Mutra	8-10 times/day
Jivha	*Niram*
Shabda	*Spashta*
Sparsha	*Ushna*
Druk	*Prakrut*
Aakruti	*Madhyam*

Clinical Findings

1. Clinical examinations revealed *Pittapradhan-vaat Prakruti* having *Tikshna Agni Bala, Mrudu Koshta* and *Madhyam Sharir Bala.*
2. The patient was afebrile with 110/70 mm Hg blood pressure. Pulse rate-92/min, RR-20/min.
3. On the systemic examination, no abnormality was found in respiratory, cardiovascular, and central nervous system activity.
4. Per abdominal examination revealed soft and non-tender.
5. *Mutravahasrotas* examination
6. *Mutra Matra-Muhurmuhu* (frequent)
7. *Varna-Peeta*
8. *Gandha-Durgandha*
9. *Mutrapravritti*-8-10 times/day micturition with *Daha* and *Ruja*.
10. In urine routine examination, dark yellow color slightly turbid with trace albumin, pus cells were 8-10 HPF, epithelial cells 4-5 & RBC 3-4 cells were present.

A patient having symptoms of *Peeta Mutrata, Saruja Mutrata, Sadaha Mutrata, Kruchra Mutrata*, and *Muhurmuhu Mutrapravritti.* After 7 days of treatment, it recovered quite positively. Repeat urine routine examination revealed 1-2/HPF pus cells, Epithelial cells 1-2/HPF, and RBC nil with pale yellow color urine.

Diagnosis: Clinically on the basis of signs and symptoms of *Pittaj Mutrakrucchra*. Urine-routine & microscopic.

Treatment Plan

1) *Ervarubijadi yog* with *Tandulodak* (rice-wash water) [6]

Ervarubijadi Yog contains *Ervarubij choorna*, & *Yashtimadhu choorna*, & *Devdaru Choorna* in equal quantity along with *Tandulodak* (rice water). *Tandulodak* is obtained by soaking and squeezing one *Pala* of broken rice and water eight times [7]. All the ingredients have their own properties.
5 gm *Ervarubijadi Choorna* with *Tandulodak* in 3 divided doses.

2) Chandraprabha Vati:- 250 mg----1 Tab BD after meal

Nidanapanchaka

The manifestation of any disease is described in five steps in Ayurveda these are *Nidana, Purvarupa, Rupa, Upashaya* and *Samprapti*. These help in proper diagnosis of disease.

***Nidana*:** *Aharaj-Ruksha Ahara*, habitual eating of incompatible food items like spicy, excess pickle, junk food, *Katu, Amla, Lavana Rasatmak Ahar Ati Sewana. Viharaj*-riding fast cycle, common washrooms. Activities-The suppression of natural urges- Suppression of micturition, defecation and flatulence.

Poorvarupa: *Saruja, Sadaha Mutrapravritti.*

Rupa: *Saruja* (painful), *sadaha (*burning), *Peeta Mutrata* (yellow color), *Muhurmuhu Mutrapravritti* (frequent urination).

***Samprapti* or pathogenesis of dysuria:** When the *Doshas* being vitiated due to their specific aggravating factors reached the urinary bladder individually or combined, those afflict the urinary passage. In such a condition the patient passes urine with difficulty. If *Pitta* is the cause of dysuria the patient passes yellow and blood-mixed urine repeatedly with difficulty, pain, and burning sensation. In

Kashyapa Samhita it is described that *Mutrakrucchra* is *Pittapradhana Tridoshaja Vyadhi.*

In the above patient due to habitual eating of incompatible food items, *Vata Prakopjanya Vihar* and the suppression of natural urges *Pittapradhan Tridosha* vitiated and due to their (*Doshas*) specific aggravating factors reached the urinary bladder individually or combined, and afflicted the urinary passage resulting in *Pittaj Mutrakrucchra*.

Table 3: Showing Samprapti Ghatak

Dosha	***Pittapradhan Tridosha***
Dushya	*Mutra*
Srotas	*Mutravaha*
Agni	*Jataragni and Dhatwagni*
Udbhavasthana	*Amashaya Pakwashaya*
Sanchara Sthana	*Mutramarga*
Vyakt Sthana	*Mutramarga*
Rogmarga	*Madhyama*

Samprapti Ghataka

Table 4: Showing grading scale of subjective and objective criteria [8]

Grades	***Saruja* (Pain)**	***Sadaha* (Burning)**	***Mutrapravritti* (Frequency)**	**Color of urine**	**No. of Pus cells**	**No. of RBC**
--	No pain	No pain	No frequent micturition (normal 6-8 times)	Clear to Pale yellow	No pus cells	No RBC
+	Occasional only at starting of micturition	Occasional only at starting of micturition	Frequent but controlled (8-10 times)	Dark yellow	0-5 pus cells/HPF	0-5 RBC
++	Tolerable at starting and during micturition	Tolerable at starting and during micturition	Often frequent not able to control (10-12 times)	Amber	6-10 pus cells/HPF	6-10 RBC
+++	Unable to tolerable and prolonged for long time	Unable to tolerable and prolonged for long time	More than 12	Orange / Red	11-15 pus cells/HPF	11-15 RBC
++++					>16 pus cells/HPF	>16 RBC

Observation and result

Table 5: Showing observation and result

Observation	**Before regimen**	**After completion of regimen**
Sadaha Mutrapravritti	++	--
Saruja Mutrapravritti	++	--
Muhurmuhu Mutrapravritti	++	--
Color of urine	Dark Yellow	Pale Yellow
No of pus cells	++	--
No of RBC	+	--
pH of urine	5	6

Assessment of Result

Table 6: Showing assessment of result

Sr. No.	**Efficacy of the regimen**	**Relief in signs & symptoms in percentage**
1	Excellent	Above 75%
2	Moderate	50-75%
3	Mild	25-50%
4	Ineffective	Below 25%

Discussion

Nidana Parivarjan is the first line of management in *Pittaj Mutrakrucchra*. The child had specific *Aharaj* and *Viharaj Hetu*. The *Ervarubijadi Yog* was given to the patient in the form of *Choorna* along with *Tandulodak* and *Chandraprabha Vati*.

Mode of Action

Table 7: Showing mode of action

Drug name	***Ervarubij* [9]**	***Yashtimadhu* [10]**	***Devdaru* [11]**
Latin Name	Cucumis sativus	*Glycerrhiza glabra*	*Cedrus deodara*
Family	Cucurbitaceae	Leguminosae	Pinaceae
Rasa	*Madhur*	*Madhur*	*Tikta, Katu*
Virya	*Sheeta*	*Sheeta*	*Ushna*
Vipaka	*Madhur*	*Madhur*	*Katu*
Guna	*Laghu, Ruksha*	*Guru, Snigdha*	*Laghu, Snigdha*
Doshakarma	*Pittashamak*	*Vatapittashamak*	*Vatakaphaghna*
Karma	*Mutral, Dahashamak*	*Mutral, Mutravirajaniya, Vedanasthapak, Dahashamak*	*Mutrajanana, Vedanasthapak*
Prayojyanga	*Beej, Phal*	*Mula*	*Kandsar, Tail*

1. ***Ervarubij Choorna:*** The probable mode of action of this drug can be assumed due to its predominance of *Mutral Karma* (diuretic property). Due to its *Mutral Karma*, the seed acted as a diuretic and also has cooling and nutritive properties [12]. *Ervarubij* has *Madhur Rasa*, *Sheeta Virya* and *Madhur Vipak*. The pain was due to aggravated *Vata Dosha* and the burning micturition was due to aggravated *Pitta Dosha*. So, because of *Madhur Rasa* and *Sheeta*

Virya, it was found to help relieve the symptoms -pain and burning micturition respectively.

2. ***Yashtimadhu Choorna*:** Being *Madhur* and *Snigdha*, it is *Pittaghna*, and being *Guru*, *Snigdha*, and *Madhur*, it is *Vataghna*. So, being *Vatapittashamak* it eliminated *Daha* and the pain associated with *Mutrakrucchra*. It has a property- *Mutravirajaniya*. Due to this *Karma*, it eliminated the dark yellow discoloration of *Mutra* caused by *Pittaprakop*. Like *Ervarubij Yashtimadhu* also has diuretic property.
3. ***Devdaru Choorna*:** It acted as *Mutrajanana* because of *Ushna* and *Snigdha Gunas*. It eliminated *Mutragata Doshas* due to its *Tikta Rasa*. It should be used to cause *Kledashoshana* if present in urine in excess form. By eliminating *Pooya* and *Kleda* due to its *Ushna*, *Tikta*, and *Snigdha Guna* it acted as *Kledashoshak* and *Mutrashodhak*.
4. ***Chandraprabha Vati* [13]:** It is effective against urinary tract infection and painful urination. It helps to remove harmful toxins from the body. It promotes healthy functioning of the kidneys. It is also proven beneficial chronic kidney disease, kidney stones and cystitis. It is indicated in all types of *Mutrakrucchra*. The drugs like *Vacha*, *Guduchi*, *Haridra*, *Pippali*, *Gajpippali*, *Maricha*, *Shunti*, *Kshara*, *Guggulu* etc. These *Vati* act as a diuretic, anti-inflammatory, antispasmodic, antiseptic and antibacterial, as a *Rasayan*, improve bladder tone.

After taking this treatment for seven days, the patient got satisfactory relief without any recurrence. Also, He was advised to avoid incompatible food items and avoid holding natural urges that aggravate the Doshas.

Conclusion

Almost all ingredients have diuretic properties along with *Madhur*, *Tikta*, *Katu*, *Sheeta*, *Ushna*, *Laghu*, and *Snigdha*, properties and these properties acted on the *Mutravaha Srotas*. From this study, after the pre and post-assessment of intervention, it can be concluded that the Ervarubijadi Yog with *Tandulodak* and *Chandraprabha* Vati can be effective in the management of *Pittaj Mutrakrucchra* in the child.

References

1. Mukesh Agrawal. Textbook of Pediatrics. 2nd Ed. 2017. Chapter 21.15, Urinary Tract Infections, p. 665.
2. IAP Textbook of Pediatrics. 7th ed. 2019. Chapter 10.8, Urinary Tract Infection, p. 825.
3. Mukesh Agrawal. Textbook of Pediatrics. 2nd Ed. 2017. Chapter 21.15, Urinary Tract Infections, p. 665.
4. Vinod K Paul, Arvind K Bagga. Ghai Essential Pediatrics. 8th Ed. Chapter 16, Disorders of Kidney and Urinary Tract. CBS Publishers & Distributors; Reprint; c2014. p. 483.
5. Pandit S. Hemraj. Kashyapa Samhita (Vrddhajivaka). Chikitsa Sthana, Adhyaya Mutrakrucchra Shlok No. 6-8. Varanasi: Chaukhambha Sanskrit Sansthan; Reprint; c2016. p. 50.
6. Agnivesha, revised by Charak and Dhrudbal. Charak Samhita. Edited with 'Vaidyamanorma' Hindi Commentary by Acharya Vidyadhar Shukla, Ravidatta Tripathi. Chikitsa Sthana, Chapter 26/53.
7. Sharangdhar. Sharangdhar Samhita. Jiwanprada Hindi Commentary by Shailaja Srivastava. Madhyamkhand. Varanasi: Chaukhambha Orientalia; c2017. p. 132.
8. Baghel BS, Gopala RS. Developing guidelines for clinical research methodology in Ayurveda. Chapter 3.16, Gradation of Symptoms: Mutravaha Strotas. Institute for Post Graduate Teaching & Research in Ayurveda; c2011. Jamnagar. p. 78.
9. Baghel BS, Gopala RS. Developing guidelines for clinical research methodology in Ayurveda. Chapter 3.16, Gradation of Symptoms: Mutravaha Strotas. Institute for Post Graduate Teaching & Research in Ayurveda; c2011. Jamnagar. p. 78.
10. Deshpande AP, Ranade S. Dravyaguna Vijnyana, Ayurvedic Medicinal Plants. Part 2. Pune; 1st Ed. Reprint; c2016. p. 809.
11. Deshpande AP, Ranade S. Dravyaguna Vijnyana, Ayurvedic Medicinal Plants. Part 2. Pune; 1st Ed. Reprint; c2016. p. 523.
12. Gyandra Pandey. Dravyaguna Vijnyana. Part 1. 3rd Ed. Varanasi: Chaukhambha Krishnadas Academy; c2005. p. 660.
13. Ambikadattashastri. Varanasi: Chaukhambha Sanskrit Sansthan; 18th Ed. p. 730.

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Ayurvedic management of male infertility: A case study

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Abstract
Male infertility refers to a male's inability to result pregnancy in a fertile female and it has a strong impact on the psychology of a couple. Almost 20-40% of Infertility cases were found to be due to male factors. The study patient reported Oligozoospermia (low sperm count) and Asthenozoospermia (low sperm motility). Where medicinal treatment (*shaman chikitsa*) and purification therapy (*shodhana chikitsa*) i.e. *panchakarma* especially Intra Urethral *Uttar Basti* (IUUB) is the management. After 4 months of treatment, his condition is improved from severe Oligoasthenozoospermia to normozoospermia. *Ayurvedic Panchakarma* treatment i.e. *Shodhana karma, Uttarbasti* and *shaman chikitsa* is a safe and effective approach for male infertility.

Keywords: Infertility, *Uttar Basti, vajeekarna, Ksheena Shukra*

Introduction
15% of married couples worldwide struggle with infertility, making it a global issue [1]. Infertility affects 15-20% of the overall population [2]; male factors account for 20-40% of this [3], with a frequency of about 23% in India. According to WHO (1992), oligospermia is defined as having less than 20 million sperm/ml and asthenozoospermia as having spermatozoa with motility less than 50% of active motile sperm [4].
Oligoasthenozoospermia is characterised by decreased motility and a reduced sperm count. Thousands of years ago, *Ayurveda* recognised the issue of male sexual dysfunction and created *Vajeekarana Chikitsa*, a distinct specialty (Aphrodisiac Therapy). One branch of *Ayurveda* called *Vajeekarana* treats disorders of the seminal fluid, defective semen, disturbed sexual potency, spermatogenesis, and male seminal disorders. It also preserves and amplifies the sexual potency of healthy men and helps them conceive healthy progeny [5]. *Vajeekarana* enhances a person's physical, psychological, and social well-being in addition to promoting sexual ability and performance [6].
Research studies have correlated the term "Oligozoospermia" with *Ksheena Shukra, Alpa Shukra, Shukra Dosha, Shukra Dushti, Shukra Kshaya*, and *Shukralpata. Shukradhatu Vikara, Beejopghata,* and *Ksheena Retasa* [7]. Among these, *Ksheena Shukra* is used in majority of the research works with special reference to Oligozoospermia is the seminal disorder in which sperm count is below 20 million/ml [8].
Ayurvedic study is essential for the treatment of oligospermia, asthenospermia, and azoospermia because modern medication for these conditions has numerous adverse effects and is expensive.

Infertility (*Vandhyatwa*)
Definition
Infertility is defined as the incapacity to conceive after a year or more of Regular sexual intercourse with no contraceptive measures taken. In contrast, the fertile population is defined as those who do become pregnant after some reasonable time of regular sexual intercourse.

Case Report
A male 35-year-old, non-smoking and non-alcoholic patient married for seven years reported with primary infertility and came to OPD of CSMSS *Ayurved Mahavidalaya* for treatment. After performing a routine physical examination, there was no significant abnormality, the patient has severe Oligoasthenozoospermia. The clinical symptoms in the present case report correlate to *Kshina Shukra* comprehended in Ayurvedic classics.

Past history-No any
Personal history & Family history-any major history
Ashtasthanagata Pariksha
Nadi (pulse)-82 b/min *Vataja Nadi*
Mala (stool)-Once in a day
Mootra (urine)-3-4 times a day
Jihwa (tongue)-Alpa Sam
Shabda (speech)-*Spashta*
Sparsha (touch)-*Anushna*
Druk (eyes)-*Spashta*
Akruti (built)-Moderate.
Prakruti Pitta-Kapha,
Height-164cm
Weight-55kg

Systemic Examination
CVS-S1 S2 normal
CNS-NAD
RS-AEBE Clear
GIT-NAD
Lab Investigations:
Semen analysis-Abstience-6 Days

Treatment Given

Table 1: Treatment

Sr. No	Treatment Modality	Drugs and Dose	Duration
1	Deepana, Pachana and Anulomana (04/01/2024)	*1.Hingwashtak Churna* [9] 2gm BD *with Ghrita Pragbhakt Kal* *2. Ampachaka Vati* [10] 500 mg BD *Adhobhakt Kal* *3. Avipattikar churna* [11] *2 gm* at night with lukewarm water	For 5 Days
2	*Snehapana* (09/01/2024)	*Mahatiktaka Ghrita* 30 ml *hrasiyasi matra* upto 180ml.	For 6 Days
3	*Snehana and Swedana* (15/01/2024)	*Tila Taila* and *Dashmool Kwatha* respectively.	For 2 Days
4	*Vamana* (17/01/2024)	*Vamanarth-Madanphal Pippali churna 6gm + Vacha 3*gm *Vamanopag-Yashtimadhu kwatha* (5500ML) + *Saindhav Jal (1000ML)*	For 1 Day
5	*Samsarjan krama* (18/01/2024)	*Madhyam suddhi (Manda, Peya, Yavagu, Yusha)*	For 8 days
6	*Snehapana* (26/01/2024)	*Mahatiktaka Ghrita* 30 ml *hrasiyasi matra* upto 150ml.	For 5 Days
7	*Virechan Karma* (01/02/2024)	*Virechana-Shunthi siddha eranda sneha* 50 ml	For 1 Day
8	*Samsarjan krama* (02/02/2024)	*Madhyam suddhi (Manda, Peya, Yavagu, Yusha)*	For 8 days
9	*Basti Karma* (08/02/2024)	*Yog Basti-Madhutailik Basti Anuvasana 120ml, Niruha 960ml alternatively with sarvanga snehana and swedana.*	For 8 days
10	*Uttar Basti* (26/02/2024)	*Ashvagandha Ghrita* [13]	4 settings with 3 days interval.
11	*Shamana Chikitsa* (26/02/2024)	*1) Ashvagandha+Shatavari Kshirpaka* 20 ml BD *2) Vanari Vati 250* mg BD with a cup of milk. *3) Gandarva Haritaki* 3 gm HS with *koshna jala.*	For 60 days

Table 2: Before treatment and after treatment report mentioned in below table

Criteria	Before Teatment (21/12/2023)	After Treatment (17/05/2024)
Sperm count	45 Mill	55 Mill
Viscosity	Viscous	Thick
Volume	2.0 ml	2.0 ml
Active Sperms	60%	80%
Sluggish Sperms	35%	10%
Type of motility	Low Motility	Forward progressive
Grade of motility	II	III
Others	----	Giant Headed, tail less

Discussion

Dipan: It was done by *Hingvashtak churna* (2 gm-2gm before meals with *anupan Goghruta).* The contains in this drug are *agneya mahabhutatmak, katu amala lavan rasa pradhan, laghu ushna tikshna viryatmak* which stimulate & strengthen *jatharagni.*

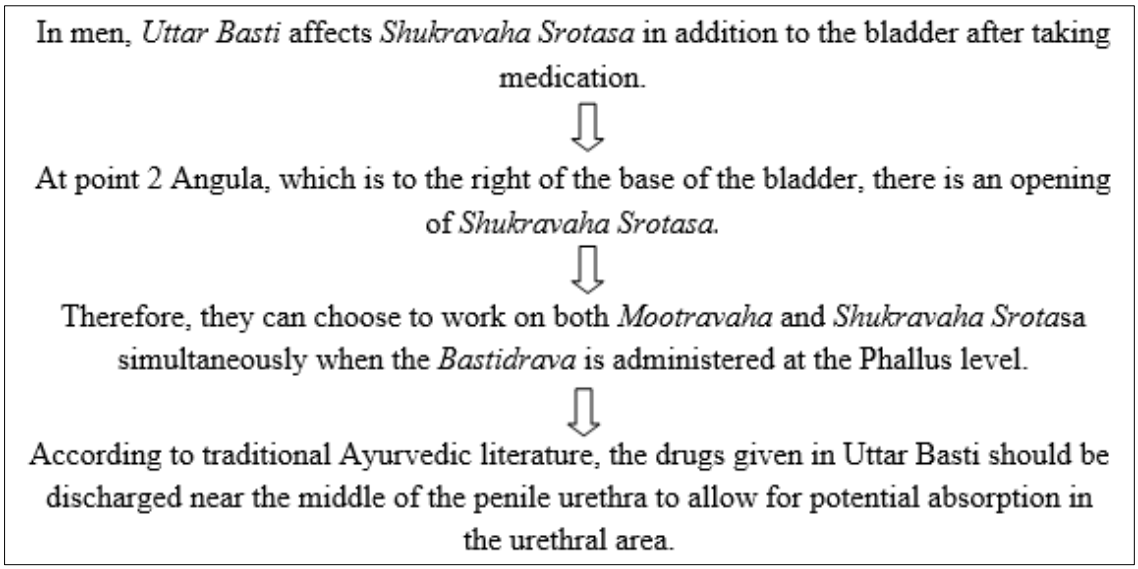
Pachan: It was done by *Aampachak vati*. The ingredients in this drug digest the *aama* by *ushna virya.* So, by *dipan* & *pachan, Nirama ras* was produced the *saman vayu* was in its right position.

Anuloman with *Avipatikar churna*: The drug digest *apakva mala* correct vitiated *vata dosas,* facilitated easy evaluation of mala through anus, help the *Apan vayu* in its right position.

Panchakarma

1. ***Snehan (Bahya parimarjan):*** *Vata* is located mainly in the tactile sensory organ lodged in the skin, hence *sarvanga snehan (bahya parimarjan)* was beneficial to skin & *vaat dosha.* Snehan (oleation) loosens the morbid doshas to certain extent.
2. ***Swedan* (sudation):** The qualities of *swedan* like *ushna, tikshna, sara, drava, snighdha,* helps in flushing out the wastage & toxins from the body through perspiration.
3. ***Yogabasti:*** Act locally as well as systematically help to normalize the vitiated *apan vayu.*
4. ***Uttarbasti:*** *Ashwagandha Ghrit* helps to reduce lipid peroxidation, enhance sperm motility and count, and regulate reproductive hormone levels when taken orally. It improves blood circulation throughout the body and enhances sperm quality naturally. Since oxidative stress is a major cause of low sperm count, *Ashwagandha Ghrit* is beneficial for restoring sperm count, improving semen health, and increasing fertility.

Probable mode of action of *Uttar Basti*



Conclusion

Based on the comparison of pre and post-treatment data, it can be said that the aforementioned treatment approach is successful in managing *Ksheena Sukra* (oligozoospermia).

In the treatment of male infertility, it can be concluded that a method based on Ayurvedic principles can lead to encouraging outcomes by improving not only sexual functioning indicators but also the quantity and quality of semen produced in 4 months of period. male impotence is caused by a variety of causes, but it is treatable with Ayurvedic medication and appropriate safeguards. A healthy diet, appropriate lifestyle choices, and appropriate medical care are required.

References

1. Sharlip ID, Jarow JP, Belker AM, Lipshultz LI, Sigman M, Thomas AJ, *et al*. Best practice policies for male infertility. Fertility and Sterility. 2002;77(5):873-882.
2. George SS, Fernandes HA, Irwin C, Chandy A, George K. Factors predicting the outcome of intracytoplasmic sperm injection for infertility. PubMed. 2003;16(1):13-15.
3. Zargar AH, Wani AI, Masoodi SR, Laway BA, Salahuddin M. Epidemiologic and etiologic aspects of primary infertility in the Kashmir region of India. Fertility and Sterility [Internet]. 1997 Oct 1 [cited 2021;68(4):637-43. Available from: https://www.sciencedirect.com/science/article/abs/pii/S0015028297002690
4. Malhotra N, Kumar P, Malhotra J, Bora NM, Mittal P. Jeffcoate's Principles of Gynaecology. New Delhi: Jaypee Brothers Medical Publishers Pvt. Limited; c2014.
5. Shastri R, Pandey U. Chikitsasthana 2/4 Verse 51. In: Charaka Samhita of Agnivesh. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c1998, 92.
6. Shastri A. Sutrasthanam 1/16. In: Sushruta Samhita. Varanasi: Choukamba Sanskrut Sansthan; c2007, 4.
7. Girish KJ. Revival of Vajikaranatantra: Ayurved related to Vajikaranatantra over past 45 years. Journal of Ayurveda. 2007;1(1):60-66.
8. World Health Organization. WHO Laboratory Manual for the Examination of Human Semen and Sperm Cervical Mucus Interaction. 4th Ed. Cambridge: Cambridge University Press; c1999, 445.
9. Shashtri PG, Editor. Ayurvediya Aushadhi Gunadharma Shastra. Ahamadnagar: Dr. Janardhar Gangadhar Gune; Sanyukta Kalpa. 1959;3:57.
10. Shashtri PG, Editor. Ayurvediya Aushadhi Gunadharma Shastra. Ahamadnagar: Dr. Janardhar Gangadhar Gune; c1959, 3.
11. Shashtri PG, Editor. Ayurvediya Aushadhi Gunadharma Shastra. Ahamadnagar: Dr. Janardhar Gangadhar Gune; Sanyukta Kalpa, 1959;3:57.
12. Babu S. Bahi Pari Marjan (External purification), Sneha-karma, Swedana, Basti Therapy. In: Principle and Practice of Panchakarma. Varanasi: Chaukhamba Orientalia; c2017.
13. Trikamaji Y, Editor. Charaka Samhita: Ayurveda Dipika Commentary with Chakrapaanidatta. 1st Ed. Varanasi: Chaukhambha Orientalia; c1984, 166.

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A case study on Amavata (Rheumatoid arthritis)

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Abstract
Amavata is one of the commonest disorders caused by the impairment of Agni (digestive fire), formation of Ama (bio-toxin) and vitiation of Vata Dosh. The Ama combines with Vata Dosha and occupies Shleshmasthana (Asthisandhi) which results in "Amavata". Amavata can be correlated with Rheumatoid Arthritis due to similarities of clinical features. Rheumatoid Arthritis is an autoimmune disease causing a chronic symmetrical polyarthritis with systemic involvement. The management in Modern science includes the use of NSAID's (Nonsteroidal anti-inflammatory Drugs), Glucocorticoids, DMARD's (Disease Modifying Ant rheumatic Drugs), immunosuppression therapies, long term use of which leads to many side effects. Ayurveda treats it in a natural way without any side effects. Acharya Chakradatta mentioned Chikitsa Siddhanta for management of Amavata, which consists Langhana, Swedana, use of drugs having Tikta, Katu Rasa and Deepana property, Virechana, Snehapana and Basti. By using this Chikitsa Siddhanta a case of Amavata was successfully treated. Marked improvement was observed in signs and symptoms after treatment. No any complication was found during the treatment.

Keywords: Amavata, ama, rheumatoid arthritis, simhanada guggulu, Jwar

Introduction
In the present time due to modern life style, unhealthy eating habits, hectic schedule and stress, incidence of Ama related diseases are increasing. One of the most common disease is Amavata. In Ayurveda, Madhavkar (700 A.D.) first mentioned Amavata as a separate disease [1]. The word Amavata has two components i.e., Ama and Vata. These two components contribute to the morbidity and disease process in Amavata. The main causative factor Ama is formed due to malfunctioning of the digestive and metabolic mechanisms. Ama with Vata gets localized in the body tissues and joints resulting in pain, stiffness, swelling, tenderness etc. and presents as a Amavata disease. The features of Amavata are much identical to Rheumatoid Arthritis. The disease is chronic, progressive, autoimmune disorder characterized by bilateral symmetrical involvement of joints with some systemic clinical manifestation. In global scenario, more than one million people are affected by rheumatic disorders and one fifth of these are severely disabled. The prevalence of the disease is approximately 0.8% of the total population worldwide (range 0.3% to 2.1%) with male and female ratio of 1: 3. The onset is most frequent during the fourth and fifth decades of life, with 80% of patients developing the disease between age group of 35 and 50 [2].

Aims and objectives
To understand Amvata in detail in comparison with Rheumatoid Arthritis To understand amvata and its efficacy and treatment

Methodology
A female patient diagnosed with Amavata has been taken for the study and administered with shodhan, Shamana chikitsa and classical swedan.

Case report
A 43 years female patient visited in OPD of Kayachikitsa, having complaints of Pain and Swelling in metacarpophalyngeal joints followed by both knee joints since 6 months, Pain in both wrist joints and morning stiffness more than 60 mins since 2 month. she had complained of loss of appetite and mild fever (Jwar). Pain was pricking and severe in nature. Eventually, the elbow and ankle joints also began to get affected. The patient was facing trouble performing her daily activities due to pain. For that she took allopathic treatment but did not get satisfactory results and for further management she came to ayurved rugnalaya.

H/O past illness: There was no history of Diabetes, Hypertension or any other major illness in the past.

Personal history
Occupation: Housewife. Diet: Mixed diet. Appetite: Irregular. Allergy: No history of any drug or food allergy.

Ashtavidh - Parikshna
1. Nadi: 80/min
2. Mala: Malavashtmbha
3. Mutra: 4 to 5 time in day, 2 to 3 times in night
4. Jihva: Sama
5. Shabda: Prakrut
6. Sparsha: ushna
7. Drik: Prakrut
8. Akriti: Sthula

Systemic examination
Vitals of patient were within normal limits. Systemic examination showed no any abnormal findings.

Local examination
Swelling presents on both metacarpophalangeal joints, wrist, and knee joints. Tenderness presents on both metacarpophalangeal joints, wrist and knee joints. Local temperature-Raised.
Range of movement-Restricted and painful movement of both knee and wrist joints.

Differential diagnosis: Amavata (Rheumatoid arthritis), Sandhigatvata (Osteoarthritis), Vatarakta (Gout).

Blood investigation
The routine blood investigations of the patient were found to be - Hb - 10.4 gm/dl
ESR - 56 mm at end of 1 hr RA factor-positive (36)
CRP-positive (24)
TLC, DLC, S.Uric acid values were within normal limits.

Diagnosis
Amavata (Rheumatoid arthritis) was diagnosed on the basis of symptoms described in the classics of Ayurveda and criteria fixed by the American Rheumatology Association in 1988 [3].

Treatment plan: Langhan for 3 days

Panchakarm Chikitsa: Virechan-Shunthi Kwatha (20 ml) with ErandaTaila (5 ml) in morning on empty stomach [4].

Mahavishgarbha Tail: For local application [5] Swedana-Valuka Pottali sweda - Duration- 30 days +.

Abhyantar chikitsa - (Internal medication)

Sr. No.	Medicine	Dose	Anupan	Duration
1	Simhanad Guggul [7]	500 mg, twice a day	Koshna jala	30 days
2	Dashmoola Kasayam [8]	20 ml,twice a day	Koshna jala	30 days

Pathya-apathya (Dos and Don'ts) - Adviced to patient as follow [9]

	Pathya	Apathya
Aaharaja (Food)	Yava (barley), kulattha (horse gram), raktashali (rice), shigru (drum sticks), punarnava, karvellak (bitter gourd), ardrak (ginger) rasona or ginger (shodhit with takra) Jangal mansa (meat). Hot water	Flour of mash (black gram), Rajmah (kidney beans), sweets. Fast food, uncooked food, salty, spicy, oily food. Fish Cold water, Curd, jaggery, milk, cold beverages, ice creams.
Viharaja (Behaviour)	Sunlight exposure for at least 15 minutes in a day. Pranayam, yoga, meditation	Daytime sleeping, vegavadharan (suppression of natural urges); exposure to cold, wind, A.C., excess of stress

Assessment criteria
Grading of Sandhishoola (pain)

Sr. No.	Severity of pain	Grade
1	No pain	0
2	Mild pain	1
3	Moderate, but no difficulty in moving	2
4	Much difficulty in moving the body parts	3

Grading of Sandhishotha (swelling)

Sr. No.	Severity of swelling	Grade
1	No swelling	0
2	Slight swelling	1
3	Moderate swelling	2
4	Severe swelling	3

Grading of Sparshasahatwa (tenderness)

Sr. No.	Severity of tenderness	Grade
1	No tenderness	0
2	Subjective experience of tenderness	1
3	Wincing of face on pressure	2
4	Wincing of face and withdrawal of the affected part on pressure	3

Sandhigrah (Stiffness in joints)

Sr. No.	Stiffness in joints	Grade
1	No stiffness	0
2	Stiffness persistently only for half an hour to one hour in the morning	1
3	Stiffness persisting for a long time (>1 hour)	2
4	stiffness for whole day and night	3

Observations and results
Assessment of Sandhishoola

LT		NME of joint	RT	
BT	AT		BT	AT
2	0	Knee joint	3	1
2	0	Wrist joint	3	1
2	0	Metacarpophalangeal joint	2	1

Assessment of Sandhishotha

LT		NME of joint	RT	
BT	AT		BT	AT
2	0	Knee joint	3	1
2	1	Wrist joint	3	0
2	1	Metacarpophalangeal joint	2	0

Assessment of Sparshasahatwa

LT		NME of joint	RT	
BT	AT		BT	AT
2	0	Knee joint	3	0
3	1	Wrist joint	3	1
3	1	Metacarpophalangeal joint	3	1

Assessment of morning stiffness

Morning stiffness	
Before	After
2	0

Investigations
Showing Laboratory values before and after treatment

Investigations	BT	AT
Hb	10.4 gm/dl	11.2 gm/dl
ESR	56 mm at end of 1 hr	23 mm at end of 1 hr
RA factor	Positive (36)	Positive (20)
CRP	Positive (24)	Positive (6)

Discussion

Ama and vata are the important components in the pathogenesis of Amavata. As no disease occurs without impairment of agni [10], the important issue in chikitsa is Vathar, deepana and Amapachana

Chakradatta was the first, who described the Chikitsa Siddhant for Amavata. It includes Langhana, Swedana, drugs having Tikta, Katu Rasa and Deepana action, Virechana, Snehapana and Anuvasana as well as Ksharabasti [6].

1st line of treatment in Amavata is Langhana which helps in digestion of Ama. Here Langhana means not complete fasting but, intake of light food. The duration of Langhana varies from person to person.

In Amavata, Rukshasweda has been adviced in the form of Valukapottali due to the presence of Ama. It helps in pacifying vitiated Vata Dosha thus leads to relieve pain and stiffness [6].

Deepana-Pachana was done using Eranda Taila and Shunthi Kwatha. Eranda Taila is described to be best for the treatment of Amavata [4]. It is Katu, Ushna and Vataghna. Due to its Sukshma Guna, it reaches Sandhi and breaks Doshasanghata. Shunthi is Deepana, Vibandhahara, immunomodulator, shothahara (antiinflammatory). Also due to its Pachana action, it helps in Aamapachana. Thus, is helpful in Samprapti Vighatana

Simhnada Guggul have Katu, Tikta Rasa, Laghu, Ruksha Guna, Ushnavirya, Katu Vipaka, Vedhnasthapana, Amapachak, Srotoshodhaka properties which helps in breaking the pathogenesis of Amavata [7].

Dashamool kashay mainly act in vata and vata-kapha disease.it is anti-inflammatory as its content dashmool is shothahar in properties so is used in amavat [8].

Mahavishgarbha Tail have vedanasthapana, shothahar, swedajanana, dipana and pachana properties which help to relive the pain by vatashaman and causes amapachana on local application [5].

Conclusion

The above administered treatment protocol included oral as well as local medications which were effective to relieve the symptoms of Amavata. The drugs were tolerated by the patient and improved the range of movements. But this is a single case study hence to prove its efficacy there is a need to conduct a study on large number of patients.

References

1. Madhavakara. Madhava Nidana. Vijayarakshita, Shrikanthadatta, commentators. Madhukosha Teeka. Chapter 25, Aamavata Nidana. Varanasi: Chaukhambha Prakashan; 2009. p. 508.
2. Shah SN. API Textbook of Medicine. 7th ed. Mumbai: Association of Physicians of India; 2003.
3. Arnett FC, Edworthy SM, Bloch DA, McShane DJ, Fries JF, Cooper NS, *et al*. The American Rheumatism Association 1987 revised criteria for the classification of rheumatoid arthritis. Arthritis Rheum. 1988;31(3):315-24.
4. Govindadasa. Bhaishajya Ratnavali. Shastri A, commentator. Varanasi: Chaukhambha Prakashan; 2014. Amavatachikitsa, 29/20. p. 615.
5. Govindadasa. Bhaishajya Ratnavali. Mishra B, editor. Shastri A, commentator. Vatvyadhi Chikitsa, Chapter 26/596-606. p. 585.
6. Cakrapanidatta. Chakradatta Chikitsa Sangraha. Rao GP, translator. Varanasi: Chaukhambha Prakashan; Amavata Chikitsa 25/1-2. p. 264.
7. Cakrapanidatta. Chakradatta Chikitsa Sangraha. Rao GP, translator. Varanasi: Chaukhambha Prakashan; Amavata Chikitsa 25/33-38. p. 268.
8. Vagbhata. Ashtanga Hridaya. Chikitsa Sthana 17/14-16.
9. Govindadasa. Bhaishajya Ratnavali. Mishra B, editor. Shastri A, commentator. Amvat Chikitsa, Chapter 29/232-236. p. 585.
10. Vagbhata. Ashtanga Hridaya. Garde GK, translator. Pune: Anmol Prakashan; 2006. Nidanasthana 12/1. p. 197.

Case Study

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MANAGEMENT OF CEREBROVASCULAR ACCIDENT THROUGH PANCHAKARMA THERAPY: A CASE STUDY

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ABSTRACT

Cerebrovascular accident (CVA), the third most common cause of death in developing countries, is the term used to describe episodes of focal brain dysfunction due to focal ischemia or haemorrhage. Acute stroke is characterized most commonly by hemiplegia with or without signs of focal higher cerebral dysfunction that has posed a great problem as far as its management is concerned. Ayurveda can help in such conditions. CVA is quite clearly defined along with its symptoms, prognosis and management in Ayurveda in the context of Pakshaghata as a Vatavyadhi, affecting Madhyama Rogamarga, in which Sira (vascular structures) and Snayu (tendons and ligaments) are mainly affected. A 40-year-old male patient diagnosed with non-hemorrhagic infarct presented with left-side hemiplegia and diplopia was admitted to IPD. Panchakarma procedures, including Snehana, Swedana, Shirodhara, Nasya and Basti, were adopted along with other internal medicines. Assessments were done before and after treatment using the National Institute of Health Stroke Scale (NIH-SS). At the end of the treatment, there was considerable improvement in the subjective and objective clinical features. The observations reveal that Panchakarma procedures can play a vital role in managing conditions like Cerebrovascular accidents by combating general debility with extraocular muscle weakness. The recovery was promising and worth detailing.

Keywords: Cerebrovascular accident (CVA), Pakshaghata, Vatavyadhi, Stroke, Integrative Neurology, Panchakarma.

INTRODUCTION

Cerebrovascular accident or Stroke is a condition resulting in the sudden onset of weakness, numbness, paralysis, slurred speech, problems with vision and other manifestations as a result of a sudden interruption of blood flow or from a haemorrhage in a specific area of the brain resulting in neurological deficit. The ischemic area determines the type of focal deficit observed in the affected person. The two major types of stroke are ischemic and haemorrhagic strokes[1].

Stroke can be correlated with Pakshaghata's condition in Ayurveda, which results from Vata prakopa[2]. It affects sira's (vascular structures) and snayu's (tendons and ligaments) of one half of the body and face, the cause being dhatukshaya or avarana, i.e., any obstruction[3]. It is a condition affecting madhyama roga marga[4] and yapya[5] types of disease. Cardinal features are sandhi bandha vimokshana (subluxation of joints or hypotonia), akarmana (motor disability) and vichetana (sensory disability)[6].

The treatment principle explained for Pakshagata in classics are snehana (internal and external oleation), sweda, shodhana including Virechana (purgation), Basti, Nasya, Moordhni taila followed by Rasayana. The psychological issues must be addressed with selected satvavajaya protocol as per the condition in the initial management stages, as per Sushruta[7].

Table 1: Prevalence of stroke according to the 2023 National Stroke Registry Programme (NSRP)[8]

Region	Prevalence
Rural areas	84–262 per 100,000
Urban areas	334–424 per 100,000

In 2023, India has an estimated 185,000 strokes per year, about one stroke every 40 seconds. This makes stroke the second leading cause of death in India, with one death every four minutes. The Global Burden of Diseases (GBD) also states that India has the highest burden of stroke, with 68.6% of strokes, 70.9% of stroke deaths, and 77.7% of disability-adjusted life years (DALYs) lost. The chance of stroke occurring at age 55 and above is 1 in 5 for women and 1 in 6 for men[8].

MATERIALS AND METHODS

Case Report: A 40-year-old male patient with complete loss of strength in the left side of the body, impaired left eye abduction, and diplopia since 3.5 months was brought to the OPD on 31.01.2024. Initial history revealed that the patient developed sudden weakness in the left side of the body 3.5 months back and was under conventional medical supervision for a week.

MRI of the brain was done on 07.10.2023 and revealed acute non-haemorrhagic infract, right side pons and right medullar aspect chronic small vessel ischemic changes (Fazeka's Grade 1), non-haemorrhagic infarct in the posterior limb of left internal capsule.

Ayurveda Perspective: The patient presented with lakshana like shaitya (cold to touch), guruta (heaviness) along with chestahani (impaired motor activity in the left side), dwandva drushti (diplopia) in the left eye based on which Avaranjanya vaam Pakshaghata was diagnosed. The symptoms resemble acute Cerebrovascular accident. The prognosis of this manifestation is kruchra sadhya (challenging to cure). As per treatment principles, Panchakarma procedures and internal medicines were planned.

Hetu (Causative Factors)

Aahar hetu: Tea (5-6 cups/day), murmura (puffed rice), pohe (flattened rice), paryushit anna (steal meal), madyapana (alcohol intake), akalbhojanam (untimely meals), katu rasatmak aahar (spicy food).
Vihar hetu: Avyayam (lack of exercise), vegadharan (suppression of natural urges), yanayan (travelling).
Manas hetu: Chinta (psychological distress), overthinking.

Past History
K/C/O Hypertension, Diabetes mellitus.
The patient was on Telmisartan 40 mg, Metformin 500 SR and a combination of Aspirin 75 mg + Clopidogrel 75 mg + Atorvastatin 20 mg.

General Examination
BP - 120/90 mmHg
PR - 80 bpm
RR – 20 times/min
Height - 158 cm
Weight - 65 kg

Ashta Sthana Pariksha
Nadi – 78 bpm
Mala - Vibandha (constipation)
Mutra - 3-4/1-2 times D/N
Jihva - Alipta
Shabda - Prakrutha
Sparsha - Prakrutha
Drik - Dwandwa drushti (diplopia)
Akriti - Madhyama

CNS Examination
Higher Mental Function
Consciousness - Conscious
Orientation - Well-oriented to time, place and person
Behaviour - Cooperative
Attentiveness - Stuporous
Memory - Immediate - Intact, Recent - Intact, Remote - Intact

Cranial Nerve Examination
Cranial nerve examination - Intact except for cranial nerve number 6- abducens nerve - monocular horizontal diplopia when looking to the side of the paretic eye. The left eye is slightly adducted when the patient looks straight ahead. The eye abducts sluggishly, and even when abduction is maximal, the lateral sclera was exposed.

Sensory System Examination - Intact.

Motor System Examination
Tropical changes - No pressure sores.
Atrophy/hypertrophy - Absent.
Fasciculation and irritability - Absent.
Contraction and Contracture - Absent.
Involuntary movements - Absent.

Table 2: Assessment of Muscle Power Before Treatment

	Right Limb	Left Limb
Upper Limb	5/5	1/5
Lower Limb	5/5	1/5

Table 3: Assessment of Muscle Tone Before Treatment

Left limb	Clasp knife rigidity
Right limb	Normotonic

Table 4: Assessment of Deep Reflexes

	Left limb	Right limb
Bicep's	+2	+1
Triceps'	+2	+1
Supinator	+2	+1
Knee Jerk	+3	+2
Ankle Jerk	+2	+1
Babinski Sign	Positive	Intact

Table 5: Assessment for Co-ordination

Test	Result
Finger nose test	Not possible in left-hand
Knee heal test	Not possible in the left leg
Romberg's Test	Positive
Gait	Circumduction gait

Clonus - Absent.

MANAGEMENT

Table 7: Treatment regimen

Regime	Date	Procedure /drug	Duration/dose
1.	31.01.2024 to 06.02.2024	Snehana (massage) with Til taila	35 minutes
		Swedana (sudation therapy)	20 minutes
		Tab. Ekangaveer Ras	250 mg - 250 mg Vyan-udana kale (after meals)
		Tab. Mahayogaraj guggul	250 mg - 250 mg Vyan-udana kale (after meals)
		Avipattikar chooma	3 gm at night after food with Lukewarm water
2.	07.02.2024 to 20.02.2024	Snehana with Til taila	35 minutes
		Swedana	20 minutes
		Shirodhara with Chandanbala tailam	35 minutes
		Tab. Ekangveer Ras	250 mg - 250 mg Vyan-udana kale (after meals)
		Tab. Mahayogaraj guggul	250 mg - 250 mg Vyan-udana kale (after meals)
		Avipatikar chooma	3 gm at night after food with Lukewarm water
3.	21.02.2024 to 28.02.2024	Snehana with Til taila	35 minutes
		Swedana	20 minutes
		Shirodhara with Chandanbala tailam	35 minutes

		Nasya (pratimarsha) with Panchendriya Vardhan tail	Nasya two bindu (1ml/each nostril) at morning after snehan swedana.
		Tab. Ekangveer Ras	250 mg - 250 mg Vyan-udana kale (after meals)
		Tab. Mahayogaraj guggul	250 mg - 250 mg Vyan-udana kale (after meals)
		Avipatikar choorna	3 gm at night after food with Lukewarm water
4.	29.02.2024 to 07.03.2024	Snehana with Til taila	35 minutes
		Swedana	20 minutes
		Tiktasheerbasti	Yogabasti Krama
		Tab. Rasnadi guggul	500 mg - 500 mg Vyan-udana kale (after meals)
		Tab. Sanshamani vati	250 mg - 250 mg Vyan-udana kale (after meals)
5.	08.03.2024 to 15.03.2024	Snehana with Til taila	35 minutes
		Swedana	20 minutes
		Shirodhara with Dashmool kwath	35 minutes
		Tab. Sanshamani vati	250 mg - 250 mg Vyan-udana kale (after meals)

RESULT

Table 6: NIH Stroke Scale Assessment [10]

Sr.No.	NIH scale	Range of score	Before treatment	After treatment
1a	Level of consciousness	0 to 3	0	0
1b	LOC questions	0 to 2	1	0
1c	LOC command	0 to 2	1	0
2	Best gaze	0 to 2	1	0
3	Visual	0 to 3	0	0
4	Facial palsy	0 to 3	0	0
5	Motor arm	0 to 4	3	1
6	Motor leg	0 to 4	3	1
7	Limb ataxia	0 to 2	2	0
8	Sensory	0 to 2	1	0
9	Best language	0 to 3	1	0
10	Dysarthria	0 to 2	1	0
11	Extinction & inattention	0 to 2	1	0
	Total	42	15	2

DISCUSSION

In an ischemic stroke, there will be a reduction in blood supply to any part of brain tissue, which leads to dysfunction of that part of brain tissue. About 30-40% of Ischemic Strokes are termed as cryptogenic (i.e. of unknown origin). Several classification systems for acute ischemic stroke, the OCSP, i.e., Oxford Community Stroke Project classification (also called the Bamford or Oxford classification) relies generally on the initial symptoms of stroke, based on the extent of these stroke symptoms, stroke episode is classified as, total anterior circulation infarct (TACI), partial anterior circulation infarct (PACI), lacunar anterior circulation infarct (LACI) or posterior circulation infarct (POCI) [11]. These four types of infarcts predict the extent of the stroke, the area of the brain affected, the underlying cause and its prognosis. Due to severe disability and dependency, Pakshaghata can be considered as one of the major diseases[12-14]. Our Acharyas have given the line of treatment for Pakshaghata. In Sushruta Samhita, Acharya has given the treatment protocol in the sequence of Snehana followed by Swedan, Mrudu Samshodhana and Basti Chikitsa[15]. In Charaka Samhita, Acharya has given protocols like Sweda, Sneha, and Virechana[16]. However, in the present study, the treatment protocol was decided based on the condition of the roga and rogi.

The possible roles of different Panchakarma therapies used herein are discussed below:

Shirodhara: This therapy involves pouring medicated oil on the forehead, calming the nervous system and promoting relaxation. In stroke patients, Shirodhara helps:

- Reduce stress and anxiety
- Improve sleep quality
- Enhance cognitive function
- Promote neuroplasticity

Pratimarsha Nasya: This nasal medication therapy targets the brain and nervous system, offering benefits such as:

- Improved cognitive function and memory
- Enhanced neurotransmitter balance
- Reduced inflammation and oxidative stress
- Promoted neuronal regeneration

Tiktaksheer Basti: This medicated enema therapy targets the nervous system and brain, providing benefits like:

- Reduced inflammation and oxidative stress
- Improved cognitive function and memory
- Enhanced neurotransmitter balance
- Promoted neuronal regeneration and repair

CONCLUSION

Using the treatment principles of Panchakarma, Ayurveda offers rehabilitation therapy for patients with stroke. The line of treatment is to bring back the motor and sensory functions of the brain. Internal medicines boost the blood supply, and natural antioxidants increase the oxygenation to the brain, rejuvenate the brain cells, and decrease cell death. The external therapies and Panchakarma improve the functioning of the peripheral nervous system. The heat modalities in therapy maintain the muscle tone and reduce muscle spasm/ stiffness. Thus, the above-described sets of Panchakarma treatments and shaman oushadhi have shown significant clinical results with speedy recovery in the patient in the present study.

Panchakarma therapies like Shirodhara, Pratimarsha Nasya, and Tiktaksheer Basti offer a holistic approach to stroke rehabilitation. By addressing the physical, mental, and emotional aspects of stroke, these therapies can complement modern medicine and enhance patient outcomes. Further research and

integration of Panchakarma therapies into stroke rehabilitation protocols may offer new hope for patients and caregivers.

DISCLAIMER: The study is carried out as per the International Conference of Harmonization-Good Clinical Practices Guidelines (ICH-GCP) or as per ICMR National Ethical Guidelines for Biomedical and Health Research Involving Human Participants.

REFERENCES

1. Jean D. Wilson *et al.* (editor). Harrisons Principles of Internal Medicine, Volume 2, 16th Edition, Mc Graw-Hill Companies; 2004: p 2372-2373.
2. Hari Sadasiva Sastri Paradakara (editor). Ashtanga Hridaya of Vagbhata with Sarvangasundara commentary by Arunadatta & Ayurvedrasayana of Hemadri, Nidanasthan, Chapter 15, verses 38-41. Reprint edition, Varanasi, Chaukhamba Sanskrit Sansthan; 2012: p 533.
3. Hari Sadasiva Sastri Paradakara (editor). Ashtanga Hridaya of Vagbhata with Sarvangasundara commentary by Arunadatta & Ayurvedrasayana of Hemadri, Nidanasthan, Chapter 15, verse 5,6. Reprint edition, Varanasi, Chaukhamba Sanskrit Sansthan; 2012: p 530,531.
4. Hari Sadasiva Sastri Paradakara (editor). Ashtanga Hridaya of Vagbhata with Sarvangasundara commentary by Arunadatta & Ayurvedrasayana of Hemadri, Sutrasthan, Chapter 12, verse 47,48. Reprint edition, Varanasi, Chaukhamba Sanskrit Sansthan; 2012: p 200.
5. Hari Sadasiva Sastri Paradakara (editor). Ashtanga Hridaya of Vagbhata with Sarvangasundara commentary by Arunadatta & Ayurvedrasayana of Hemadri, Sutrasthan, Chapter 1, verses 30-33. Reprint edition, Varanasi, Chaukhamba Sanskrit Sansthan; 2012: p 18.
6. Yadunanda Upadhyaya (editor). Madhav Nidanam of Sri Madhavakara- Madhukosh Tika, Vata Vyadhi Nidan, Chapter 22, verse 41. Reprint edition, Varanasi, Chaukhamba Prakashan; 2018: p 473.
7. Dr Anant Ram Sharma, Priya Vrat Sharma (editor). Sushruta Samhita of Maharsi Sushruta with Susrutvimarsini Hindi commentary, Chikitsasthana, Chapter 5, verse 19, Reprint edition, Varanasi. Chaukhamba Surbharati Prakashan; 2019: p 219
8. Hemorrhagic stroke, Hemorrhagic stroke A. Cause the blockages that lead to ischemic strokes [Internet]. Gov. in. [cited 2024 Apr 25]. Available from: https://namayush.gov.in/sites/all/themes/webcms/images/org_str/STROKE.pdf
9. PTI. Stroke second most common cause of death in India, younger and middle-aged people at greater risk, says neurologist [Internet]. Economic Times. 2023. Available from: https://economictimes.indiatimes.com/magazines/panache/stroke-second-most-common-cause-of-death-in-india-younger-and-middle-aged-people-at-greater-risk-says-neurologist/articleshow/98518204.cms
10. NIH Stroke Scale [Internet]. National Institute of Neurological Disorders and Stroke. Available from: https://www.ninds.nih.gov/health-information/public-education/know-stroke/health-professionals/nih-stroke-scale
11. Yash Pal Munjal (editor). API Textbook of Medicine, Volume 2, 9th Edition, Mumbai: Association of Physicians of India; 2012: p 321.
12. Hari Sadasiva Sastri Paradakara (editor). Ashtanga Hridaya of Vagbhata with Sarvangasundara commentary by Arunadatta & Ayurvedrasayana of Hemadri, Nidanasthana, Chapter 8, verse 30, Reprint edition, Varanasi, Chaukhamba Sanskrit Sansthan; 2012: p 497.
13. Dr Anant Ram Sharma, Priya Vrat Sharma (editor). Sushruta Samhita of Maharsi Sushruta with Susrutvimarsini Hindi commentary, Sutrasthana, Chapter 33, verse 4, Reprint edition, Varanasi. Chaukhamba Surbharati Prakashan; 2019: p 267
14. Yadavji Trikamji (editor). Charaka Samhita of Agnivesa with 'Ayurvedadipika' commentary by Sri Chakrapanidatta, Indriyasthan, Chapter 9, verse 8, Reprint edition, Delhi, Chaukhamba Sanskrit Pratisthan, 2016: p 368
15. Dr Anant Ram Sharma, Priya Vrat Sharma (editor). Sushruta Samhita of Maharsi Sushruta with Susrutvimarsini Hindi commentary, Chikitsasthana, Chapter 5, verse 19, Reprint edition, Varanasi. Chaukhamba Surbharati Prakashan; 2019: p 219
16. Yadavji Trikamji (editor). Charak Samhita of Agnivesa with 'Ayurvedadipika' commentary by Sri Chakrapanidatta, Chikitsasthan, Chapter 28, verse 100, Reprint edition, Delhi, Chaukhamba Sanskrit Pratisthan, 2016: p 621

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A review article: Conceptual study for Gridhrasi management

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Abstract
Back pain is fairly frequent these days, both in India and overseas, although its prevalence varies depending on the definitions employed and the demographic investigated. A major study found an incidence of 28.0 episodes per 1000 people per year for low back pain with sciatica and an incidence of 11.6 per 1000 people per year. Low back pain affects men somewhat more than women and is most common in the working population, with the highest frequency reported in individuals aged 2 to 64. Modern medicine lacks precise treatments, particularly for sciatica, so an extensive study was conducted to gain a thorough understanding of the idea of sciatica in Ayurvedic terminology. Because the condition is not well documented in Ayurvedic classics, physicians have found it difficult to treat such patients. So present study has been taken to understand the concept of disease gridhrasi and to achieve a treatment protocol accordingly. Gridhrasi, according to Ayurveda, is one of the disorders produced by Vata vitiation. Sometimes even Kapha vitiation.

Keywords: Back pain, low back pain, sciatica, prevalence

Introduction
With lifestyle changes, low back pain is becoming a more common complaint in all age groups in India and overseas, and it is increasing by the day. A big study found an incidence of 28.0 episodes per 1000 people per year for low back pain with sciatica and 11.6 episodes per 1000 people per year. Low back pain affects men somewhat more than women and is most common in the working population, with the highest prevalence observed in individuals aged 25 to 64 years. Modern medicine does not have a specific treatment for sciatica, which is why an extensive study has been conducted to gain a thorough understanding of the idea of sciatica in Ayurvedic terms. Ayurvedic texts provide a detailed account of the therapy of vatavyadhi, but a full description of the treatment of gridhrasi is only mentioned by a few experts.
The current study was done to gain a comprehensive understanding of the pathology of gridhrasi and to develop a therapeutic strategy based on Ayurvedic classics.
Gridhrasi is the most obstinate and notable of the 80 forms of nanatmaja diseases. Gridhrasi is a painful ailment in which the individual is unable to sit and walk properly, which interferes with his daily activities. Almost all indications and symptoms of Gridhrasi.

Nidana (Etiology) of gridhrasi
Incase of Gridhrasi specific nidana has not been mentioned. So, the causal variables described above for Vata vyadhis are considered nidana, and efforts have been made to understand how they cause the ailment. Actually, there isn't much of a distinction between Nidana and Vatavyadhis. The main difference is in samprapti in all vata vyadhis. Vataprakopaka karanas are nearly identical, with the exception of gridhrasi, pakshaghata, and others, which are caused by the samprapti vishesa of vitiated dosha [1], Charaka [2] and Bhavaprakasha [3] clearly stated the causes of Vata vyadhi, while the causes of Vata vyadhi were not properly defined in Sushruta Samhita, Astanga Sangraha, and Astanga Hridaya, among other places. However, in these works, the causes of triggered Vata dosha are identified. Gridhrasi is considered a nanatmaja type of Vata sickness, hence vata-provocative variables can also be included as causes. Furthermore, in Charaka Samhita, Astanga Sangraha, and Ashtanga Hridaya, the exact causes of Vata Vyadhi [4].

Purvarupa of gridhrasi
Gridhrasi is one of the 80 forms of Vata vyadhi, therefore small symptoms before the disease's manifestations may be considered purvarupa.

Rupa of gridhrasi

Pain starting from Sphik and radiating towards Kati, Pristha, Uru, Janu, Jangha and pada in order, is the cardinal symptoms of Gridhrasi. Ruk and Toda are the two main words used to describe the pain. Charak also mentioned Stambha and Muhuspandana [5]. Shusruta and Vagbhatta have designated Sakthikshepanigraha as the cardinal sign. Bhavaprakash, Madhavnidan, and Yogaratnakara have categorized some signs and symptoms as Vatik lakshanas, such as Dehasyapi pravakrata and Janu uru sandhi spurana [6, 7]. Charka, Madhavnidan, Bhavapraksha, and Yogaratnakara [8-10] define Vatakaphaja as Tandra, Gaurava Arochaka, Mukhapraseka, Bhaktdwesha and others.

Symptoms of vataja gridhrasi

a) **Ruk (Pain):** This is a common symptom of Gridhrasi, starting at the hip and affecting the waist, back, thighs, knees, calf, and foot [5]. Obviously, this discomfort is present in the area covered by the sciatic nerve.
b) **Toda (Pricking pain):** Charaka and Madhava have mentioned this symptom. Toda is pricking, similar to pain, felt along the sciatic nerve distribution.
c) Stambha (stiffness) in the affected area of Gridhrasi patients. This is a sensation of lightness or rigidity throughout the leg. Due to the pain in the nerve distribution, the person attempts to move as little as possible. As a result, the muscles of the leg become rigid, causing stambha.
d) **Spandana (twitching):** A sensation of pulsating or throbbing. This is caused to muscle twitching. This can occur in the buttock region of the thigh, legs, or even the tiny muscle of the foot, and is most commonly found in the sciatic nerve-supplied muscles.
e) **Sakthikshepana nigrahanti:** Shusruta mentioned this symptom. Dalhana comments on the aforesaid symptom, stating that the kandara that prevents limb mobility is known as Gridhrasi. This is another symptom of reduced mobility in the afflicted leg. The word kshepa refers to prasarana, or extension. The patient must maintain the leg flexed because stretched position causes additional pain.
f) Vagbhata uses the word "Utkshepana" instead of "Kshepa" to indicate that the patient is unable to lift the leg. Aruna Dutta explicitly explains it by using the term 'Pada udharane Ashakti', which implies that the patient is unable to raise or lift the leg.
g) **Dehasyapi pravakrata:** Madhava described the symptom as pain resulting from lateral and forward bending of the body. The Gridhrasi patient maintains the leg in a flexed position and attempts to walk without considerable leg extension. As a result, his entire body is skewed on the affected side, causing him to bow or limp. The gait is also usual.

Symptoms of vata kaphaja gridhrasii

Tandra: Tandra is one of the symptoms of the Vatakapha syndrome. According to Acharyas, Tandra is the result of vitiated Vata and Kapha [11]. In the instance of Gridhrasi, it may also be stated that Vata and Kapha dominance creates Tandra. Charaka describes the causative factors of tandra as dietary substances with attributes such as madhura, Snigdha, Guru, and some mental factors such as Chinta, Shoka, and so on. The end outcome of the preceding is the vitiation of vata and kapha.

a) **Gaurava:** The sensation of heaviness in the body. Heaviness is the quality of Kapha. Gaurava develops when the Kapha is activated in the Vata kaphaja kind of Gridhrasi. Anyway, only Charaka mentioned this ailment, whereas others did not.
b) **Arochaka:** Charaka, Madhava, and Bhavaprakasha mentioned Arochaka as a symptom of Gridhrasi. It is a subjective symptom in which the patient loses taste yet keeps their hunger intact. In comparison to Vata, it appears that Kapha plays a larger part in Arochaka manifestation because the name of Bodhaka Kapha is Jiwha (Tongue). So it is apparent that this ailment is caused by kapha vitiation, specifically Bodhaka Kapha.
c) **Agnimandy:** Agni refers to the body's Pachaka pitta. When impacted by vitiated Kapha, the Pachakapitta fails to operate normally. This could be owing to the antagonistic qualities of Pitta and Kapha. So, in the situation of Gridhrasi, where Kapha is dominating, Ama's function must be considered. Agnimandya causes the development of Ama, which in turn creates more Agnimandya.
d) **Mukhaphaseka:** The reason of mukhaphaseka is the vitiated beta. Mukhapraseka has been referenced in the Vatakaphaja kind of Gridhrasi by Madhavanidana and Bhavaprakash. Vatamay has a small part to play in Mukhapraseka's situation. Some Acharyas have cited Praseka because of Ama's involvement. In summary, Mukhapraseka is brought about by the interaction of Ama and Kapha.
e) **Bhaktadwesha:** The involvement of Kapha and Maha also results in this symptom. Here, the patient exhibits a general antipathy to the meal ingredients. This symptom has been noted by Madhava Nidana and Bhavaprakash in relation to the vatakaphaja Gridhrasig kind.
f) **Staimitya:** Harit is the only one to describe this ailment. The word timiditya (frozen feeling) refers to timidity. The patient feels as though a damp cloth has been wrapped around their limb as a result of Kapha vitiation.

Sapeksha nidana of gridhrasi

Urustambha and Khalli are comparable diseases that cause significant pain in the leg. Khanju and Pangual both had lower limb illnesses that resembled Gridhrasi. In addition, Gudagata Vata necessitates a differential diagnosis with this condition.

The differential diagnosis of Gridhrasi from Urustambha and Consider the following points when determining khalli [12] disease:

a) Gridhrasi is distinguished by radiating pain that begins in the Prishtha and Kati portions, which is not present in Urustambha or Kalli.
b) In Gridhrasi, sakthikshepa (leg raising) is restricted, while in Urustambha, patients have heaviness in their thighs and trouble walking.
c) Urustambha is linked with Jvara, Chhardi, Aruchi, and Angamarda. etc. that are not often found in Gridhrasi.
d) Khalli pain is typically more severe and proximal compared to Gridhrasi.
e) In Khanja and Pangu, paralysis is the primary symptom, but sciatica may emerge as a late consequence with no history of pain [13]. With contrast, with Gudagata Vata, in addition to pain, foot symptoms such as shosha, retention of feces, urine and flatus, colic, flatulance, and stone formation (Ashmari) may be present [14].

Samprapti of gridhrasi

Gridhrasi's specific samprapti is not described in the classics, yet it follows the same lines as vatavyadhies. Gridhrasi is

shoola pradhana vatavyadhi and shoola (pain) cannot occur without the presence of vata dosha. Gridhrasi is classified into 80 varieties of nanatmaja vatavyadhies, indicating that Vata dosha predominates in its samprapti. Vyana and Apana Vata are the most vitiated of the five forms of Vata. Prakrut vyana vata's duties include gati, prasarana (extension), akunchana (flexion), and utkshepana (lifting), among others. The hampered Sakthikshepa karma denotes Vyana dusti. Gridhrasi's causes and adhisthana are similar to those of Apana Dusti. Hence, apana vitiation is predominant. Though Vata is a dominant dosha, Kapha can occasionally produce Gridhrasi but cannot develop it on its own. Pitta is the least involved dosha. When 'daha'lakshana is present, pitta may participate as anubandhi dosha.

All of these lakshanas are similar to the signs and symptoms of bone degenerative disorders such as osteomalacia, tuberculosis, and spondylosis. According to Sushruta, in this ailment, the vitiated dosha affects the kandara, which causes the manifestation. Charaka defines kandaras as the upadhatu of rakta dhatu. Chakrapani notes that kandara can also be interpreted as sthula snayu. Snayu is mulasthana of mamsa and upadhatu of meda. Rakta, mamsa, and meda may be considered dushya in the disease Gridhrasi.

Furthermore, the sthana of vayu is referred to as asthi, and there is an inverse relationship between both; for example, rising vayu causes asthi kshaya, which leads to increased prakopa of vata. As previously stated, Gridhrasi is a nanatmaja vata condition, with sakthiksepa nigraha being the primary symptom performed by Sandhi. So Sandhi may also be involved. In this sandhi, asthi kshaya deformity is more likely. Growth may occur in the event of anubandha of kapha, which is created from jala mahabhuta, leading to theavarana of vata. Prakupitavatamay can produce sramsa-bhramsa in the implicated sandhi, resulting in intervertebral disc protrusion and gridhrasi. When prakupitavata involves masa its sudden sankocha, it may also create bhramsa in the sandhi, resulting in Gridhrasi.

Charaka mentions that cause pain in the lower limbs, starting with Kati and Sphik. Kati sandhi is mostly implicated in this disorder. Some sphiksandhial disorders result in a situation resembling Gridhrasi. Some Acharyas have neurological system abnormalities that lead to mastulunga and consequently majja. Gridhrasi nadi is engaged in this sickness, so Majja dhatu may also be involved.

According to ashraya ashrayi bhava, the vitiation of vata and the aforementioned dushyas include their srotasas as well. As a result, rasavaha ravktavaha, mamsavaha, medovaha asthivaha and majjavahasrotas may all be implicated in this sickness. The main udbhavasthana of this ailment is pakwashaya, which is a nanatmaja vatavyadhi. Amashaya can also be considered an udbhavasthana in the case of vata kaphaja Gridhrasi. Chrkradutta has identified kati and sphik as the first places from which the sickness begins. Gridhrasi illness arises when the kandara of parsni and pada anguli, which starts from the mastulunga, is compressed in kati and sphik pradesha. The Sanga and Srotarodha types of vikruti exist in the Marga of the Gridhrasinadi. Asthikshaya of the bones of Katisandhi due to the patients' rukshadi ahara vihara could be the main cause. Prakupita vata by causes sankocha in the mansapesi, and katisandhi's kandara may produce sthanachyuti in the intervertebral disc, which can lead to this condition. The sickness may also be caused by new growth by the kapha anubandha, which causes vata margavarodha. Both jatharagni and dhatwagni are disturbed, resulting in ama from both origins, which causes srotarodha in the adhisthana. Adhyasthi arbuda granthi, apachi, sthaulya, and other examples of incorrect asthi, mamsa, and meda dhatuvridhis are found in inappropriate locations. In modern medical science, osteophytes spurs, tumours, cysts, and neurofibromas are all mentioned as causes of sciatica. Due to such rotarodha in the way of Gridhrasinadi, lakshanas such as ruk'toda, stmbha, and so on are formed. In addition to vatic lakshana, kapha lakshanas such as tandra, gaurav, and arochaka are formed.

The two varieties of samprapti have previously been explored as dhatukshaya and margavarodha. When kha vaigunya is present at kati, sphik sandhi, snayu, kandara, and nadi, some type of trauma or exposure to chills, for example, acts as a vyanjaka hetu. Without any prior khavaigunya, acute trauma or injury to the lambosacral area can cause rapid contraction of the mansapeshi of katisandhi, which can lead to sransa or bhramsa of kasherukasthi of katisandhi (prolapsed intervertebral disc) and vataprakopa. This leads to sanga and srotarodhajanya vikruti during Gridhrasi nadi. Gridhrasi nadi has pidan, and Gridhrasi symptoms appear. This can be expressed as agantuja nidana janya Gridhrasi.

Samprapti ghataka's overview

Nidana – vataprakopaka nidana
Dosha – Vyana and apana vata, kapha
Dushya – Rasa, Rakta, asthi, majja, sira, kandara, snayu
Agni – Jatharagni and Dhatwagni
Ama – Jatharagnijanya and dhatwagnijanya
Udhbhava sthana – Pakwashaya
Sancharasthana – Rasayanies
Adhisthana – pristha, kati, sphik
Srotas – Rasa, rakta, mansa, medo, asthi and majjavaha srotasas
Vyakta – Adhosakthi – uru, janu jangha and pada
Rupa – Ruk, toda, stambha arochaka, suptata, bhaktadwesa, tandra, gaurava.

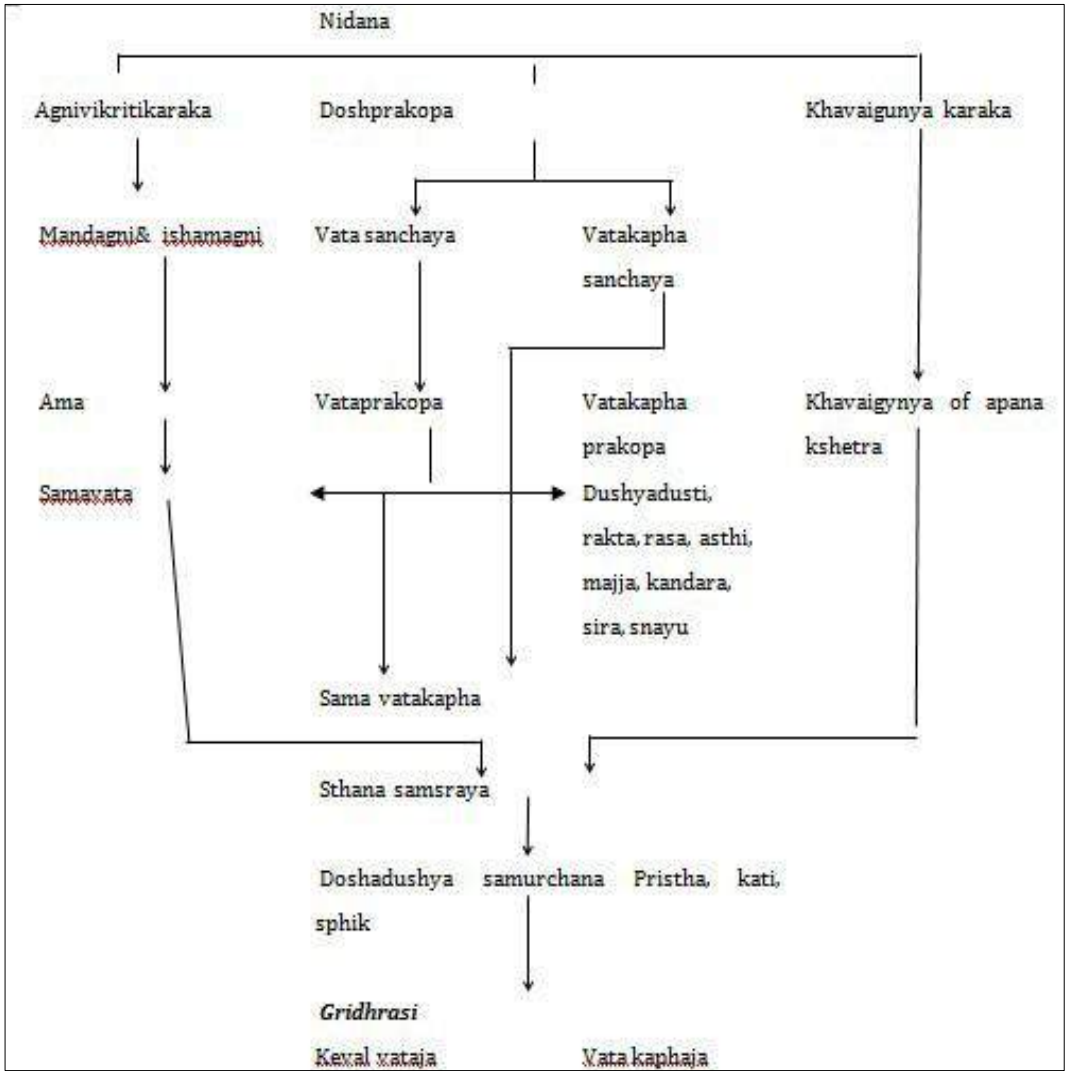

Fig 1: Schematic representation of probable samprapti of gridhrasi

Sadhyasadhyatva of gridhrasi

A separate prognosis has not been mentioned for Gridhrasi. It may be said that Gridhrasi in which the vitiated vata is seated in majjadhatu or if Gridhrasi is accompanied with khuddavata, angasosha and stambha may or may not be cured even after careful treatment. But if this condition occurs in a strong person and is of recent origin and without any associated disease, then it is curable. Sushruta mentions that a patient of vatavyadhi, if develops the complications like shunam (oedema/ inflamation) suptatwacham (Tactile senselessness), Bhagnam (fracture), kampa (tremors) adhmana (distension of abdomen with tenderness) and pain in internal organs, then he does not
Survive [15].

Chikitsa of gridhrasi

Gridhrasi is being a Vata vyadhi, general treatment is advised for that of Vata. The first and foremost principle to be adopted in treatment is to avoid the nidanas that cause Gridhrasi. According to the Dosha Kopa, Gridhrasi can be divided into three stages. It should be studied carefully before starting the treatment as the stage varies from time to time.
Stages of Dosha prakopa Treatment.

a) Minimum (vata) Langhana
b) Moderate langhana–Pachana
c) Maximum (ama/vata kapha) Shodhana.

Before starting the treatment we should study the patient and disease, because in case we are misguided by the patient or due to ignorance, inappropriate medicines will create serious complications.
In all stages of Gridhrasi, expect in Amavastha, oil preparations is suggested by all Acharyas both externally and internally. But in Ama and Vata Kapha Gridhrasi Sneha prayoga will not give any positive result. In this, Ruksha prayoga should be advised.
In first two stages – minimum & moderate, in Kevala Vata, Shamana sneha is advised by Acharyas. In the third stage, Shodhana should be given, because in this case, shaman treatment will not give any good result without purification of the body. After the Sodhana, shamana can be used. So first we should go through Shodhana therapy. Pre operative process helps to bring back
the doshas to their respective Asayas. Here preoperative processes is of two kinds–Snehana and Swedana.

Discussion on the treatment snehana

Taila is supposed to be the best for Vata as Vata is Ruksha, Sheeta, laghu and khara and Taila has just opposite qualities like Snigdha, Usna, Guru, Piahila etc. Thus, Taila alleviates Vata and at the same time does not increase Kapha as it is ushna. A type of internal Snehapana helps in Kledana and Vishyandana of Doshas. By its Apya, Snidha, Guru, Picchila guna it brings the Doshas to Kostha and then further it drived

out by shodhana. It destroys the malasanghata, does kosthasudhi Agnidipti and improved vigour and complexion.
Sneha is used externally in Abhyanga, Pariseka, Avagaha etc. Sparsanendriya is the place of Vata. Since Abhyanga is done on the skin, it alleviates Vata. Shusruta has given a calculation of time in which sneha in Abhyanga reaches different Dhatus. With this reference it can be said that, Sneha applied on skin for 900 matras can reach upto Majja Dhatu. Thus, it can be useful in Asthimajjagata Vatavyadhiea also. Abhyanga increases body capacity to bear trauma and hard work, which is the maximum occurring cause in Gridhrasi.
Abhyanga keeps away the aging process. Hence it can slow down the degenerative process occurring in different Dhatus (Especially in the spine the sciatic nerve and the muscles of lower extremities in Gridhrasi).

Swedan
Charak acharya has pointed that even dry wood can be made soft and flexible with Snehana and swedana then why not be living organs [16]. Gridhrasi is clearly mentioned in the list of swedanarha and also the cardinal and associated features of Gridhrasi like shool, Stambha, Sankocha, supti have also been mentioned. Gridhrasi is a Vatavyadhi and sometimes Kaphanubandhi. Swedana is also indicated in vatavyadhies as well as Vatakaphaja Vyadhies [17]. Gridhrasi is a shoola pradhana vatavyadhi and shulavayuparama (destruction of pain) is the sign of proper swedana [17]. Nirgundi patra pinda sweda is effective in Gridhrasi as it Act as snehana as well as swedana.

Mriduvirechana
If the vitiated Doshas are more in amount and no relief is acquired by Snehana, Swedana, then only MriduVirechana is indicated for the Dosha shodhana. They have already brought to kostha by Snehana and swedana and can be easily derived out by Mridu Virechsana. Trivruttta, Eranda. Aragvadha etc. are used for this purpose. Virechana removes the maladravyas, increases Agni, purifies srotas, Dhatus and destroyes the vyadhi [18]. Though it is especially indicated in Pittapradhana and Raktapradoshaja Vyadhies, it is also
usesful in Vatavyadhies as it does the systemic purification of Doshas and affects the whole Dhatu pariposhan karma.
As far as etiopathology of Gridhrasi is concerned ‘VataVaigunya’ is important. It essentially plays a role in the over stimulation of the nerve as experienced by severe pain in the course of affected part. In removing the ‘Vata Vaigunya pertaining to the disorder, Shodhan therapy should be indicated. Among the shodhan therapy ‘Sneha Virechana’with ‘Nirgundi patra swarasa’has a specific indication.
For the Mridu Virechana, Eranda taila and Nirgundi Patra Swarasa should be mixed and given to Gridhrasi patients. This mixture relieves vata from katipradesha. It clears the Apana Vata which is the main factor of Gridhrasi.

Bastikarma and concept of selection of the bastikarma
Basti is the important karma in the treatment of Vata vyadhies. It is indicated in almost all vata vyadhies and especially indicated in the patients who have disability, stiffness in the extremities, pain in the organs, and fractures in the bones. Severe constipation, loss of appetite etc. majority of the symptoms is present in the patients of Gridhrasi. As Basti stays in pakwashaya, pelvises, organs below umbilicus get benefitted through virya of the Bastidravyas,
transmitted all over the body. It sucks out Doshas from head to toe as, the sun, though miles away, with its ray’s sucks the water from the plants on the earth. No other chikitsa is as capable as Basti to tolerate and regulate the force of Vata.19 Niruha Basti if used methodically and skillfully purifies mala, Tridoshas and Saptadhatus, drives out Dosha Sanchaya from the whole body, increases Agni, intellect, life span, checks aging process [20].
In Anuvasana Basti Sneha is used. Nothing is as superior as Taila in destroying Vata as Taila with its Snigdha Guna destroyes Rukshata and with its Guru and Usna guna destroyes Laghu and Sheeta Gunu of vata respectively. As water poured into root nourishes the whole tree and blossoms, oil given into the anus nourishes the whole body, increases Sukra Dhatu, and enhances fertility.

Agni karma as specific treatment of gridhrasi
In Charaka Samhita Bastikarma (Niruha and Anuvasana basti), Siravedha and Agnikarma (between kandarsa and Gulpha) has been advised [21]. Sushruta has advised Siravedha at Janu after flexion [22]. Astanga sangraha and Astanga Hrdaya have also advised Siravedha four Angula above the Janu [23]. Chakradutta has given the treatment of Gridhrasi in details. He has stressed that basti should be administered after proper Agnidipan, pachan and Urdhvasodhana. He has said that administration of Basti before Urdhvasudhi (Purification by Vaman, Virechana etc.) is meaningless. He has mentioned a small operation with prior Snehana and Swedana to remove Granthi in Gridhrasi and also siravedha four Angula below Indrabasti marma. If not relieved by this treatment, then Agnikarma at Kanishthika anguli of pada has been suggested.
Yogaratnakara has advised siravedha in the area of four Angula around Basti and Mutreendriya, if this fails Agnikarma in the little finger of the leg is advised. He has mentioned Mahavishagarbha Taila, Vajigandhadi Taila, lasuna etc.

References

1. Kunte AM, Ramchandra KR, Shastri Navre. Astangahrdaya of Vagbhata, Nidana Sthana. 6th ed. Varanasi, India: Chaukhamba Sanskrit Sansthan; 1939. p. 443-4.
2. Sharma P. Charak Samhita, Chikitsa Sthana. 7th ed. Vol. 2, 28/15-17. Varanasi, India: Chaukhambha Orientalia; 2005. p. 462.
3. Misra PS, Brahma PS. Bhavprakash, Uttarardh, Chikitsa Prakaran. 7th ed. 24/1-3. Varanasi, India: Chaukhamba Sanskrit Sansthan; 2000. p. 227.
4. Sharma P. Charak Samhita, Chikitsa Sthana. 7th ed. Vol. 2, 28/59. Varanasi, India: Chaukhambha Orientalia; 2005. p. 467.
5. Sharma P. Charak Samhita, Chikitsa Sthana. 7th ed. Vol. 2, 28/56-57. Varanasi, India: Chaukhambha Orientalia; 2005. p. 466.
6. Acharya VJT. Susruta Samhita of Susruta, Nidana Sthana. Reprint ed. 1/74. Varanasi, India: Chaukhamba Sanskrit Sansthan; 2010. p. 268.
7. Kunte AM, Ramchandra KR, Shastri Navre. Astangahrdaya of Vagbhata, Nidana Sthana. 6th ed. 15/54. Varanasi, India: Chaukhamba Sanskrit Sansthan; 1939. p. 535.
8. Vijayaraksita S, Srikanthadatta. Madhavanidana. Reprint ed. Varanasi, India: Chaukhamba Sanskrit Sansthan; 2010. p. 166.
9. Misra PS, Brahma PS. Bhavprakash, Uttarardh, Chikitsa Prakaran. 7th ed. 24/4-16. Varanasi, India: Chaukhamba Sanskrit Sansthan; 2010. p. 227-8.

10. Tripathi ID, Tripathi DS. Yogratnakar Purvakhanda. 2nd ed. Varanasi, India: Choukhamba Krishnadas Academy; 2007. p. 16.
11. Acharya VJT. Susruta Samhita of Susruta, Sharir Sthana. Reprint ed. 4/33-35. Varanasi, India: Chaukhamba Sanskrit Sansthan; 2010. p. 358.
12. Sharma P. Charak Samhita, Chikitsa Sthana. 7th ed. Vol. 2, 27/13-14. Varanasi, India: Chaukhambha Orientalia; 2005. p. 456.
13. Vijayaraksita S, Srikanthadatta. Madhavanidana. Reprint ed. 22/59-60. Varanasi, India: Chaukhamba Sanskrit Sansthan; 2010. p. 166.
14. Sharma P. Charak Samhita, Chikitsa Sthana. 7th ed. Vol. 2, 28/25. Varanasi, India: Chaukhambha Orientalia; 2005. p. 463.
15. Acharya VJT. Susruta Samhita of Susruta, Sutra Sthana. Reprint ed. 33/7. Varanasi, India: Chaukhamba Sanskrit Sansthan; 2010. p. 144.
16. Sharma P. Charak Samhita, Chikitsa Sthana. 7th ed. Vol. 2, 28/79-80. Varanasi, India: Chaukhambha Orientalia; 2005. p. 468.
17. Sastri KN. Charak Samhita of Agnivesh, Sutra Sthana. Reprint ed. 14/3. Varanasi, India: Chaukhamba Sanskrit Sansthan; 2012. p. 197.
18. Sastri KN. Charak Samhita of Agnivesh, Sutra Sthana. Reprint ed. 15/22. Varanasi, India: Chaukhamba Sanskrit Sansthan; 2012. p. 222.
19. Acharya VJT. Susruta Samhita of Susruta, Chikitsa Sthana. Reprint ed. 35/27-30. Varanasi, India: Chaukhamba Sanskrit Sansthan; 2010. p. 527-8.
20. Sharma P. Charak Samhita, Siddhi Sthana. 7th ed. Vol. 2, 1/27-28. Varanasi, India: Chaukhambha Orientalia; 2005. p. 591.
21. Sharma P. Charak Samhita, Chikitsa Sthana. 7th ed. Vol. 2, 28/101. Varanasi, India: Chaukhambha Orientalia; 2005. p. 471.
22. Acharya VJT. Susruta Samhita of Susruta, Chikitsa Sthana. Reprint ed. 5/23. Varanasi, India: Chaukhamba Sanskrit Sansthan; 2010. p. 428.
23. Kunte AM, Ramchandra KR, Shastri Navre. Astangahrdaya of Vagbhata, Sutra Sthana. 6th ed. 27/16. Varanasi, India: Chaukhamba Sanskrit Sansthan; 1939. p. 328.

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Importance of Indriya in Manas Vyadhi Utpatti: A Review

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Abstract
Being a holistic science, Ayurveda promotes physical, mental, social and spiritual health. Nowadays, 95% diseases are phychosomatic. Basic cause of Manas vyadhi is stress causes due to Kam-krodhadi Shadripu's. Indriya ie Sense organs act as an instrument to acquire knowledge by the soul and play a vital role as a messenger to mana ie mined. Asatmendriyarth sanyog of both Dnyanendriya and Karmendriya including Mana vitiates Raja-Tama dosha. Harsh words/ Aggressive talking or listening immediately decreases Satva guna of Mana which causes physical as well as mental stress. As per modern treatment, Antidepressant drugs are generally prescribed in such stress induced disorder which has huge side-effects like insomnia or drug dependency. In Ayurveda, Aacharya Charak has explained the concept of Nitya rasayana. To control on our Indriya ie sense organs, one needs to practice Aachar rasayan in his daily routine to stop mind and senses from wandering. Hence practicing and following Aachar rasayan is a need of an hour to maintain Swasthayu.

Keywords: Indriya, mana, stress management, aachar rasayan, ayurveda, shadripu

Introduction
Rapidly increasing westernization, sedentary lifestyle, excessive use of Social media and gadzets, ignorance to health by consuming fatty food and alcohol etc are the causes of stress induced mental disorders. Ayurveda is a basic life science which promotes one's health by all means i.e. physical, mental, social and spiritual. A healthy mind in a healthy body constitutes absolute health. While defining health, Ayurveda clarifies the importance of maintaining the clarity of mind, the sense organ, and the normal physiological functions of the body [1]. The threegunas i.e. Satva, Raja and Tama are the essential components or energies of the mind [2]. Satva which is supreme 'Guna' of mind which regulates our emotion and mental state while Raja and Tama are considered as 'Doshas' or toxins for the mind which acts as 'Avarak' on our intelligence. Ayurveda provides a distinct description of people on the basis of their Manasa Prakriti ie. psychological constitution. While all individuals have mixed amounts of these three gunas, in which, the predominant guna determines an individual's Manasa prakriti [3]. Equilibrium of these three gunas preserves the mind and indirectly the body, and maintaining individual healthy. Any disturbance in this equilibrium results in various types of mental disorders.

Causes of Manas Vyadhi
Kama (Desire), Krodh (Anger), Moha (Delusion), Bhaya (Fear), Shoka (Grief), Chinta (Worry), Irsha (Envy), Vilap (Groaning), Lobh (Greed), Udvega (Anxiety) etc are the manasik bhavas which leads to imbalance of mind and intellect [4]. According to Ayurveda, three factors are responsible for the origin of any kind of Manas roga, which are Asatmyeindriyartha Samyoga i.e. excessive utilization or non-utilization or improper utilization of sense faculties, Pradnyaparadha ie. Intellectual blasphemy and Parinama i.e. time [5].

Necessity of treatment of stress related Manas Vyadhi
Anxiety/Stress is defined as a subjective feeling of apprehension or dread about the present or the past accompanied by a number of autonomic and somatic signs and symptoms. It is the feeling of fear with no adequate cause. Anxiety/ Stress is the commonest psychiatric symptom in clinical practice in general population. Anxiety/Stress is commonly experienced virtually by

all humanas. It is an alerting signal; it warns of threat, external or internal, and it is probably life threatening in a life time [6]. It is observed that, COVID-19 pandemic had a significant impacton public mental health. Thus, it is essential to preserve the mental health of individuals and to develop psychological interventions that can improve the mental health of vulnerable groups during the COVID-19 pandemic [7]. Now a day's stress is more common in young adults due to work pressure, feeling of job loss, addiction of mobile phone and gadgets, even harsh words/aggressive talking or listening.

Role of Indriya in samprapti of Manaas vyadhi

Basic cause of Manas vyadhi is stress which causes due to Kam-krodhadi Shadripu's by involving different factors like Dosha, Dushya, Agni, and Srotas etc. Also due to Nidana Sevan i.e. Asatmendriyarthasanyoga, Pradnyaparadha & Parinama, Manas Dosha i.e. Raja and Tama and Sharir Dosha i.e. Vata, Pitta and Kapha gets vitiated. Indriya i.e. sense organs act as an instrument to acquire knowledge by the soul and plays a vital role as a messenger to Mana ie mind. This Vitiated Mana involving with Manaovaha Srotas produces different 'Aprakrut Manasika Lakshana'. As Mana is Ubhayendriya, it involves on both physical and mental level with the help of Dnyanendriya and Karmendriya. Both Pancha Dnyanendriya and Karmendriya are the part of Manovaha strotas which acts as an instruments who provides knowledge to Hruday (Heart) and Mastishk (Brain) sthit Mana (Mind). Hence Kam-krodhadi Shadripu's have both psychic and somatic manaifestation. Apriya Bhashan - Shravan (Harsh words/ Aggressive talking or listening), Bhibhatsa Darshan (Terrible sight), Uttejit Gandh (Stimulating smell), Ghrunaspad Sparsh (Disgusting touch) etc. immediately decreases Satva guna of Mana (Mind) which causes physical as well as mental stress. Due to Asatmendriyarth sanyog and knowledge acquired by Mana (mind) differs psychological and physiological state of person which is characterized by cognitive, somatic, emotional and behavioral components. Also according to Ayurveda, there is functional resemblance of Oja and Mana. Both Oja and Mana are seated in the heart [8]. Oja is depleted by emotions such as anger and grief and the person becomes fearful, worried.

Symptoms of Ojakshaya are resemble with symptoms of stress as follows- Abhikshanam-Excessive worry.

Vyathitindriyatwam- Lack of pleasure. Durmana- Loss of interest

Bibheti- Fearfull anticipation (A.H.Su.11)

Manas vyadhi Chikitsa

Acharya Charak has explained about samanaya chikitsa of Sharirik and Manaasik Vyadhi's [9].

1. Daivavyapashraya – Spiritual therapy
2. Yuktivyapashraya – Physical therapy (Medhya Rasayana)
3. Satvavajaya – Mental therapy. (Cha. Su. 11/54)

Satvavajaya Chikitsa: Acharya Charak (Su. 11/54) states that Satvavajaya is nothing but withdrawal of mind from unwholesome objects. It also includes methods mentioned under Adravyabhuta Chikitsa (Cha. Vi. 8/87) like Bhayadarshana (Terrorizing), Vismapana (Surprising), Vismarana (De-memorizing), Kshobhana (Socking), Harsha (Exciting), Bhatsana (Chiding) etc. The following things are to be followed for the treatment of Manas roga:

1. To attend the courses of conduct relating to virtue, wealth and desire.
2. To render service to the persons well versed in the nature and cure of psychic diseases.
3. To obtain all round knowledge about the self. (Cha. Su. 11/47).
4. According to Charak (Su. 1/58) [10], treatment of mental disorders is Dnyana – Vidnyana (Spiritual and scriptural knowledge), Dhairya (Patience), Smruti (Memory) and Samadhi (Meditation). With these treatments one can reconcile the pathogenic factors of the mind.

Role of Achara Rasayana in Manas Vyadhi Chikitsa

Achara Rasayana means social and mental conduct, which can acquire the Rasayana effect on bodyand mind. It is also suggested as a 'Nitya Rasayana' (Cha. Chi. 1/4-30-36) [11], which has direct effect on enhancement of Satva Guna of mind.

The Achara Rasayana described by Charak are mentioned as below

1. Satya Vadinam (Truthful)
2. Akrodha (Free from anger)
3. Nivrutam Madya Maithunat (Devoid of alcohol and sex)
4. Ahinsaka (Do not indulge in violence)
5. Anayasa (Do not indulge in exhaustion)
6. Prasanna Priya Vadinam (Peaceful and pleasing in speech)
7. Japa Shauchaparam (Practice incantation and cleanness)
8. Dhiram (Stable)
9. Nitya Dana (Regularly practicing charity)
10. Tapasvinam (Practicing penance)
11. Deva, Go, Bramhana, Acharya, Vruddha Archana Ratam (Regularly offer prayers to God, Cows, Bramhamanaas, Teachers and old people)
12. Karuna Vedinam (Compassionate)
13. Sama Jagarana Swapnam (Regular period of awaking and sleep)
14. Kshira Ghrutashinam (Habitually taking milk and ghee)
15. Desha Kala Pramanaa Dnaynam (Acquainted with the measurement of 35 country and time)
16. Yuktidnyam (Rational)
17. Anahmkrutam (Free from ego)
18. Shishta-achaaram (With good conduct)
19. Asankirnam (Not narrow minded)
20. Adhyatma Pravana Indriyam (Loving spiritual knowledge)
21. Dharma Shastraparam (Regularly studying scriptures)

All these conducts are very effective to prevent and to treat the psychological conditions raised due to Raja and Tama dosha of Mana.

Conclusion

Being a holistic science, Ayurveda promotes physical, mental, social and spiritual health. Nowadays, 95% diseases are phychosomatic. Basic cause of Manas vyadhi is stress which causes due to Kam-krodhadi Shadripu's. Indriya ie Sense organs acts as an instrument to acquire knowledge by the soul and plays a vital role as a messenger to mana ie mind. Asatmendriyarth sanyog of both Dnyanendriya and Karmendriya including Mana vitiates Raja-Tama dosha. Apriya Bhashan - Shravan (Harsh words/ Aggressive talking or listening), Bhibhatsa Darshan (Terrible sight), Uttejit Gandh (Stimulating smell), Ghrunaspad Sparsh (Disgusting touch) etc. immediately decreases Satva guna of Mana which causes physical as well as mental stress. As per modern treatment, Antidepressant drugs are generally prescribed in such stress induced disorders which has huge side-effects like

insomnia or drug dependency. In Indriyopkramaniya Adhyay, Aacharya Charak has explained the importance of Sadvrutta which is also known as Aachar Rasayan ie. Physical and mental decorum which should be followed by everyone on daily basis. In which Behavioural do's and don't' s, Eating etiquetts, Social rules, guidelines about Chastity are explained. To control on our Indriya ie sense organs, one need to practice Aachar rasayan in his daily routine to stop mind and senses from wandering. Hence practicing and following Aachar rasayan i.e. Ayurvedokta Mental hygiene is a need of an hour and it is far better than modern psychotherapy to maintain Swasthayu.

References

1. Joshi YG. Charak Samhita, Khand 1st, Sutrasthana, Adhyaya-1st, Shloka No. 42. In: Vaidyamitra Prakashan. 3rd ed. p. 16.
2. Joshi YG. Charak Samhita, Khand 1st, Sutrasthana, Adhyaya-8th, Shloka No. 5. In: Vaidyamitra Prakashan. 3rd ed. p. 549.
3. Joshi YG. Charak Samhita, Khand 1st, Sutrasthana, Adhyaya-8th, Shloka No. 6. In: Vaidyamitra Prakashan. 3rd ed. p. 549.
4. Joshi YG. Charak Samhita, Khand 1st, Sutrasthana, Adhyaya-7th, Shloka No. 52. In: Vaidyamitra Prakashan. 3rd ed. p. 726.
5. Joshi YG. Charak Samhita, Khand 1st, Sutrasthana, Adhyaya-11th, Shloka No. 43. In: Vaidyamitra Prakashan. 3rd ed. p. 170.
6. American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed. Arlington, VA: American Psychiatric Publishing; c2013.
7. Ayubi E, Bashirian S, Khazaei S. Depression and anxiety among patients with cancer during COVID-19 pandemic: a systematic review and meta-analysis. J Gastrointest Cancer. 2021;52:499-507. DOI: 10.1007/s12029-021-00643-9.
8. Gadre GK. Sarth Vagbhat, Sutrasthana, Adhyaya-11th, Shloka No. 37-38. In: Choukhambha Surbharati Prakashan. 2011 ed. p. 54.
9. Joshi YG. Charak Samhita, Khand 1st, Sutrasthana, Adhyaya-11th, Shloka No. 54. In: Vaidyamitra Prakashan. 3rd ed. p. 172.
10. Joshi YG. Charak Samhita, Khand 1st, Sutrasthana, Adhyaya-1st, Shloka No. 58. In: Vaidyamitra Prakashan. 3rd ed. p. 33.
11. Tripathi AR, Tripathi PR. Charak Samhita, Second Part, Chikitsasthana, Adhyaya-1st, Pad-4th, Shloka No. 30-36. In: Choukhambha Surabharati Prakashan. 2014 ed. p. 41.

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Evaluation of therapeutic efficacy of Shamana therapy and lifestyle modifications in the management of polycystic ovarian disease: A case study

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Abstract
Polycystic Ovarian Disease (PCOD), a common condition among reproductive-age women, is marked by hormonal imbalances and anovulation. In Ayurveda, it is seen as a Kapha predominant disorder involving Aartavavaha Srotas, Agni Mandya (Digestive impairment), and Ama (Toxic waste) formation, with vitiation of Kapha and Vata, specifically Apana Vayu leading to Artava Nasha. A 25-year-old female with irregular menstruation and metabolic imbalances was treated with Shamana Chikitsa (Palliative therapy). Treatment included Kapha-pacifying, Agni-normalizing drugs like Shunthi, Ajamoda, Erandamula, and Rasayana herbs like Amalaki and Guduchi. After three months, improvements in menstrual regularity, reduced dysmenorrhea (WaLIDD Scale), and other symptoms were noted. This case underscores the efficacy of Shamana Chikitsa in PCOD, showing that Ayurvedic approaches focused on Agni Deepana (Digestive stimulation) and Ama Pachana (Detoxification) can improve reproductive health.

Keywords: PCOD, Shamana therapy, dysmenorrhea, menstrual irregularity, Kapha dosha, Vata dosha

Introduction
Polycystic Ovarian Disease (PCOD), often referred to as Polycystic Ovarian Syndrome (PCOS), is a prevalent endocrine disorder that affects women of reproductive age [1]. It is characterized by a complex interplay of clinical manifestations, including menstrual irregularities, hyperandrogenism, and the presence of polycystic ovaries [2]. Beyond reproductive issues, PCOD is frequently associated with various metabolic disturbances, such as obesity, insulin resistance, and infertility, significantly impacting the quality of life and overall health of affected individuals.

From an Ayurvedic perspective, PCOD is conceptualized as a predominantly Kapha disorder, with concurrent vitiation of Vata and Pitta. This condition primarily affects the Artavavaha Srotas (The reproductive channels), leading to an array of symptoms that disrupt normal physiological functions.The pathophysiology of PCOD can be attributed to the accumulation of Ama (Toxins), often resulting from poor dietary habits and a sedentary lifestyle. This accumulation contributes to the dysfunction of Agni (Digestive fire), resulting in hormonal imbalances that exacerbate the disorder [3, 4].

This case study aims to evaluate the effectiveness of Shamana therapy in the management of PCOD, emphasizing improvements in digestive function, dosha pacification, and hormonal balance. By addressing the root causes of the disorder through holistic Ayurvedic practices, this study seeks to demonstrate the potential of Shamana therapy as a viable treatment option for women suffering from PCOD.

Materials and Methods
Assessment Criteria
The effectiveness of treatment was assessed based on:

- Regularity of Menstrual Cycle [5]
- Duration of Menstruation [6]
- Dysmenorrhea Severity (WaLIDD scale)[7]
- General Symptom Improvement: Lethargy, back pain, loss of taste, etc.

Table 1: Assessment Criteria of Regularity of Menstrual Cycle

Regularity Of Menstrual Cycle -	Regular (21 to 35 days interval)	Irregular (Greater Than 35 or lesser than 21 days interval)

Table 2: WaLIDD scale

Working Ability	Location	Intensity (Wong–Baker)	Days of Pain
0: None	0: None	0: Does not hurt	0: 0
1: Almost never	1: 1 site	1: Hurts a little bit	1: 1–2
2: Almost always	2: 2–3 sites	2: Hurts a little more – hurts more	2: 3–4
3: Always	3: 4 sites	3: Hurts a whole lot – hurts worst	3: ≥5

Case: A 25-year-old female presented at the OPD of Prasuti Tantra & Stree Roga of CSMSS Ayurvedic Mahavidyalaya, Chhatrapati Sambhaji Nagar with complaints of irregular menses, severe abdominal pain, and generalized body swelling for the past four years. She reported additional symptoms of loss of taste, lethargy, and back pain. Her menstrual cycle occurred every 60 days with only one day of spotting. The patient refused Shodhana (Cleansing therapies) or Panchakarma and preferred internal Shamana (Palliative) treatments.

Table 3: Parameters of Patient History

Parameter	Details
Age	25 years
Menstrual History	60-day interval with spotting, Painful
History Of Present Illness	Regular Menses while taking oral contraceptive pills but irregulation in menses after stopped taking them. Severe Abdominal Pain after doing USG Of Abdomen-pelvis**.,** Swelling, lethargy, back pain, loss of taste
Past Medical History	Liver adenoma, renal calculi
Personal History	Excessive and regular intake of sour food (Amla) Ahara, Fermented Food, Viruddha Ahara Like smoothie of fruits and milk, Abhishyandi Ahara like Dadhi, Bread and eggs before exercise
Drug History	Oral contraceptive pills
Family History	Nil
Marriage Status	Unmarried

General Examination

- Weight – 58 kg
- Built – Normal
- BP- 110/80 mmHg
- Pulse Rate- 89/min
- Respiratory Rate – 24/min
- Temperature – Afeb

Physical Examination

Koshtha - Krura

Ashtavidh Parikshan

Nadi – Vata-Pitta
Mala – Asamyak, Kathin
Mutra – Kandu-Dahayukta with white discharge
Jivha – Saama
Shabda – Prakrit
Sparsha – Anushnasheeta
Drika – Prakrit
Akriti – Madhyama

Investigations

USG Abdomen and Pelvis

1. Bilateral renal calculi
2. Well defined Isodense lesion with tiny calcifications showing homogenous enhancement in early arterial phase and washout in portl and delayed phases in right lobe of liver (Segment VII) – to R/o Adenoma
3. Multiple small peripheral follicles in both ovaries

Ayurvedic Diagnosis

Based on clinical features and examination, the diagnosis was Artavavaha Strotas Dushti with aggravated Kapha and vitiated Vata, accompanied by Mandagni (Weak digestive fire) and accumulation of Ama. The Artava Srotas (Reproductive channels) were obstructed, leading to irregular menstruation and associated symptoms.

Samprapti Ghataka

Table 4: Samprapti Ghataka of Presented Case

Category	Details
Dosha	Vata, Kapha, Apana Vata, Samana Vata, Pachak Pitta
Dhatu	Rasa, Rakta, Mamsa
Mala	Purisha
Srotas	Rasavaha, Raktavaha
Udbhava Sthana	Yakrit, Pakwashaya, Garbhashaya
Vyakta Sthana	Pakwashaya, Garbhashaya, Basti, Yakrit
Panchamahabhuta	Akasha, Vayu, Prithvi

Treatment Plan

The patient was treated with Shamana therapy focusing on digestive enhancement, pacification of aggravated doshas, and rejuvenation. Herbal formulations were prescribed for three months, combined with lifestyle and dietary modifications.

Table 5: Treatment Plan

Sr. No.	Drug	Type Of oral medication	Dosage	Anupana	Period Of Tretment
1.	Shunthi + Rasapchaka + Raktapachaka	Powder	4 gm BD	Warm Water	3 months
2.	Ajamoda + Erandamula + Haritaki	Powder	5 gm OD at night	Warm Water	3 months
3.	Eranda Taila	Oil	10 ml OD at night	Milk	3 months
4.	Amalaki + Guduchi + Gokshura	Powder	5 gm OD in morning	Honey	3 months

5.	Triphala + Khadira + Nimba	Powder as Dantamanjana	-	-	3 months

Pathya-Apathya (Lifestyle Modifications)
Rajaswala Paricharya

Table 6: Rajaswala Paricharya

Don'ts	Dos
Diwaswapa	Positive Approach towords life
Trecking, Excessive exercise, Exertion	Rest
Stress	Light Diet
Fried, Spicy food, Fast-food, Paneer and Non-veg Food	Ghritapana
Oil Massage	Darbhashaiyya
Pain Killers	Koshthashodhnakara Ahara

Pranayama: For 15 minutes Everyday
- Anuloma-Viloma
- Bhramari
- Omkara
- Dirghashwasana
- Suryanamaskara

Results
After three months of Shamana therapy, the patient showed significant improvements in her menstrual cycle, symptom relief, and overall well-being.

Table 7: Results

Sr. No.	Before Treatment		After Treatment
1.	Irregular Menses		Menses Occurred After 1 month of Treatment
			Regular Menses Every Month
			Initially For 2 months Menses occurred For 1 Day, Later for 3 Days every Month
2.	Dysmenorrhoea (WaLIDD Scale): 10 (Severe)		3
	Working Ability	2	1
	Location Of Pain	3	1
	Intensity Of Pain	3	1
	Days Of Pain	2	0
3.	Size Of Adenoma of liver	5.6 cm x 4 cm	5 cm x 3 cm
4.	Aruchi		Significantly Decreased
5.	Mukhavairasya		Significantly Decreased
6.	Aalasya		Significantly Decreased
7.	Backpain		Significantly Decreased
8.	Headache		Significantly Decreased

The patient reported regular menses every month, initially lasting one day, then normalizing to three days per cycle by the end of the treatment. Dysmenorrhea intensity dropped from severe to mild, and associated symptoms like back pain, headache, and lethargy reduced markedly. The size of the liver adenoma also showed significant reduction on follow-up ultrasound.

Discussion
PCOS is understood in Ayurveda through Aartavavaha Srotas Dushti and Kapha-Vata predominance. The patient's symptoms, including irregular menses, were due to Vata-Kapha Avrutha Apana Vata, causing Artava Nasha (Oligo-amenorrhea). Her lifestyle choices, including Viruddha Ahara (Incompatible food), aggravated Kapha and caused Agni Mandya, leading to metabolic disturbances.
The treatment focused on Shamana Chikitsa using herbs like Shunthi, Ajamoda, and Eranda Taila to balance vitiated doshas, enhance digestion (Agni Deepana), and promote regular menstruation through Anulomana and Pachana actions. Rasayana herbs like Amalaki and Guduchi nourished tissues and supported overall vitality. As a result, the patient experienced regularized cycles, reduced dysmenorrhea, and improvements in associated symptoms. This highlights the potential of Ayurvedic management in addressing both the symptomatic and root causes of PCOS.

Conclusion
This case study shows that Ayurvedic Shamana Chikitsa effectively managed PCOS by balancing Doshas and improving Agni. The patient experienced regularized menstruation, reduced dysmenorrhea, and relief from other symptoms without adverse effects. Ayurvedic therapies provide a holistic and sustainable approach to PCOS management, warranting further research to validate their efficacy on a larger scale.

References
1. McGowan MP. Polycystic ovary syndrome: a common endocrine disorder and risk factor for vascular disease. Curr Treat Options Cardiovasc Med. 2011 Aug;13(4):289-301. Doi: 10.1007/s11936-011-0130-0. PMID: 21562798.
2. Rasquin LI, Anastasopoulou C, Mayrin JV. Polycystic Ovarian Disease. [Updated 2022 Nov 15]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK459251/.
3. Jain A, Khathuria D, Joshi K, Dixit M. An Ayurvedic Approach to Manage PCOD– A Case Study. International Journal of Ayurveda and Pharma Research. 2022;10(3):126-129. https://doi.org/10.47070/ijapr.v10i3.2256.

4. Rajpurohit D, Neelima A. Ayurvedic perspective of Polycystic Ovarian Syndrome. J Ayurveda Integr Med Sci. 2023;07:128-133. http://dx.doi.org/10.21760/jaims.8.7.24.
5. Reed BG, Carr BR. The Normal Menstrual Cycle and the Control of Ovulation. [Updated 2018 Aug 5]. In: Feingold KR, Anawalt B, Blackman MR, *et al*., editors. Endotext [Internet]. South Dartmouth (MA): MDText.com, Inc.; c2000-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK279054/.
6. Thiyagarajan DK, Basit H, Jeanmonod R. Physiology, Menstrual Cycle. [Updated 2022 Oct 24]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK500020/.
7. Teherán AA, Piñeros LG, Pulido F, Mejía Guatibonza MC. WaLIDD score, a new tool to diagnose dysmenorrhea and predict medical leave in university students. Int J Womens Health. 2018 Jan 17;10:35-45. Doi: 10.2147/IJWH.S143510. PMID: 29398923; PMCID: PMC5775738.

Ayurvedic Management of Pandu A Single Case Study

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Abstract— Ayurveda is the science of life which not only cures but Eradicates the root cause of the disease from the body. Ayurveda described Pandu Roga which correlated with Anaemia. Ayurveda mentioned causes, symptoms and treatments of Pandu. Pitta Pradhan Vyadhi is Pandu Roga. The vitiated Doshas in Pandu Roga cause a disruption in tissue metabolism, which results in Dhatu-Shathilya in all of Dhatu. Paleness is the dominant colour across the body. A Prominent diagnostic feature of Pandu Roga (Anemia) is hemoglobin estimation. The assessment was Panduta (pallor of skin), Karnachhweda (tinnitus), Hatanala (loss of appetite), Shwasa (breathlessness), Bhrama (vertigo), Gatrashoola (bodyache) and Hrid-drava (palpitation). So, here is a case report of 21 years old female patient with iron deficiency anemia who was given Ayurvedic formulations in the line of treatment of Pandu roga along with dietary supplements rich in iron for a period of one month and marked improvement in symptoms.

Index Terms- Pandu , Anemia, Ayurved

I. INTRODUCTION

Ayurveda is the science of life. Iron deficiency anaemia is still a major problem in the world today, impacting a wide variety of people. The definition of Swastha is equilibrium state of Dosha, Dhatu, Agni, Mala along with Prasanna Atma, Mana, Indriyas. The reason for disease to occur is Dhatu Vaishamyata. According To Acharya Charaka in this disease the Twaka of patient Is discoloured as Pandura Varna so it is named as Pandu Roga. [1] In the pathogenesis of Pandu Roga, Pitta Roga Prakupita by Nidana Sevan and it expelled by Hridaya Through Dasha Dhamani by powerful Vata which further Vitiate Vata, Rakta, Kapha, Twak, and Mamsa Dhatu Which results Pandur Varnata and ultimately developed Panduroga. [2] A prominent diagnostic feature of Pandu roga is the pallor on the skin which occurs due to the quantitative and qualitative deficiency of raktu dhatu (blood tissue) caused either in the form of deficiency of hemoglobin and/ or red blood cells (RBCs). Charaka, it is one among the Rasavaha Srotodushti. Susruta has mentioned it as Raktavaha Srotodushti. Ayurveda being holistic medicine advises that all diseases are due to malfunction of Agni (metabolism). If Metabolism is good everything gets digested and assimilated, which is necessary for the sustaining the health. Ayurveda mentioned excessive intake of alkaline, sour, Salty, too hot, incompatible diet, excessive use of black Gram, Sesame oil, excessive exercise, day sleep, Suppression of natural urges as the causes of Anaemia. [3] Ayurvedic mangagment of this diseases includes many Oral drugs for specific treatment to reduce its symptoms.

II. CASE REPORT

Name- XYZ
Age- 45 Yrs.
Gender- Female
Residence- Maharashtra
HISTORY OF PRESENT ILLNESS
A 45 Years female patient came with the complaint of Generalized weakness and pain in all over body for three Years.
Associated with the complaint of her *Aruchi* , panditva , daurbalya, hrid sapandana,shwas, akshikoita shotha, pindikodweshtana, since 1 month took some other Medications but not get relief so she came to opd for her further treatment.
HISTORY OF PAST ILLNESS
No such relevant past history found.
PAST SURGICAL HISTORY
No such relevant past surgical history found.
FAMILY HISTORY
No any family member having same complaint.
PERSONAL HISTORY
Ahara: pure vegetarian diet.
Appetite: loss of appetite.
Dominance of Rasa: Katu tikta.
Kostha: Kroora.
Nidra: Alpa.
Addiction: no addiction.

GENERAL EXAMINATION
Built: Moderate.
BP: 110/70.
Pulse: 70.
Temperature: 98.4
Tongue: Coated.
Pallor: Present.
Icterus: Absent.
Cyanosis: Absent.
SYSTEMIC EXAMINATION
RESPIRATORY SYSTEM
Breathlessness present after walking
No aided sound detected
CARDIOVASCULAR SYSTEM
S1 and s2 heard normally
GASTROINTESTINAL SYSTEM
Shape- scaphoid
Soft non tender
CENTRAL NERVOUS SYSTEM
Well conscious and Well oriented
ASTAVIDHA PARIKSHA

1. Naadi: 80/min (Vatapittaja)
2. Mala: Ruksha
3. Mutra: Prakrut 4-5 times/day
4. Jihva: Sama
5. Sparsha: Sheeta and Ruksha
6. Shabda: Prakrita
7. Akruti: Madhyama
8. Drik: Pandura varna

SAMPRAPTI GHATAKA

1. Dosha- Pitta Pradhana Tridoshaja Vyadhi [4]
2. Dushya- Rasa, Rakta, Mamsa, Meda and Ojas [5]
3. Agni- Jathragni, Rasagni, Raktagni
4. Agnidushti- Mandagni
5. Srotasa- Rasavaha and Rakta Vaha
6. Srotodushti- Sanga and Vimargagamana
7. Udbhava Sthana- Aamashaya and Hridaya
8. Sanchara Sthana- Whole Body by Vyana Vayu
9. Vyakta Sthana- Twaka, Nakha, Netra, Mamsa
10. Adhisthana- Sarva Shareera
11. Assesment criteria

Aruchi (loss of appetite)

S. No.	*Aruchi* (loss of appetite)	Condition	Score
1.	Very good appetite	None	0
2.	Irregular	Mild	1
3.	Occasionally poor appetite (appetite is not on time)	Moderate	2
4.	Frequently persistent very poor appetite	Severe	3

Panduta (pallor)

S. No.	*Panduta* (pallor)	Condition	Score
1.	No pallor	None	0
2.	Pallor of conjunctiva	Mild	1
3.	Pallor of conjunctiva, nails, tongue	Moderate	2
4.	Pallor of conjunctiva, nails, tongue, skin, palm and soles	Severe	3

Daurbalya (weakness)

S. No.	*Daurbalya* (weakness)	Condition	Score
1.	No	None	0
2.	Occasional in normal activity	Mild	1
3.	Persistent in normal activity	Moderate	2
4.	Occasional in heavy activity	Severe	3

Hrida Spandanam (palpitation)

S. No.	*Hrida Spandanam* (palpitation)	Condition	Score
1.	No palpitation on usual activity	None	0
2.	Occasional on heavy exertion	Mild	1
3.	On light exertion	Moderate	2
4.	During rest	Severe	3

Shwasa (dyspnoea)

S. No.	*Shwasa* (dyspnoea)	Condition	Score
1.	No	None	0
2.	Occasional on exertion	Mild	1
3.	Walking upstairs / quick moving	Moderate	2
4.	On bed	Severe	3

Pindikodweshtana (leg cramps)

S. No.	*Pindikodweshtana* (leg cramps)	Condition	Score
1.	No	None	0
2.	Mild leg cramps only at night	Mild	1
3.	Leg cramps present in night or on exertion	Moderate	2
4.	Leg cramps present throughout the day	Severe	3

Akshikutashotha (periorbital oedema)

S. No.	*Akshikutashotha* (periorbital oedema)	Condition	Score
1.	No	None	0
2.	Periorbital oedema in morning for 1 hours	Mild	1
3.	Periorbital oedema in morning for 2 hours	Moderate	2
4.	Periorbital oedema in morning for 6 hours	Severe	3

Treatment plan

1) Raspachak vati 250 mg BD with koshna jala
2) Aarogyyavardhini vati 250 mg BD with koshna jala
3) Vidangaeishta 15 ml BD with shitoshna jala

4) Punarnava mandoor 250 mg BD with koshna jala
5) Dadim ghrit 2 tsf BD with koshna jala

Treatment given for 1 months with other doshic involvement modifications.

III. OBSERVATION AND RESULTS

According To Ayurveda there are many Ayurvedic drugs to treat Pandu by increasing appetite, decreasing Daurbalyta, Decreasing Twak Panduta, Appreciable results were observed in subjective and Objective criteria. As per the drug it contains We treated our patient with aarogyavardhini vati, in combination with Punarnavadi Mandur, rasapachaka vati which will help to break samprapti. on follow up after one month we found there is significant changes in subjective & objective parameters. Decreased in *Aruchi* , panditva , daurbalya, hrid sapandana,shwas, akshikoita shotha, pindikodweshtana,and there is significant increase in Hb% by given treatment. By this, it shows if proper diagnosis is done by clinical presentation with evaluating relevant investigations done treatment given gives good results in improving the patient's condition in short duration.

CONCLUSION

Anaemia is very common in India and iron deficiency is the commonest nutritional deficiency all over the world[6]. According to WHO, over one third of the world's population suffers from anaemia, mostly due to iron deficiency. The pathological factors responsible for Pandu are Tridoshas and Agnimandta. The rasapachaka vati, aarogyyavardhini vati vidangarishta Herbal ingredients present in the trail drug may decrease the chances of Pandu in the patients. The results suggest that given treatment protocol shows appreciable response in the treatment of Pandu.

REFERENCES

[1] Kashinath shastri, Gorakhnath Chaturvedi, editors. Vidyotini, Hindi commentary of Charaka Samhita Chikitsa Sthana chapter 16 verse no.11 Edn. Varanasi: Chaukhambha Bharati academy, 2020; 441.

[2] Kashinath shastri, Gorakhnath Chaturvedi, editors. Vidyotini, Hindi commentary of Charaka Samhita Chikitsa Sthana chapter 16 verse no.4-6 Edn. Varanasi: Chaukhambha Bharati academy, 2020;441.

[3] Kashinath shastri, Gorakhnath Chaturvedi, editors. Vidyotini, Hindi commentary of Charaka Samhita Chikitsa Sthana chapter 16 verse no.11 Edn. Varanasi: Chaukhambha Bharati academy, 2020;441.

[4] Harishasthri B. Astangahrudaya editor. Nidanastana 13/1-7.2010 Varanasi.Choukambhasurabharathi

[5] Harishasthri B. Astangahrudaya editor. Nidanastana 13/1-7.2010 Varanasi.Choukambhasurabharathi

[6] Zimmermann MB, Hurrell RF. Nutritional iron deficiency. Lancet. 2017; 370:511-20. Ritesh Damle et al.

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Ayurvedic review on Pathya Apathya in Kamala Vyadhi

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Abstract
This review focuses on the Ayurvedic perspective of Kamala Vyadhi, which is correlated with jaundice in modern medicine. Kamala is primarily a disorder of Raktavahastrotas, with Pitta as the main causative factor. The ancient Ayurvedic texts, including Charak Samhita and Sushrut Samhita, offer a detailed description of the condition and its management through diet and lifestyle modifications, collectively referred to as Pathya and Apathya. The review emphasizes the importance of a balanced diet in mitigating the progression of Kamala by promoting liver health and metabolic function. The role of various Ayurvedic formulations and dietary interventions in managing Kamala is discussed, alongside the significance of adhering to Pathya to achieve optimal health outcomes.

Keywords: Kamala Vyadhi, Jaundice, Ayurveda, Pathya, Apathya, Raktavahastrotas, Pitta dosha, Diet therapy, Liver health

Introduction
Ayurveda is an ancient medical science. It has thoroughly described *swatthavritta* as well as treatment of various diseases. *Bhrihatrayee* are three main *samhitas* which explain the basic principles of ayurveda. They are *Charak Samhita*, *Sushrut Samhita* and *Vagbhat Samhita (Ashtang Hriday/Ashtang Sangrah*). In our ancient *samhitas*, *Kamala* is briefly described. *Kamala* can be correlated with jaundice in modern medical science. *Charak Acharya* has considered *Kamala* as advance stage of *Pandu roga*. When person with *panduroga* continues intake *of pittakar ahar* then he may develop *kamala.*
Ayurveda is a science which deals with the study of Knowledge of Life. The aim of this science is to protect the human being from various diseases, which are acquired by not following *SwasthaVritta*.This can be achieved without disturbing the rhythm of your life. *Kamala* can be seen in a recorded form since Vedic times. The term Kamala is derived by the root 'Kamu' which means Kanti suffixing 'Nhin' pratyayais substituted by Kalaha[1] thus the term Kamala is Kumu+ Nhin (Kalaha). *Kamala* is *pitta pradhana*, *rakthavahasroto vikara*, in which discoloration of the skin, sclera, nail beds is found due to the deposition of vitiated *pitta dosha*. The Kamala would be point out to a disease condition in which hunger and appetite for food are diminished.
Ayurveda considers Jaundice (Kamala) as a disorder of raktavahastrotas. *Yakrit* and *pleeha* are *moolasthana* of *raktavahastrotas*. Vitiated *Pitta* is the main causative factor in the pathogenesis of kamala.

Kamala Vyutpatti
The term Kamala is derived by the root 'Kamu' which means Kanti suffixing 'Nhin' pratyaya is substituted by Kalaha thus the term Kamala is Kumu+ Nhin (Kalaha).

Nirukti/Paribhasha
'Kamam kantimharatiharidravarnam latiiti kamala Here *Kamam* means desire and *kanti* is the luster, both are diminished in case of Kamala. *Haridra* is yellowish discoloration, lati mean runaddati or to get yellowish discoloration, in other words Kamala is a disease in which an individual loses interestinall aspects and gets the yellowish discoloration.
"*Kamamlunatihantiiti* kamala".

Materials and Methods
- *Charak Samhita* with *Ayurved Dipika* Commentary by *Chakrapani.*

- *Sushruta Samhita* with *Nibandhsangraha* commentary of Shri *Dalhanacharya* and *NyayachandrikaPanjika* of *Shri Gayadasachary*.
- *Ashtang Hriday* with commentaries *Sarvangasundara* of *Arundatta* and *Ayurvedrasayana* of *Hemadri.*
- Relevant articles published in various national and international journals.

Classification of Kamala

- *Charak* [2] *Koshthashakhashrit, Shakhashrit, Halimak, Kumbhkamala.*
- *Sushrut* [3] *-Kamala, Halimak, Kumbhahvaya (kumbha sahva), Laghraka (laghrakaalasaka).*
- *Vagbhat* [4] *Swatantra, Paratantra, Kumbhakamala, Lodhara, Aalasaka.*

Ayurveda in Sanskrit means 'Science of life'. This ancient science of medicine & positive health, first originated in India. *Acharya Charak* has also emphasizes on health, hygiene, medicine, prophylaxis, diet and life-style in *Sutra sthan*. Over the past few decades, the ancient system of medicine known as Ayurveda has experienced a healthy revival. Ayurveda aims to keep a pserson's physical, mental, and *adhyatmik* aspects in balance. The person develops health problems and diseases when this equilibrium is disturbed. For this maintenance of equilibrium Aahar is the best medium. In Ayurveda, *Aahar* is mentioned in *Trayoupstambh*, and it is called *Brahma* in *Shastra*. *Acharya Kashyapa* has said that food is *Mahabheshaja.*

In this series, *pathya- kalpana* is the basic and most powerful component in the fight against disease. It is possible if one uses diet according the *Tridosa*, *Deha prakriti*, *Satmya* of person as well as *panchabhautika* composition of dietary substances. *Pathaya Aahar*, based on *Panchabhoutic* principles and shows effect accordingly. (Su.Su.46/526). It can cure a wide range of diseases. *Pathya* is used during Panchakarma to boost the fatigued *Annavaha Strotas* (digestive system) and *Purishavaha Strotas* (excretory system) to regain their healthy stage. It assists patients in keeping their *dhatus* (basic elements) in a healthy state, preventing dosha fluctuations. According to the disease, by selecting the *pathya*, detoxification can be done by opening the *shrotasa*. We use a variety of food additives and preservatives in our modern culture, which contribute to obesity, hypertension, diabetes, infertility, liver disease, and kidney disease. Although in Ayurveda, lifestyle disorders are often seen as a result of *Pradnyapradh* (intellectual blasphemy).

Nirukti: *Pathya* is derived from the root word "*Patha"*, which means "a way or channel".

Definition: *Pathya*, which is the *Aahar-vihar* that calms the mind, is beneficial to the body, and provides nutrients, and *Apathya*, which is the opposite of *Pathya.*

They include

- Foods indicated for healthy people.
- Foods contraindicated for healthy people.
- *Pathya-Apathya* toward the patient.

Synonyms [5]

- ***Pathya:*** *Satmya, Swasth-hitakara, Upshaya, Swavasthaparipaalaka, Hita Ahara, Swasthaaurjaskara, Sharmakara, Dhatua- Avirodhi, Sukha-parinaamkara, Dhatu Saamyakara.*
- ***Apathya:*** *Asatmya, Swastha-Ahitkara, Ahitkara, Anupashaya, Asukha-Parinaamakara, Ashrmakara, Dhatu- Asamyakara.*

Ahara (Diet) is one of the three pillars of human body; other two are *Nidra* (sleep) and *Maithuna* (sexual life) may be considered as *Vihara* (regimen) after the inclusion of *Vyayama* (exercise), *Vyasana* (addiction) and *Vrutti* (occupation. *Ahara* (Diet) is that consumed are transformed to *Prasada* (essence) and *Kitta* (waste) by the metabolic fire *(Agni).* The concept of digestive & metabolic fire can be thought of as the strength and volume of stomach acid, digestive enzymes, and bile in the GI tract. These juices break down the food that we eat into the necessary building blocks for energy and proper nutrition [10].

Importance of Pathya

- *Acharya Charaka* mentioned *Pathya* as the synonym of *Chikitsa* [6] (Ca.chi.1/3)
- *Acharya Sushruta* described *Hita-ahita* in a whole different chapter named "*Hitaahitiyamadhyayam".*
- *Acharya Kashyap* mentioned that health depends of food, food is best medicine; only *Pathya* (wholesome) food can keep person healthy [7] *(Ka. Khi.* 5/9 pg.256)
- *Acharya Harita* described in context of importance of *Pathya* is A person should follow *Pathya* always and diseases cannot be cured by *Apathya* (unwholesome). If person is taking only medicine which are prescribed to him by physician and avoiding *Pathya* (wholesome) than he cannot be healthy [8] *(ha. Samhita*, pg.173)
- *Acharya Bhel* also explains profits of following *Pathya* (wholesome) is that a person become happy and strengthened by taking meals that are salutary; similarly he declines meals that are non-salutary, as then his Vata and other Doshas become morbid. The Dhatus of healthy, such as blood and others thrive forth by the food he takes. For the diseased person, however the meal he takes gets converted to severe for augmenting morbidity. *Pathya ahara* helps detoxification of body by getting rid of vitiated *Doshas*. So, person should always consume *Pathya aahara.* [9] (*Bhel samhita* pg. 12)
- *Acharya Yogaratnakara* said that *Nidana* (cause of disease/aetiology), drugs, and *Pathya* (wholesome are main constituents of treatment of any disease, physician should think about them carefully and then management should be done, because proper combination of three of those cause successful eradication of disease just like without proper raining seedling is destroyed.[10] (Yo.pg.251)
- *Vaidhya Lolimbaraja* indicated importance of *Pathya sevan* that, if a person follows *Pathya* (wholesome) diet and regimes than he doesn't have to take any medicine because he wouldn't be diseased and if he gets diseased than he will cured by disease without much efforts and if person is taking only his prescribed medicines and not following *Pathya* (wholesome) diet and regimes than what's the profit of taking medicine because it wouldn't be effective.
- *Acharya Charaka* had given equal importance to *Pathya aahara* (wholesome food) along with *Pathya vihara* (wholesome routine); as he said that if person is suffering from any of *Chinta* (anxiety), *Shoka* (grief), *Bhaya* (fear),

Krodha (anger), *Dukhashayya* (sleeping on uncomfortable bed), *Jagrana* (insomnia); wholesome food taken by him cannot be digest. So one have to follow *Pathya aharavihar* (wholesome diet and regimes) for having a healthy life.[11] (Ca. Vi. 2/9)

Review on Pathya in Kamala [12]

ताभयांसांशुध्दकोष्ठाभयांऩथ्यान्यन्नाननदाऩयेत।
शालऩन्सयवगोधूमान्मुराणान्यूषसांहहतान॥४१॥
मुद्गाढकीमसूरैश्चजाङ्गरैश्चरसैहहतैरू।
यथादोषांववलशष्टांचतथाभैषज्यमाचरेत॥४२॥

[च१६/४१-४२]

Here after the treatment for *Kamala* must done with *Mrudu Virechana Samshodhana* i.e., Purgation therapy, One who is having *Samshudhakoshta* should take *Pathya ahara* those are *Purana Shali, Yava, Godhuma* and *Mudga, Adhaki, Masurayusha* and *Jangalamamsa rasa* which are having less fat content that is good for fat metabolism of liver in this condition so here importance of the Pathya can be seen.
Ex. *Purana Shali, Purana Yava, Purana Godhuma, Mudgayusha, sAdhakiyusha, Masura yusha, Jangalamamsa rasa, Mrudvika rasa Amalaka rasa.*

According to *Bhaishajya Ratnavali* and *Vaidya chintamani.* [13, 14]

Varga and Dravya

- *Shuka dhanyavarga-Purana Shali, Purana Yava, Purana Godhuma*
- *Shami dhanyavarga-Mudga, Adhaki, Masura*
- *Mamsavarga-Jangalamamsa rasa, Tittira, barhi, Daksha*
- *Shaka varga-Patola, Vrudhakusmanda, Jeevanti, Nagakesara, Palandu, Lashuna, Vartak,*
- *Drona Pushpi, Punarnav, Tanduliyaka, Guduchi, Matsyakshi*
- *Phala varga-Dhatri, Pakva Amra, Abhaya, Taruna khadaliphala*
- *Ikshu varga-Ikshu Rasa*
- *Gorasavarga-Ksheera, Takra, Navaneeta, Grutha*
- *Mutra varga-Gomutra*
- *Madya varga-Souviraka, Tushodaka*
- *Anya-Haridra, Chandana, Yavakshara, Lohabhasma, Kunkuma Kashaya*

Apathya ahara* and *Vihara.

- ***Aharaja Apathya**: Ahara Dravya: Shimbidhanya, Vidahi Dravya, GuruAhara, virudhaahara, teekshanalavana Dravya, Masha, Hingu, Pinyaka, Tambula, Sarshapa Drava Dravya, Dustambu, Sura, Vindya Adrija, Nadijala, Amla souviraka, Bijapura Taila*
- ***ViharajaApathya:** Panchakarma, Raktamokshana, Dhumpana, Swedana, Vamana vegadharana, Mrudbhakshana, Maituna, Atapa, Ayasa, Vanhi Sevana*
- ***Manasika Apathya:** Krodha*

Discussion

The *Samprapti* of *Kamala* goes like *PittakarAahara-Vihara* sevana which increases *Ushna, Tikshna Guna*. Because of that, *Aahar Rasa* get vitiated and *Pachaka-Pitta Dushti* and *Rasa dushti* occurs which leads to the *Agni-mandya* that causes *Rakta, Mansa dushti. Guduchi* is mentioned as *Pathya Aahara* by *Bhaishajya Ratnavali* in Kamala due to its Madhura, Tikta, Kashaya, Laghu, Ushana Guna and Balya, Deepana, Rasayana, Rakta prasadana, Kledanashaka Karma. Pharmacological studies on *Guduchi* also reveals its anti-pyretic, immunomodulatory, hepatoprotective activity which confirms its beneficial use in *Kamala* [15]. It can be consumed in the form of vegetable

Purana Yava[16]	Due to its *Madura* and *Kashaya Rasa*, *Sheetaveerya* Pacifies Pitta, as *Kamala* is a *Pittaja nantamaja vyadhi*, It is said that it cures *Pittajamaya* so it can helpful in curing *Kamala*. Each 100gm contains Moisture: 12.5gm, Protein:11.5gm, Fat:1.3gm, Carbohydrate: 70gm,Iron: 1.6gm
Purana Shali[17]	which is *Shigrapaaki, laghu* which helps in correction of Agni, due to its *sheetavirya Madura rasa* and *Vipaka* which *Pittahara*. Each 100gm contains Moisture:13.7g, Protein:7.5gm, Fat:0.05gm, Carbohydrate: 78.2gm, Calcium: 10mg, Phosphorous: 160mg and Iron 0.7 mg
Purana Godhuma[18]	*Purana Godhuma* which is having *Madhura rasa* and *Sheetavirya* pacifies *Pitta*, which is having property of *Pittahara*. The special property of *Sandanakara* helps in repairing the damaged cells in liver. Each 100gm contains Moisture: 12.8gm, Protein: 11.8 gm, Fat. 1.5 gm, Carbohydrate: 71.2gm, Iron: 5.3mg.
Mudga[19]	*Mudga is Madhura, kashaya rasa, sheetavirya, katuviapki*.Due to its *kapha Pittashamaka -doshakarma* which pacifies the *pitta*, Due to its *vishadaguna* clears the obstructed body channels, digestive and metabolic Pathways. Each 100gm contains Moisture: 12.4gm, Protein: 25.1gm Fat: 0.7gm, Carbohydrate: 59gm, Iron: 4.4mg.
Ahadaki[20]	*Ahadaki* A/C *Bhavapraksha* Due to its *madhura* and *kashaya rasa* and *Sheetavirya* which alleviates *pitta*.It cures the diseases which are vitiated by *Pitta, Rakta, Kapha*. Each 100gm contains Moisture: 13.4gm Protein: 22.3gm Fat: 1.7g, Carbohydrate: 57.6gm, Iron: 4.4mg.
Masura[21]	*Masura*, due to its *Madhura rasa* and *sheetaviryaguna* leads to *Pitta Shamana*, Each 100gm contains Moisture: 12.4gm,Protein: 25.1gm, Fat: 0.7gm, Carbohydrate: 59gm, Iron: 4. 4mg.
JangalaMamsa rasa [22]	*Jangala Mamsarasa* which is having snigdata[less fat content], *laghu* for digestion due to its *Vishada guna* helps in clearing the channels also have *balya* properties. It is a protein of high biological value [first class protein].It is essential for the formation of hemoglobin. Vitamin B12 is available only in animal tissues, which is essential for maturation of erythrocytes.
Shaka Varga [23]	*Tanduliyaka* is rich iron content and dietary fibers and it is the power house of iron, vitamins and minerals. The presence Lysine (amino acids) helps to fight against free radicals. *Taruna kadali* rich in dietary fibers, unsaturated fatty acids, proteins, vitamin E and flavonoids.
Ikshu Rasa[24]	*Ikshu varga* act as *Pittashamaka* by its Properties *Madhura, Sheetavirya, snigdha* and *Avidahi guna*.It is rich in iron, magnesium, calcium and other electrolytes. Each 100gm contains, Moisture: 90gm, Protein: 0gm, Fat: 0gm, Carbohydrate: 20.7gm.
Phala varga amra phala[25]	*Amra phala* Due to its *madhura, kashaya rasa* and *sheetavirya* which alleviates *pitta*. It is *Apittala* so indicated in *Kamala*. ¾ cup pieces Protein:1gm,Fat :0gm, Carbohydrate: 19gm, Iron :0.2mg
Amalaki[26]	*Amalaki* which is *pitta pradhana Tridosha Shamaka*, Each 100gm contains Protein: 1gm, Fat: 0.5gm, Carbohydrate: 10gm, Vitamin C: 478mg.It is Hepatoprotective which is richest source of Vitamin C which reduces the ferric iron into ferrous and helps in producing red blood cells.
Haritaki [27]	*Haritaki* Each 100gm contains Protein: 1gm, Fat: 0.5gm, Carbohydrate: 10gm, Vitamin C: 478mg. It increases the activities of antioxidant enzymes which in turn obviously protect liver for oxidative damage.

Apathyaahara

- *Masha* [28] which leads to *Pittaprakopa*, Each 100gm contains, Moisture: gm, Protein: 11.8 gm, Fat: 1.5 gm, Carbohydrate: 71.2gm, Iron: 5.3mg.
- *Sarshapa* [29] which is having *Katu, tikta rasa* and *katuVipaka* and it will lead to *pitta* and *Rakta vardhana.*
- *Shimbi* [30] *dhanya* which is *rooksha* and it is *vistambi* so one should avoid its intake.

- By eating *VidahiAhara* [36] causes *Hrut kantadaha* and *amla udgara* which leads to *Pitta Prakopa.*
- *Virudha adhyashana*[31] which causes *Guru Anna* [38] which leads *Agnimandya*.In *Charaka Samhita* it is described *"GurubhojanaDurvipakakaranam*"(*Ahara* in *guna* and in quantity too).
- *Divaswapna* [32] (sleep during the day) vitiates *Tridosha* an mainly *Kapha Dosha. Vata dosha* may get vitiate by *Maituna. Atapa* and *agni sevana* which causes *pitta prakopa* that can lead to increase in *Lakshanas* of *Kamala.*

Conclusion

In the Ayurvedic literature *Kamala* would be point out to a disease condition in which hunger and appetite for food are diminished. Since liver is the largest gland, which is the main site for metabolism of Bilirubin and detoxification. So our Pathya which is mentioned in our classics are having low fat and rich in Carbohydrate and protein which helps in easy metabolic process of liver, if *pathya* is advised in early stage of *kamala*, the management of further disease progression can be reduced. Even in different stages of *Kamala* as told by our *acharya's* after *Samshudhakoshta* adopting *Pathya* will definitely helpful in minimizing the further complications by promoting strength in an individual.As in *Vaidya jeevanam* told importance of *Pathya ahara* stating if the patient intakes *Pathya* then there is no need of *Aushada* and if a Patient continuously consumes *Apathya* then also there is no need of *Aushada.* Hence proper understanding of *Nidana, Samprapthi, Chikitsa* along with *Pathya* and *Apathya* plays important role in curing the disease.

Conflict of interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

References

1. Kumar G. Shabda Kalpadruma. Varanasi: Chaukhambha Surbharati Prakashana; UP 2008.
2. Ibid, pp. 528-532.
3. Paradkar HS. Ashtang Hriday, Sarvangasundara and Ayurved Rasayana Tika. Varanasi: Chaukhambha Prakashana; Reprint 2014; p. 519.
4. Chakrapani. Yajjapurushiya Adhyay, Sutra Sthan, Charak Samhita with Chakrapani Teeka. Ed. Yadavji Trikam Ji. 1st ed. Varanasi: Chaukhambha Surbharti Prakashan; c2014. p. 133.
5. Peltz S. The Digestive Fire: Ayurvedic approach to healthy digestion through the seasons. Chiro-practice Wellness. 2019 Mar;1:20-1.
6. Charak Samhita. Vidyotini Hindi Commentary by Kashinath Shastri and Gorakhnath Chaturvedi. Varanasi: Chaukhambha Bharty Academy; Reprint 2014. Chikitsa Sthan, chapter 1/3.
7. Vruddhajeevaka. Kashyapa Samhita. Sharma HR, editor. 9th ed. Khilastana; c2004. p. 256.
8. Harit. Aushadha Parigyan Vidhan, Tritya Sthan. Tipathi HH, editor. Varanasi: Chaukhambha Krishnadas Academy; c2005. p. 173.
9. Bhel. Atyashitiya Adhyay, Bhel Samhita. Katyayan A, editor. Varanasi: Chaukhambha Surbharti Prakashan; c2009. p. 12.
10. Lakshmipati Sastri V. Yogaratnakara. Brahmasankar Sastri, editor. Reprint 2015. Varanasi: Chaukhambha Prakashan; p. 251.
11. Charak Samhita. Vidyotini Hindi Commentary by Kashinath Shastri and Gorakhnath Chaturvedi. Varanasi: Chaukhambha Bharty Academy; Reprint 2014. Vimaansthan, chapter 2/9.
12. Agnivesha. Charaka Samhita, Ayurveda Deepika commentary of Chakrapani. Yadavji Trikamaji Acharya, editor. Chikitsa Sthan. Varanasi: Chaukhambha Surabharati Prakashana; c2015, p. 529:41-42.
13. Bhaiṣajyaratnavalli by Kaviraj Govinda Das Sen. Mishra SN, editor. Chapter 12. Varanasi: Chaukhambha Orientalia; c2015, p. 143-152.
14. Vaidya Chintamani by Sri Vallabhacharya. Reddy KR Chandra, editor. Chapter 7, Kamala Prakarana. Varanasi: Chaukhambha Orientalia; c2013, p. 67-74.
15. Upadhyay AK, Kumar K, Kumar A, Mishra HS. Tinospora cordifolia (Willd.) Hook. f. and Thoms. (Guduchi): Validation of the Ayurvedic pharmacology through experimental and clinical studies. Int J Ayurveda Res. 2010 Apr;1(2):112-21.
16. Bhavapraksha of Shri Bhava Mishra. Sitaram B, editor. English Commentary. Varanasi: Chaukhambha Orientalia; c2015, p. 27-30.
17. Bhavapraksha of Shri Bhava Mishra. Sitaram B, editor. English Commentary. Varanasi: Chaukhambha Orientalia; c2015, p. 22-26.
18. Bhavapraksha of Shri Bhava Mishra. Sitaram B, editor. English Commentary. Varanasi: Chaukhambha Orientalia; c2015, p. 31-35.
19. Bhavapraksha of Shri Bhava Mishra. Sitaram B, editor. English Commentary. Varanasi: Chaukhambha Orientalia; c2015, p. 38-40.
20. Bhavapraksha of Shri Bhava Mishra. Sitaram B, editor. English Commentary. Varanasi: Chaukhambha Orientalia; c2015, p. 51-52.
21. Bhavapraksha of Shri Bhava Mishra. Sitaram B, editor. English Commentary. Varanasi: Chaukhambha Orientalia; c2015, p. 434.
22. Bhavapraksha of Shri Bhava Mishra. Sitaram B, editor. English Commentary. Varanasi: Chaukhambha Orientalia; c2015, p. 476.
23. Mahesh R, Harshita KJ, Tripathy TB. Know the vegetables before you eat: A nutritive review of Shaka Varga. World J Pharm Med Res. 2017;3(10):112-9.
24. Bhavapraksha of Shri Bhava Mishra. Sitaram B, editor. English Commentary. Varanasi: Chaukhambha Orientalia; c2015, p. 1-2.
25. Bhavapraksha of Shri Bhava Mishra. Sitaram B, editor. English Commentary. Varanasi: Chaukhambha Orientalia; c2015, p. 14.
26. Bhavapraksha of Shri Bhava Mishra. Sitaram B, editor. English Commentary. Varanasi: Chaukhambha Orientalia; 1997, p. 38-41.
27. Bhavapraksha of Shri Bhava Mishra. Sitaram B, editor. English Commentary. Varanasi: Chaukhambha Orientalia; c2015, p. 19-22.
28. Bhavapraksha of Shri Bhava Mishra. Sitaram B, editor. English Commentary. Varanasi: Chaukhambha Orientalia; c2015, p. 41-43.
29. Bhavapraksha of Shri Bhava Mishra. Sitaram B, editor. English Commentary. Varanasi: Chaukhambha Orientalia; c2015, p. 69-71.

30. Agnivesha. Charaka Samhita, Ayurveda Deepika commentary of Chakrapani. Yadavji Trikamaji Acharya, editor. Sutrasthana. Varanasi: Chaukhambha Surabharati Prakashana; c2015, p. 32.
31. Acharya Sushruta. Sushruta Samhita, Nibandhasangraha commentary by Dalhanacharya. Yadavji Trikamaji Acharya, editor. Sutrasthana. Varanasi: Chaukhambha Orientalia; c2014, p. 10.
32. Agnivesha. Charaka Samhita, Ayurveda Deepika commentary of Chakrapani. Yadavji Trikamaji Acharya, editor. Sutrasthana. Varanasi: Chaukhambha Surabharati Prakashana; c2015, p. 5-10.

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A Clinical trial to study the effect of *Ramraksha stotra Mantra* as *Daivavyapashray Chikitsa* in the management of *Chittodvega* –A pilot study.

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ABSTRACT:

One of the definition of research is the logical rethinking to revalidate the old facts. Knowledge refers to the acquisition of information and facts, on the other hand, Wisdom involves the application of knowledge along with experience, insights and good judgement which later develops Shradhha ie Faith. In India, since Vaidik times, we practice different Mantra's for different purpose. Being a divine science, Ayurveda has explained Mantra chikitsa on Manas roga under Daivavyapashray chikitsa. Mantra's are the high energy sounds which is the effective treatment of Karmaja Manas vyadhi with its Prabhavjanya Karma (Action) providing Mental stability. Every Mantra are having a specific action (Falshruti). Chittodvega is one of the type of Manas Roga in which person has anxious state of mind with fear and worries. Ayurveda has explained Satvavajay chikitsa and Daivavyapashraya chikitsa in Manas Roga. In India, Lord Rama is worshiped since ancient times as he is the ideal example of Achar Rasayan (Code of Conduct) mentioned in Satvavajay chikitsa. (Also called as Purushottam). So, Ramraksha Stotra Mantra which is the combination of both Daivavyapashraya chikitsa and Satvavajay chikitsa can definitely fulfil the definition of Swastha mentioned in Ayurveda ie happiness of body, mind and spirit.

Keywords: Chittodvega, Anxiety, Manas Rog, Mantra Chikitsa, Ayurveda

INTRODUCTION

A healthy mind in a healthy body constitutes absolute health. While defining health, Ayurveda clarifies the importance of

maintaining the clarity of mind, the sense organ, and the normal physiological functions of the body[1]. The three gunas ie. Satva, Raja and Tama are the essential components or energies of the mind[2].Satva which is supreme 'Guna'of mind which regulates our emotion and mental state while Raja and Tama are considered as 'Doshas' or toxins for the mind which acts as 'Avarak' on our intelligence. Ayurveda provides a distinct description of people on the basis of their Manasa Prakriti ie. psychological constitution. While all individuals have mixed amounts of these three gunas, in which, the predominant guna determines an individual's Manasa prakriti[3]. Equilibrium of these three gunas preserve the mind and indirectly the body, and maintaining individual healthy. Any disturbance in this equilibrium results in various types of mental disorders.

Kama (Desire), Krodh (Anger), Moha (Delusion), Bhaya (Fear), Shoka (Grief), Chinta (Worry), Irsha (Envy), Vilap (Groaning), Lobh (Greed), Udvega (Anxiety) etc. are the manasik bhavas which leads to imbalance of mind and intellect[4].According to Ayurveda, three factors are responsible for the origin of any kind of Manas roga, which are Asatmyeindriyartha Samyoga ie. excessive utilization or non-utilization or improper utilization of sense faculties, Pradnyaparadha ie. Intellectual blasphemy and Parinama ie. Time[5].

Anxiety is defined as a subjective feeling and commonly experienced by all humans. Anxiety is an alerting signal; it warns of threat, external or internal, and it is probably lifesaving, more than once in a life time[6]. The COVID-19 pandemic had a significant impact on public mental health. Thus, it is essential to preserve the mental health of individuals and to develop psychological interventions that can improve the mental health of people to face these challenges [7]. Now a days anxiety is more common in young adults due to work pressure, feeling of job loss, addiction of mobile phone and gadgets[8]. In the older people medical condition like dementia, depression, fear due to anxiety disorder is more complicated.

Mantra's are the high energy sounds which is the effective treatment of Karmaja Manas vyadhi with its Prabhavjanya Karma (Action) providing Mental stability[9]. Ayurveda has explained Daivavyapashraya chikitsa[10] and Satvavajay chiktsa[11] in Manas Roga including Chittodvega. As Ramraksha Stotra Mantra is the combination of both Daivavyapashraya chikitsa and the Prabhavjanya activity ie. Lord Rama is ideal example of Achar Rasayan (Code of

Conduct) mentioned in Satvavajay chikitsa. Hence pilot study has been taken on Ramraksha Stotra Mantra in the management of Chittodvega.

AIM: To study the effect of Ramraksha Stotra Mantra as Daivavyapashray chikitsa in the management of Chittodvega.

OBJECTIVE: To study the effect of Ramraksha Stotra Mantra on sign and symptoms of Chittodvega.

MATERIALS AND METHODS:

Type of study design: Prospective single arm clinical trial

Location of study: Ayurved Mahavidyalaya and Rugnalaya

Duration of Study: 21 days

Study Subjects: Patients of Chittodvega attending OPD of Kayachikitsa at Ayurved Mahavidyalaya & Rugnalaya.

Sample Size: 20

Drug Description:

Mantra chikitsa (Recording of Ramraksha stotra) was heard twice a day ie. Early in the morning after waking up and before going to bed at night for continuous 21 days.

SELECTION OF PATIENT:

A. Inclusion Criteria

1. Age group 18 to 60 years, both male & female, irrespective of occupation, religion, education, socio-economic status etc.
2. Patients showing lakshanas of Chittodvega[12][Ref – Ch. Su.]
    3. Chinta (Feeling of Tension/ Restlessness/ worries)
    4. Bhay (fearful Anticipation)
    5. Nidralpata (Insomnia/unsatisfying sleep and fatigue on waking/night terrors)
    6. Anawasthit Chitta (Difficulty in concentration/ poor memory)
    7. Daurbalya (Fatigue)
    8. Kamp (tremors of hands and legs/fidgeting/ strained face)

B. Exclusion Criteria

C. Age below 18 years and above 60 years.

D. Patients having signs and symptoms other than Chittodvega.

E. A Current or Previous (Within 3 month) use of Antipsychotic drugs, Antidepressant drugs, Antiepileptic drugs or any Hormonal Therapy.

F. Pregnant & lactating mothers.

G. Patient who was not willing to continue the trial.

ASSESSMENT CRITERIA

Assessment was done on following criteria before and after the treatment.

SUBJECTIVE CRITERIA:

General symptoms of Chittodvega:

1. Chinta (Feeling of Tension/ Restlessness/ worries)

2. Bhay (fearful Anticipation)
3. Anawasthit Chitta (Difficulty in concentration/ poor memory)
4. Nidralpata (Insomnia/unsatisfying sleep and fatigue on waking/night terrors)
5. Daurbalya (Fatigue)
6. Kamp (tremors of hands and legs/fidgeting/ strained face)

Following are the common gradations for all of the above symptoms.

Grade	Description
0	Did not apply to me at all
1	Occasional once a week
2	2 to 3 times in a week
3	Almost Everyday

OBJECTIVE CRITERIA:

Generalized Anxiety Disorder 7-item (GAD-7)

The Generalized Anxiety Disorder 7-item (GAD-7) is a easy to perform initial screening tool for generalized anxiety disorder[13].

Over the **last 2 weeks**, how often have you been bothered by the following problems?

1. Feeling nervous, anxious or on edge
2. Not being able to stop or control worrying
3. Worrying too much about different things
4. Trouble relaxing
5. Being so restless that it is hard to sit still
6. Becoming easily annoyed or irritable
7. Feeling afraid as if something awful might happen
8.

Grade	Description
0	Not at all
1	Several days
2	More than half the days
3	Nearly every day

Interpretation:

When screening for anxiety disorders, a score of 8 or greater represents a reasonable cut-point for identifying probable cases of generalized anxiety disorder; further diagnostic assessment is warranted to determine the presence and type of anxiety disorder. Using a cut-off of 8 the GAD-7 has a sensitivity of 92% and specificity of 76% for diagnosis generalized anxiety disorder. [14,15]

The following cut-offs correlate with level of anxiety severity:

- Score 0-4: Minimal Anxiety
- Score 5-9: Mild Anxiety
- Score 10-14: Moderate Anxiety
- Score greater than 15: Severe Anxiety

Based on a recent meta-analysis, some experts have recommended considering using a cut-off of 8 in order to optimize sensitivity without compromising specificity.

OBSERVATION & RESULT:-

In present study a clinical trial, single arm study had been carried out on 20 patients of Chittodvega.

Table no. 1 :- Observation and effect of Ramraksha Stotra mantra on subjective parameters in 20 patients of Chittodvega.

Sr. No.	**Bhay**		**Chinta**		**Anawasthit Chittava**		**Nidralpata**		**Daurbalya**		**Kamp**		**Difference**		**Recovery %**
	BT	**AT**	**BT**	**AT**	**BT**	**AT**	**BT**	**AT**	**BT**	**AT**	**BT**	**AT**	**BT**	**AT**	
1	3	1	3	1	3	1	3	1	3	1	3	1	18	6	66.67
2	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
3	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
4	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
5	3	1	3	1	3	1	3	1	3	1	3	1	18	6	66.67
6	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
7	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
8	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
9	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
10	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
11	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
12	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
13	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
14	3	1	3	1	3	1	3	1	3	1	3	1	18	6	66.67
15	3	1	3	1	3	1	3	1	3	1	3	1	18	6	66.67
16	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
17	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
18	3	0	3	0	3	0	3	0	3	0	3	0	18	6	66.67
19	3	1	3	1	3	1	3	1	3	1	3	1	18	6	66.67
20	3	1	3	1	3	1	3	1	3	1	3	1	18	6	66.67

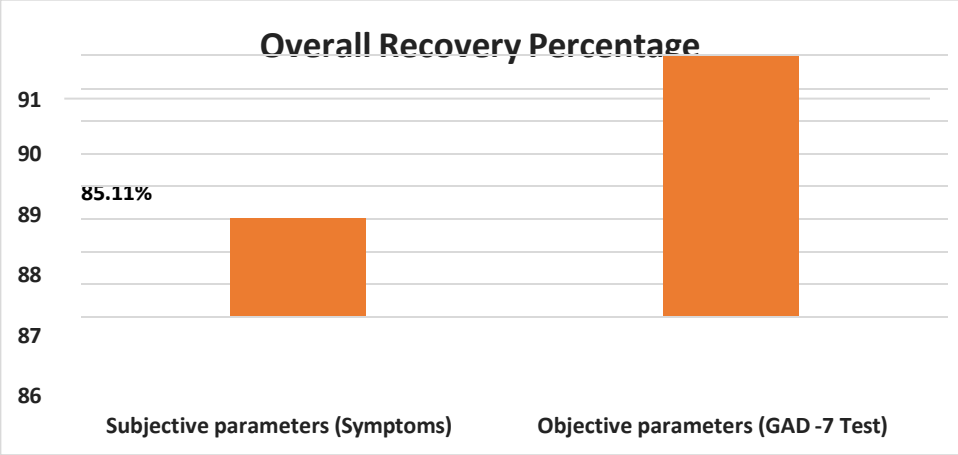
Table no. 2 :- Observation and effect of Ramraksha Stotra mantra on Objective parameters in 20

patients of Chittodvega.

Sr. No.	Feeling nervous, anxious or on edge		Not being able to stop or control worrying		Worrying too much about different things		Trouble relaxing		Being so restless that it is hard to sit still		Becoming easily annoyed or irritable		Feeling afraid as if something awful might happen		Total Effect		Recovery %
	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	BT	AT	
1	3	0	3	0	3	0	3	0	3	0	3	0	3	0	18	0	100
2	2	0	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
3	2	0	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
4	2	0	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
5	3	1	3	1	3	1	3	1	3	1	3	1	3	1	18	6	66.67
6	3	0	3	0	3	0	3	0	3	0	3	0	3	0	18	0	100
7	2	0	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
8	2	0	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
9	3	0	3	0	3	0	3	0	3	0	3	0	3	0	18	0	100
10	2	0	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
11	2	0	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
12	2	0	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
13	2	0	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
14	3	1	3	1	3	1	3	1	3	1	3	1	3	1	18	6	66.67
15	3	1	3	1	3	1	3	1	3	1	3	1	3	1	18	6	66.67
16	2	0	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
17	2	0	2	0	2	0	2	0	2	0	2	0	2	0	12	0	100
18	3	0	3	0	3	0	3	0	3	0	3	0	3	0	18	6	66.67
19	3	0	3	0	3	0	3	0	3	0	3	0	3	0	18	0	100
20	3	1	3	1	3	1	3	1	3	1	3	1	3	1	18	6	66.67

Table no. 3 :- Overall Assesment of effect of Ramraksha Stotra mantra on Chittodvega.

Sr. No.	**Parameters**	**Score**			
		BT	**AT**	**Difference**	**Recovery %**
1	Subjective parameters (Symptoms)	282	42	240	85.11
2	Objective parameters (GAD -7 Test)	294	30	264	89.8



DISCUSSION:

In this study 20 individual fulfilling the criteria for the diagnosis of Chittodvega were selected. Complete history and written consent of individuals were taken.

Effect of Ramraksha Stotra mantra on subjective parameters (Table no.1)-

Symptoms like Chinta, Bhay, Anawasthit Chitta, Nidralpata, Daurbalya, Kamp which is the main assessment criteria for Chittodvega were reduced by 85.11% as showed in table no 1 as the study conducted before and after Ramraksha Stotra mantra chikitsa.

Effect of Ramraksha Stotra mantra on Objective parameters (Table no.2)-

The Generalized Anxiety Disorder 7 test (GAD-7) is easy to perform initial screening tool for generalized anxiety disorder performed on the basis of question Answer form depending on the symptoms observed by the patient of Chittodvega were reduced by 89.80% as showed in table no 2 as the study conducted before and after Ramraksha Stotra mantra chikitsa.

Probable mode of action of Ramraksha Stotra mantra chikitsa on Chittodvega –

In this study, it is observed that Chittodvega is subjective feeling or state of mind which affects individuals personal as well as social life. Chittodvega ie Anxiety gets agrrevate due to Karma ie action of that person on certain situation. Behind any Manas bhav, there is a story in the form of Karma which affects our mentality and its symptoms shows on systemic level as its prabhav. As condition like Chittodvega is Karmajanya prabhav on that particular subject, its remedy should also be another karma which will nullify the previous bad karma and its prabhav. Taking this thought, this pilot study was done on 20 patients of Chittodvega with Mantra chikitsa

(Ramraksha Stotra mantra) which is Adravyabhut Daivavyapashraya chikitsa mentioned in Charak Samhita which has showed good results in 21 days of study.

CONCLUSION:

Chittodvega (Anxiety) is very common now a days and one of the causes of psychosomatic and endocrine disorders if not treated properly or not treated in time. Modern medicine offers medicinal treatment for Anxiety but don't provide complete recovery, rather Anxiolytic medicines are having many adverse effects due to which patient lands up in serious complications on long term use.

Ayurveda has always emphasised on preventive treatment on Manas vyadhi including Daivavyapashray chikitsa and Satvavajay chikitsa. Even Panchakarma along with Medhya Rasayan are also proved effective in Manas Roga including Chittodvega. But due to hectic schedule, many people do not get time to perform Panchakarma, also don't afford the cost of Panchakarma and Medicinal treatment (Shamana Chikitsa).

Mantra chikitsa is Adravyabhut Daivavyapashraya chikitsa which is absolutely free of cost and truly effective on Karmaja manas roga with its Prabhavjanya Karma (Action) providing Mental stability. As these Mantra's are highest energy sound, they passify all the toxins (Negative thoughts) in the mind and intellect. Mantra's may have multidimentional effects on Endocrine and Psychosomatic disorders including Chittodvega i.e. Anxiety which is the root cause of Manas roga, but the sample size of this pilot study was too small, large sample size needed to confirm the results.

REFERENCE:

1. Vd. Rajendra Deshpande, Vd. Shivaji Vavhal, Shantanu Prakashan, 6thEdition, Kriya Sharir, Paper-2nd, Part-A, Page No.174.
2. Vd. Y. G. Joshi, Vaidyamitra Prakashan, 3rd Edition, Charak Samhita, Khand 1st, Sutrasthana, Adhyaya- 1st, Shloka No.42, Page No.16.
3. Vd. Y. G. Joshi, Vaidyamitra Prakashan, 3rd Edition, Charak Samhita, Khand 1st, Vimansthana, Adhyaya- 6th, Shloka No.5, Page No.549.
4. Dr. Ambikadatta Shastri, Chaukhambha Surbharati Prakashan, Edition- 2018, Sushruta Samhita Part- 1st with Aayurvedatatwasandipika commentary, Part- 1st, Sutrasthana, Adhyaya- 15, Shloka No.48, Page No.84.
5. *Vaidya Yadavji Trikamji Acharya*, edited *Charak samhita* with *Ayurved Dipika*– Commentary by *Chakrapanidatta*, published by *Chaukhamba Surbharti Prakashan* Varanasi in 1981, *Viman Sthan* 6, shlok number 5, page no.206.
6. Vd. Y. G. Joshi, Vaidyamitra

Prakashan, 3rd Edition, Charak Samhita, Khand 1st, Sutrasthana, Adhyaya- 1st, Shloka No.42, Page No.16.

7. Dr. Ambikadatta Shastri, Chaukhambha Surbharati Prakashan, Edition- 2018, Sushruta Samhita Part- 1st with Aayurvedatatwasandipika commentary, Part- 1st,Sutrasthana, Adhyaya- 15, Shloka No.48, Page No.84.

8. Vd. Y. G. Joshi, Vaidyamitra Prakashan, 3rd Edition, Charak Samhita, Khand 1st, Sharirsthana, Adhyaya- 1st, Shloka No.20, Page No.625.

9. Vd. Y. G. Joshi, Vaidyamitra Prakashan, 3rd Edition, Charak Samhita, Khand 1st, Sharirsthana, Adhyaya- 3rd, Shloka No.21, Page No.682.

10. Vd. Y. G. Joshi, Vaidyamitra Prakashan, 3rd Edition, Charak Samhita, Khand 1st, Sutrasthana, Adhyaya- 11, Shloka No.20, Page No.155.

11. Vd. Y. G. Joshi, Vaidyamitra Prakashan, 3rd Edition, Charak Samhita, Khand 1st, Sharirsthana, Adhyaya- 1st, Shloka No.22-23, Page No.627.

12. Vd. Y. G. Joshi, Vaidyamitra Prakashan, 3rd Edition, Charak Samhita, Khand 1st, Sharirsthana, Adhyaya- 4th, Shloka No.37, Page No.696.

13. Spitzer RL, Kroenke K, Williams JB, Löwe B. A brief measure for assessing generalized anxiety disorder: the GAD-7. Arch Intern Med. 2006;166:1092-7.

14. Plummer F, Manea L, Trepel D, McMillan D. Screening for anxiety disorders with the GAD-7 and GAD-2: a systematic review and diagnostic metaanalysis. Gen Hosp Psychiatry. 2016;39:24-31.

15. Kroenke K, Spitzer RL, Williams JB, Monahan PO, Löwe B. Anxiety disorders in primary care: prevalence, impairment, comorbidity, and detection. Ann Intern Med. 2007;146:317- 25.

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Ayurvedic Management of Overweight child with *Panchagavya* Therapy – A Case Report

Case Report

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Abstract

Childhood obesity is a widely spreading public health condition specifically after the COVID pandemic. It is also a risk factor for the onset of various non-communicable diseases. Obesity in childhood period does not only affects the growth and development in children but also has a life-long impact if neglected. This article encompasses management of an overweight child having complaints like Exertional dyspnea, Perspiration, increased appetite & thirst. The treatment protocol was based on *Panchagavya*. Both the methods of management of *sthaulya* were practiced viz. *Shodhana* (Purification therapy) in the form of *Gomutradi Asthapana Basti* & *Shamana* (Pacifying therapy) in the form of oral medication. *Panchagavya* is the group of five sacred elements obtained from the Indian cow, from which *Gomutra* has been said to be useful in treating *Sthaulya* in adults. Strict emphasis on *Nidanparivarjana* (Avoidance of causative factors) was also considered. Marked improvement in the BMI from 25.4 (Before treatment) to 22.9 (After treatment) and the clinical symptoms from grade 2 to grade 0 was observed. Modification in the oral administration of *Gomutra* in the form of *Gomutra arka* was found to be palatable considering the age of the child. *Gomutra* via both *Asthapana Basti* and Oral route helped in the breakdown of the Pathology of *Sthaulya*. Diet restriction also helped in the process.

Keywords: *Panchagavya, Sthaulya, Shodhana, Shamana, Gomutradi Asthapana Basti, Gomutra arka pan.*

Introduction

Sthaulya has been considered one of the eight censurable physiques by Acharya Charaka (1). It is a *Santarpanajanya vyadhi* (2) (disease occurred due to over nourishment) which is mostly found in people with predominant *Kapha Prakriti* (3). So, the terms overweight & obese can be compared with *Sthaulya*. According to global and Indian data, children and adolescents from all socioeconomic groups confront a dual nutrition burden and its implications. Overnutrition is a risk factor for numerous non-communicable diseases like Cardiovascular diseases, DM, obstructive sleep apnoea, some types of cancer, osteoarthritis, etc., according to long-term cohort studies (4). Khadilkar V V (5) in 2013 observed that "according to the IOTF Categorization, the overall prevalence of overweight and obesity was 18.2%, and 23.9 % as per WHO standards". Children who are overweight or obese are more prone to become obese adults. In the last 3 years, the global spread of COVID-19 caused social withdrawal, school closings, online learning opportunities, an increase in screen time, and a decrease in outdoor and physical activity along with the increased amounts of food quantum, junk foods & sugary beverages, which increased the danger of child health deterioration and the incidence of childhood obesity (6). According to the WHO expert constitution, on average, obesity reduces life expectancy by 6 – 7 years in adults (7).

Managing overweight children is helpful to prevent them to grow into obese adults. The management of *Santarpanottha vyadhi* in Ayurveda is a multidimensional modality. It includes management with *Sanshodhana* (purification) & *Samshamana* (medicinal management) along with *Nidanaparivarjana* (avoidance of causative factors). *Panchagavya* is the group of five sacred elements obtained from the Indian cows. *Gomutradi Asthapana basti* has been effectively used in the management of *Sthaulya* in adults (8). According to *Acharya Sushruta*, *Gomutra* can be used to treat *Sthaulya* via various routes like *Basti*, *pana* etc (9).

Thus, here an attempt has been made to demonstrate the effect of *Gomutradi Asthapana basti* along with *Gomutra Arka pana* in an overweight child.

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Case Report

Incidence of childhood obesity increased after COVID pandemic due to increased screentime, excessive sitting & lack of physical exercise. This is a typical case representing childhood obesity after COVID pandemic which was successfully treated with *Panchagavya* therapy.

A 14-year-old male patient reported in the OPD of the *Kaumarbhritya* department at CSMSS Ayurved Hospital, *Chh. Sambhajinagar (Aurangabad)* with complaints of weight gain, *Kshudra-shwasa* (Exertional dyspnoea), *Swedadhikya* (Perspiration), *Kshudha-adhikya* (Increased appetite), & *Pipasa-adhikya* (Increased thirst). During the lockdown period his dietary habits and daily activities got hampered due to which he started to gain weight and subsequently landed into the overweight category as per new Indian standards of 5 – 17 years charts of BMI for boys & girls, published by IAP (10). He developed the symptoms of exertional dyspnoea, perspiration etc. So, in search of Ayurvedic management, he visited the OPD of *Kaumarbhritya*.

Past History: Not specific

Family History: Mother-normal; Father-overweight, prediabetic; child born of a non-consanguineous marriage; sibling – one younger brother-aged 10 years with normal growth & development; Maternal & Paternal grandfathers-Diabetic.

Birth History: Full term hospital delivery, cried immediately after birth, No H/O NICU stay.
Developmental History: Achieved all milestones at appropriate age.
Vaccination History: Routine vaccines received.
Metabolic Diseases History: No awareness to check it by investigations.

General Examination
General condition-Good
Respiratory system – Air entry bilateral equal
Cardiovascular System – S1 S2 Normal

Table 1: Showing Anthropometrical Measurements & Vitals

Weight – 58.5 kg	Height – 151.9 cm	BMI – 25.4	Triceps Skin Fold Thickness – 12.8 mm
Waist circum.–70 cm	Hip circum.– 82 cm	Waist Hip ratio = 0.85	Waist height ratio = 0.46
R/R – 18/ min	Pulse – 86 / min.	B.P. –110/70 mm of Hg	

Ashtavidha Parikshana-

- *Nadi-Kaphapradhana Vata, regular*
- *Mutra- Samyak Pravritti*
- *Mala- Samyak Pravritti*
- *Jivha- Saama*
- *Shabda-Prakrit (normal)*
- *Sparsha- Samashitoshna, ruksha*
- *Druka- Prakrit*
- *Akriti- Sthula*

Prakriti Parikshana: *Kapha-vatala*
Koshtha*: Madhyam*

Brief history
Socioeconomic status: Higher middle class
Ahara Itivritta **(Dietic history)**: Overeating of oily foods with increased frequency & increased indulgence of sugary beverages like Frooti, juices etc.
Vihara Itivrutta: Increased screentime with excessive sitting, no running, little playing outdoors, no cycling.
Diagnosis: Patient was not diabetic nor he had hypothyroidism. So he was diagnosed as a typical case of *Santarpanjanya sthaulya.* It was based on new standards of the IAP BMI chart for 5 – 17 years of children and clinical symptoms of *Sthaulya* (Overweight).

Therapeutic regimen

The patient was subjected to both *Shamana* (pacification) and *Shodhana* (Purification) Therapy. He was treated for 3 months. During each month, he was given *Gomutradi Asthapana* Basti for 8 days; after which he was subjected to Oral intake of *Gomutra arka* early morning for next 22 days.

***Shodhana* & *Shamana Chikitsa* –**

Table 2: Showing *Gomutradi Asthapana Basti*

Poorvakarma			
Karma	**Contents**	**Procedure**	**Duration**
1. Sasneha Haridra Gana Udvartana (Scraping therapy)	*Haridra (Curcuma longa* Linn*), Daruharidra (Berberis aristata* Dc*), Madhuyasthi (Glycyrrhiza glabra* Linn*), Prushniparni (Uraria picta* Desv*), Kutaja (Holarrhena antidysenterica* Linn*)* + *Tilataila* (Sesame oil)	Rubbed with pressure all over body for 20 minutes	8 days every month
2. Swedana-(Swedana box)	*Nirgudi* (*Vitex negundo,* Linn) *kwatha*	For 20 minutes	8 days every month
Pradhana Karma			
Gomutradi Asthapana Basti	Fresh *Gomutra* – 80 ml + *Dashamoola kwatha* (decoction) – 200 ml + Sesame oil – 50 ml + Honey – 20 gm + *Saindhava* (Rock salt) – 5 gm	Given with Enema can in left lateral position	8 days every month

Paschat Karma**:** After *Asthapana basti pratyagamana*, the patient was advised to bathe with Lukewarm water, eat according to the diet restriction with sufficient Lukewarm water to drink and he was also asked to follow the dietary pattern strictly.

***Gomutra arka pana* (Oral administration of Cow Urine distillate):** After 8 days of *Gomutradi Asthapana Basti*, the patient was advised to take *Gomutra arka pana* early morning in a dose of 4 ml daily for the next 22 days.

Diet Restriction

Last but not the least, the patient was counselled about *Nidanaparivarjana* (Avoidance of causative factors) (11). Sugary, oily food items, milk & milk products, bakery products, potato and sugary beverages were restricted throughout therapeutical management. He was also asked to lessen the quantity and frequency of meals.

This cycle of *Gomutradi Asthapana* Basti for 8 days a month followed by *Gomutra Arka Pana* along for next 22 days a month with diet restriction was continued for the next two months.

Criteria of Assessment of effect of therapy

The patient was assessed on following assessment criteria

a. Objective parameters – Anthropometrical measurements – Weight, BMI, Waist circumference, Hip circumference, Waist-Hip ratio, Triceps skin fold thickness (TSFT)

b. Subjective parameters – Following gradations of the clinical symptoms shown by the patient were used to assess clinical improvement in the patient.

Table 3: Showing gradations of *Kshudra Shwasa* (Exertional Dyspnoea)

1	No dyspnoea even after heavy work	0
2	Dyspnoea after moderate work but relieved later and tolerable; dyspnoea by climbing upstairs of 10 steps & time taken more than 15 sec.	1
3	Dyspnoea after little work but relieved later and tolerable; dyspnoea by climbing upstairs of 10 steps & time taken more than 25 sec.	2
4	Dyspnoea after little work but relieved later and not tolerable; dyspnoea by climbing upstairs of 10 steps & time taken more than 35 sec.	3
5	Dyspnoea in resting condition	4

Table 4: Showing gradations of *Swedadhikya* (Perspiration)

1	Sweating after heavy work and fast movement or in hot weather	0
2	Profuse sweating after moderate work and movement	1
3	Sweating after little work and movement (stepping ladder)	2
4	Profuse sweating after little work and movement	3
5	Sweating even at rest or in cold weather	4

Table 5: Showing gradations of *Kshudha-Adhikya* (Increased appetite)

1	As usual/routine	0
2	Slightly increased (1 meal extra with routine diet)	1
3	Moderately increased (2 meals extra with routine diet)	2
4	Markedly increased (3 meals extra with routine diet)	3

Table 6: Showing gradations of *Pipasa-Adhikya* (Increased Thirst)

1	Feeling of thirst (7 – 9 times/24 hours) and relieved by drinking water	0
2	Feeling of moderate thirst (>9–11 times /24 hours) and relieved by drinking water	1
3	Feeling of excess thirst (> 11 times /24 hours) and not relieved by drinking water	2
4	Feeling of severe thirst (> 13 times/24 hours) and not relieved by drinking water	3

Outcome of the Treatment

Table 7: Showing effect of therapy on Objective criteria

Measurements	Before Treatment	After 30 days	After 60 days	After 90 days
Weight	58.5 kg	57.2 kg	54.9 kg	52.8 kg
BMI	25.4 kg/m^2	24.73 kg/m^2	23.51 kg/m^2	22.9 kg/m^2
TSFT	12.8 mm	12.1 mm	11.5 mm	11 mm
Waist circumference	70 cm	70 cm	68 cm	68 cm
Hip circumference	82 cm	81 cm	79 cm	79 cm
Waist-Hip ratio	0.85	0.85	0.85	0.86

Table 8: Showing effect of therapy on Subjective criteria

Symptoms	BT	After 30 days	After 60 days	After 90 days
Exertional Dyspnoea	2	2	1	0
Perspiration	2	1	1	0
Increased Appetite	2	2	1	0
Increased Thirst	2	2	1	0

Discussion

Panchagavya therapy is an important method of treatment in *Ayurveda* and it is useful in many diseases including S*thaulya* or M*edovriddhi.* Incidence of child obesity is increasing day by day which is an alarming sign for society. This case typically represents the trends and underlying problems faced by society these days.

Atisantarpana and *Avyayama* causes *Medovriddhi* which creates vitiation of *Vata* which further leads to unwanted *Agnivriddhi.* Therefore, patient eats more and the vicious cycle continues. It is

very important to break this cycle to treat S*thaulya*. Many times, one type of therapy is not enough to break the *samprapti*, therefore treatments like *Udvartan*a, *Basti*, oral *Gomutra Arka pana* along with restricted diet were used for *samprapti vighatan.*

Only reduction of weight should not be the aim of the treatment but one must consider achieving reduction in V*riddha Medodhatu*, pacification of vitiated *Vata* and maintaining *samyak* state of *Agni* while treating a S*thula* patient.

By virtue of *Katu-Tikta-Kashaya rasa; Tikshna-Ushna-Laghu guna; Kapha-Vatashamaka Prabhava* and *Deepana, Lekhana, Pachana, Malashodhana, Amapachana* properties *Gomutra* had a negative impact on *Kapha* & *Medovriddhi*.

Gomutra via Asthapana Basti

In *Sthaulya, Amasanchaya* & *srotorodha* are fundamental pathologies. Due to the aforementioned properties, Fresh *Gomutra* administered via *basti* for 8 days helped in clearing the *Amasanchaya* & *Srotorodha* which led to *Samprapti vighatana* of *Sthaulya*. Biochemical analysis of Cow's urine indicates that due to the presence of Nitrogen and copper, it helps to excrete out fat in the form of *Kleda* through urine by increasing kidney functions and diuretic action (12).

The combination of Cow urine with *Dashamoola kwatha* in *Asthapana basti* is found to be useful not only to reduce *Meda* but also in pacifying vitiated V*ata*. As *Vata dosha* is alleviated, *Agni* also gets balanced hence excessive hunger and thirst also get reduced and helps to break the *Samprapti* of *Medo Roga*.

Saindhava (Rock salt) helped the other contents of the *basti* to get absorbed easily. The inclusion of sesame oil helped in the avoidance of adverse effects of the *Gomutra* causing irritability to the intestinal and rectal mucosa as the *Asthapana Basti* was given for continuous 8 days a month.

Parve S et al studied the clinical efficacy of *Asthapana basti* with *Gomutra,* we also got the similar results.(8)

Oral intake of *Gomutra*

Obese Patients are prone to regain the lost weight. To prevent this from happening, it was planned to counsel the patient to take *Gomutra* orally till the next A*sthapana Basti*. As it was impossible to avail Fresh *Gomutra* for oral intake for 22 days a month for 3 consecutive months & considering the Strong odor and pungent taste of *Gomutra*, its *Arka* form was tried in the patient as he was a child. *Gomutra arka* can be easily stored for longer period of time because it has longer shelf life than *Gomutra* whereas it has the similar properties as that of the *Gomutra* (13).

Gomutra arka was found to be comparatively palatable and acceptable. Further, it's the distilled form of the *Gomutra* so the dose was also very little. Saini NK (12) indicates the efficacy of *Gomutra pana* in reducing weight & BMI of the patients. Like *Gomutra*, in this case, *Gomutra arka* given orally also found to be helpful in the breakdown of the pathology (*Samprapti vighatana*) of *Sthaulya* by the virtue of *Teekshna-Ushna-Laghu Guna.*

***Udvartana* (External application)**

Haridradi gana (14) is *Medokaphahara*. *Meda* is dominant of *Jala* & *Prithvi Mahabhuta* and designative of adipose tissue and other lipids in the body. *Haridradi gana* drugs have *Ushna* potency, *Ruksha*, and *Lekhana* properties. It stimulates *twakstha agni* which further leads to absorption and digestion of the drugs and further *pravilayan* of *Meda dhatu* (liquefaction of cutaneous fat) below the skin (15).

Udvartana mutilates and liquefies the fat so that it is available for disposal from the system via rubbing and scrubbing with pressure which in turn effectively worked in reducing *Medodushti*. By clearing the body of its excess fat and cholesterol, toxins, etc., *Udvartana* restores health (16).

Chaitralakshmi KN et al studied the anti-obesity action of *Haridradi gana Udvartana,* the same results were observed here via the absorption of *Kleda* by *tvakstha agni* which was stimulated by *Udvartana* (15).

As S*weda* is the *mala* of *Meda dhatu*, due to *Udwartana* procedure, the symptom of *Swedadhikya* (Perspiration) gradually reduced from grade 2 to grade 0.

Sesame oil helped in the prevention of skin damage due to excessive scrapping by the virtue of *Snigdha guna.*

Diet Restriction

Acharya Kashyapa has emphasized the importance of diet in one's health by phrasing it as *'Mahabheshaja'* (17).

After the first month of *Basti* and therapy, the patient lost weight, but it was less because he had not followed the diet restrictions properly. However, when the symptoms started showing some regression, the patient began to follow the proper diet restriction in the following month, which resulted in major weight loss in the following month.

The diet which was responsible for the over-nourishment of the body of this patient was restricted e,g. overeating, eating frequently, drinking Frooty, eating oily food etc. so that the *Medo dhatu* over-production was hampered which ultimately helped in the restriction of gain of the weight and BMI.

The exertional dyspnoea decreased with decreasing weight.

Conclusion

Gomutradi Asthapana basti, Gomutra arka pana along with *Haridradi gana Udvartana* and diet restriction helped in improving the subjective and objective parameters of *Sthaulya* in the patient. *Gomutra arka pana* is comparatively more palatable than *Gomutra*.

In such a way, obese patients can also be treated with the addition of physical exercise.

A larger sample is needed to get the concrete results.

References

1. Tripathi B, Charak Samhita of Acharya Agnivesha, Reprint edition, Varanasi, Chaukhambha Prakashana, 2003, 398p.
2. Tripathi B, Charak Samhita of Acharya Agnivesha, Reprint edition, Varanasi, Chaukhambha Prakashana, 2003, 395p.
3. Tripathi B, Charak Samhita of Acharya Agnivesha, Reprint edition, Varanasi, Chaukhambha Prakashana, 2003, 422p.
4. Ramachandran P and Kalaivani K, Overnutrition in Indian Children: Opportunities and challenges, Frontiers in public health, March 2022, 2022 10(814900) retrieved from https:// www.ncbi.nlm.nih.gov/pmc/articles/PMC8927713,
5. Khadilkar VV, Khadilkar AV, Cole TJ, Chiplonkar SA, Pandit D, Overweight and obesity prevalence and Body Mass Index trends in Indian children, International J. of Paedia. Obesity. June 2011, Doi: 10.3109/17477166. 2010.541463. Epub 2010 Dec 16, 216-224.
6. Van Lancker W, Parolin Z, COVID-19, school closures, and child poverty: a social crisis in the making, Lancet Public Health. 2020, 5: e243-4. 10.1016/S2468-2667(20)30084-0.
7. WHO Expert constitution, Body Mass Index for Asian population & its implications for policy & intervention, Lancet-2004; 363, 157-163.
8. Parwe SD, Nisargandha MA, Tadas VR, Hiware S, Effect of Gomutra Niruha Basti on Sthaulya (Obesity), Ayurlog. March 2018; 6(3), 1-8
9. Ambikadatta Shastri, Sushruta Samhita of Acharya Sushruta, 9th edition, Varanasi, Choukhambha Prakashana, 1995, 181p.
10. Macdante KJ & Kliegman RM, Nelson Essentials of Pediatrics; First South Asia Edition, Elsevier Publication, 2015, 88-91p.
11. Ambikadatta Shastri, Sushruta Samhita of Acharya Sushruta, 7th edition, Varanasi, Chaukhambha Sansthana Prakashana, 1990, 11p.
12. Saini NK, Clinical Trial of Gomutra (Cow's urine) in Obesity Management, Int. J. Ayur. Pharma Research, October 2016; 4(10), 54 – 57
13. Mahajan SP, Chavan SA, Shinde SA, Narkhede MB, Miraculous benefits of Cow Urine: A review; Journal of Drug delivery and Therapeutics, August 2020; 10 (4-s), 275 – 281. http://dx.doi.org/ 10.22270/jddt.v10i4-s.4285
14. Kaviraja Atrideva Gupta, Ashtanga Hridayam of Acharya Vagbhata, 14th Edition, Varanasi, Choukhambha Sanskrit Sansthan Publications, 2003, 106-107p.
15. Chaitralakshmi KN, Basarigidad JP, A comparative clinical study to evaluate the effect of Haridradi gana churna and Triphala Gana churna Udvartana in Sthaulya (Obesity), Int Journal of Ayurveda and Pharma Research, February 2019; 7(2), 40-45
16. Patel B, Kamble SB, Vyas HA, Vyas MK, Chinthala R, Hypolipidemic effect of Rukshana Upakrama in the management of dyslipidemia – A Case Study, AYU, June 2018; 39(2), 72 - 75
17. Bhishagacharya S., Kashyapa Samhita of Acharya Vruddhajivaka, Second edition, Varanasi, Chaukhambha Sanskrit Sansthan, 1976, 249p.

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A Survey on the Awareness of Periodontal diseases and their Impact on Systemic Health among Ayurvedic Doctors

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Abstract

Background

Periodontitis is a chronic inflammatory disease of the periodontium, characterized by the progressive destruction of supporting periodontal structures. However, periodontal infection can enter into the systemic circulation and lead to systemic implications resulting in aggravation of the current systemic condition.

Aim

This study aims to evaluate the awareness of periodontal diseases and their correlation with systemic health in allied medical professionals.

Materials and Methods

68 subjects were taken for the current study. Data was collected based on a specially designed Google proforma that included questions used to assess the knowledge about periodontal diseases and their systemic implications.

Results

Out of the total 68 participants: 100% of the respondents knew the existence of a correlation between systemic and oral health; Following is the percentage of the respondents who were aware of the relationship between periodontal diseases and cardiovascular diseases (45.6%), diabetes mellitus (70.6%), hormonal imbalance (55.9%), and preterm labor and low birth-weight infants (38.2%), thus depicting a good level of awareness regarding the systemic effects of periodontal disease.

Conclusion

Knowledge about periodontal disease and its association with systemic conditions is satisfactory among Ayurveda health professionals. Allied healthcare practitioners need to be aware of the systemic implications of periodontal diseases and apply the knowledge in their practice. They should conduct oral health examinations for their patients and make referrals to dentists when necessary.

Keywords: Periodontal medicine, Ayurvedic doctors, Allied medical professionals, Systemic implications of periodontal diseases.

Introduction:

Periodontal conditions encompass a set of inflammatory states affecting the supporting structures of teeth due to bacterial activity. Periodontitis is defined as an inflammatory ailment of the supporting tooth structures resulting from distinct microorganisms or clusters thereof. This leads to progressive deterioration of the ligament securing the tooth and the bony socket, resulting in the formation of pockets within the gingiva, along with receding gingiva, or both.[(1)]

The term periodontal medicine denotes the examination of how inflammation in the gingiva might influence overall health beyond the mouth.[(2)] Recent findings propose a significant connection between periodontal infection and an increased susceptibility to certain systemic ailments, potentially modifying the course of existing systemic conditions.[(3)] Studies have pointed out that individuals dealing with periodontitis may also face cardiovascular issues. It has been concluded that there exists a modest association between periodontitis and arterial diseases. Patients and healthcare practitioners should be aware that taking steps to address periodontal concerns could potentially impede the onset or progression of atherosclerosis-linked diseases.[(4,5)]

Inflammation is regarded as the bridge connecting periodontitis to cerebral conditions like Alzheimer's disease.

A notable feature of Alzheimer's disease is the presence of activated glial cells producing substantial amounts of inflammatory cytokines.[6] Research has identified elevated levels of pro-inflammatory cytokines in older Alzheimer's patients with concurrent periodontitis.[7] Insufficient oral hygiene contributes to chronic periodontitis and might indirectly elevate the risk of Alzheimer's disease. Conversely, Alzheimer's patients often struggle with maintaining proper oral care or seeking professional dental treatment, which in turn heightens the risk of periodontitis.[8]

Initial investigations have outlined the existence of oral ailments among individuals with respiratory conditions. Microbes from the mouth can infiltrate the lower respiratory tract through inhalation, potentially leading to pneumonia. The accumulation of dental plaque might serve as a reservoir for pathogens related to the respiratory system.[9] Smoking, known to have immunosuppressive effects, can compromise the body's natural defenses by reducing the mobility, chemotaxis, and phagocytosis capabilities of white blood cells (polymorphonuclear leukocytes or PMN-L) present in the bloodstream.[10] This chain reaction set in motion by smoking includes a weakened immune response, colonization of bacteria beneath the gingival line, and damage to the connective tissue cells. Collectively, these factors contribute to an increased manifestation of periodontal diseases and a diminished response of the gingival tissue during treatment.[9]

Significantly, there exists a reciprocal association between diabetes mellitus and periodontitis, each influencing the other. Persistent infection from periodontitis can exacerbate and disrupt the body's inflammatory reactions, potentially leading to poor control over blood sugar levels and heightened insulin demands.[11]

In both males and females, intrinsic sex steroid hormones play crucial roles in regulating the responses of gingival tissues. These hormones might modulate the way periodontal tissues react to bacterial plaque, thereby potentially affecting the development of periodontal diseases directly.[12]

Alterations in hormonal balance in females are linked to changes in periodontal well-being. Gingival inflammation intensifies during puberty, pregnancy, and postmenopausal stages. Instances suggest that a single hormone, when encountered at specific life phases, triggers an amplified inflammatory response to dental plaque.[13] Pregnant individuals grappling with periodontitis might confront an elevated risk of premature labor and deliveries. Additionally, a systematic review in 2003 indicated that procedures like scaling and root planing could substantially reduce the likelihood of preterm births among women.[4, 14]

Given the established interconnection between systemic health and oral well-being, comprehensive familiarity with dental knowledge is imperative for all healthcare practitioners. This study assesses the comprehension of dental aspects among allied medical professionals and its connection with overall systemic health.

Method

A cross-sectional descriptive study based on a questionnaire survey was carried out among doctors at CSMSS Ayurveda Mahavidyalaya and Rugnalaya, Kanchanwadi, Aurangabad, in order to assess the extent of awareness among Ayurvedic doctors regarding the systemic impacts of periodontal disease. Ethical clearance was obtained from the Institutional Ethics Committee. Written consent was obtained from each participant, clarifying the study's purpose and the terms employed.

The study included all of the faculty who were present and willing to participate. On Google Forms, a self- administered, closed-ended questionnaire with 18 questions was meticulously designed and circulated around the campus. The results were recorded. The questionnaires covered a wide range of periodontal disease-related topics, including basic knowledge regarding periodontal diseases, etiology, systemic effects, dental hygiene practices, different treatment modalities, an understanding of periodontal medicine, and dental referrals. Uponcollection, the data underwent compilation and subsequent interpretation. The findings were then expressed in terms of proportions and percentages.

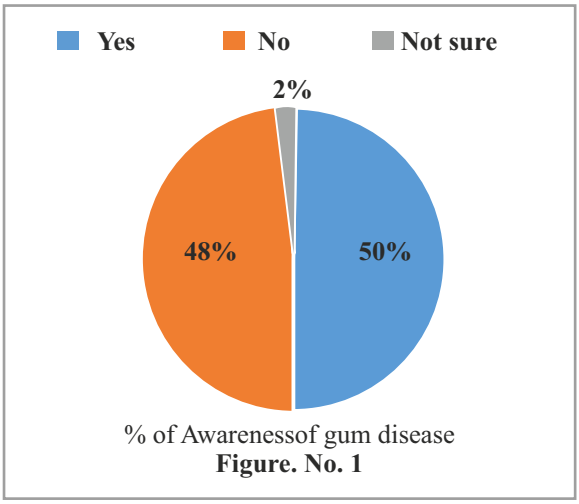
Results

Preliminary results from the survey suggest varying levels of awareness among Ayurvedic doctors regarding periodontal medicine. While some respondents demonstrated a good understanding of the interplay between oral health and systemic well-being, others displayed limited knowledge. Factors such as years of practice, exposure to interdisciplinary medical seminars, and personal interest in modern medical advancements appeared to influence participants' awareness levels. Additionally, perceived barriers to incorporating periodontal medicine into Ayurvedic practice included the lack of formal training in dentistry.

A total of 68 Ayurvedic doctors from the institution were included in the study. The Ayurveda doctors who were contacted for the purpose of the study participated in the study. All participants answered all questions.

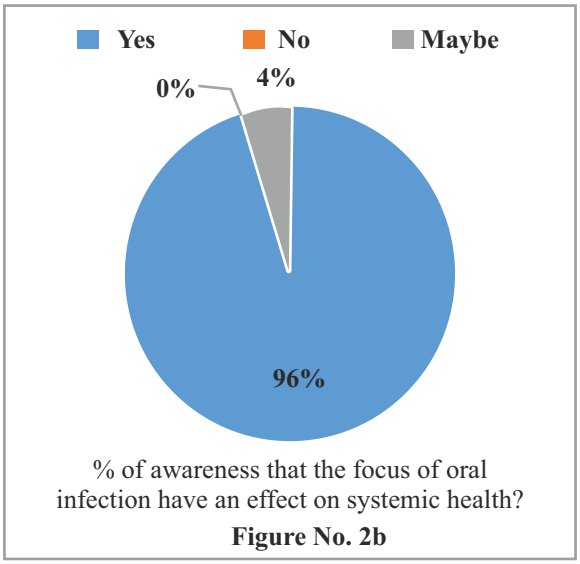
All of the respondents were aware of the relationship between systemic and dental diseases and that it is a two- way process.

Only 50% of the participants were aware of gingivitis and periodontitis as gum diseases. Surprisingly, 48.5% were not sure about them. 1.5% of respondents were unaware of such entities. Figure. No. 1



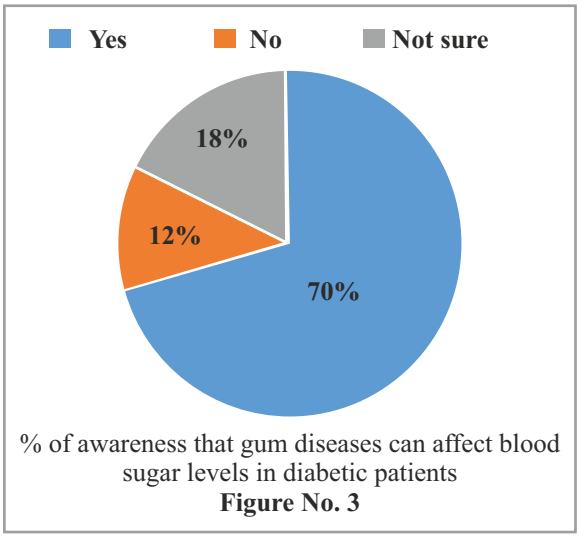
% of Awarenessof gum disease
Figure. No. 1

A staggering 95.6% of those surveyed demonstrated recognition of the impact oral infections can wield on overall systemic well-being. Figure No. 2a, 2b



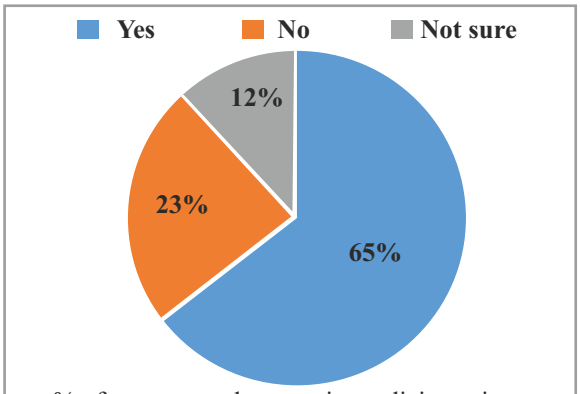
% of awareness that the focus of oral infection have an effect on systemic health?
Figure No. 2b

An impressive 70.6% of the participants exhibited a keen awareness of the connection between blood glucose levels in diabetic patients and the occurrence of gum diseases. Figure No. 3



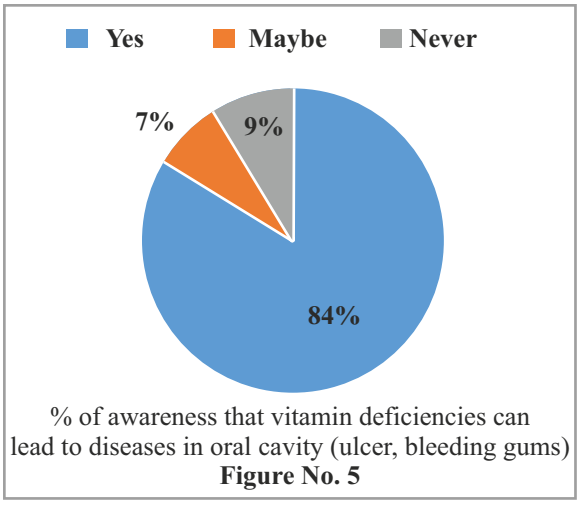
% of awareness that gum diseases can affect blood sugar levels in diabetic patients
Figure No. 3

Among the medical professionals, precisely 64.7% were well-informed about the potential of certain blood pressure medications to induce gum enlargement.Figure No. 4



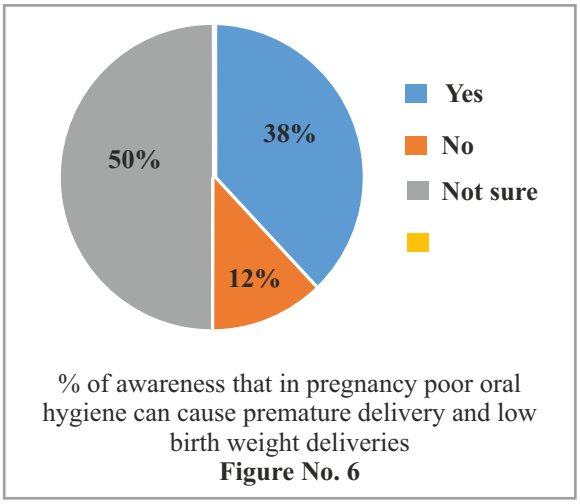
% of awareness that certain medicines given for blood pressure can cause enlargement of gums
Figure. no. 4

Furthermore, an overwhelming 83.8% of the respondents displayed understanding in regard to the role of vitamin deficiencies in giving rise to conditions like oral ulcers and bleeding gums. Figure. No 5 .



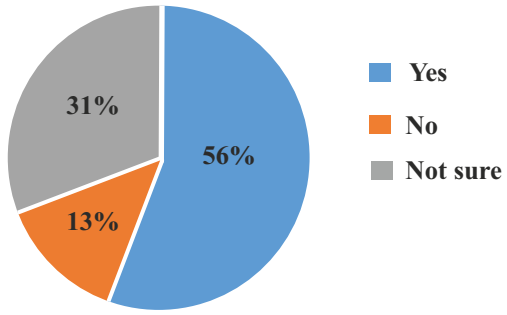
% of awareness that vitamin deficiencies can lead to diseases in oral cavity (ulcer, bleeding gums)
Figure No. 5

In the realm of pregnancy, a noteworthy 38.2% of the participants possessed the knowledge that inadequate oral hygiene can be a catalyst for premature deliveries and low birth weight, while an equal 50% remained unaware of this crucial correlation. Figure No. 6



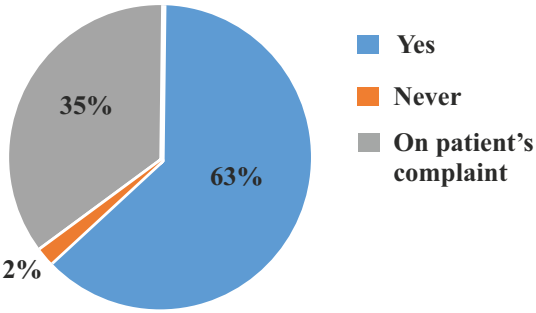
% of awareness that in pregnancy poor oral hygiene can cause premature delivery and low birth weight deliveries
Figure No. 6

Delving into the sphere of hormonal influences on oral health, a substantial 55.9% of the participants acknowledged the role of hormonal imbalances (pertaining to puberty, menstruation, and menopause) in the onset and progression of gum diseases. Figure No. 7



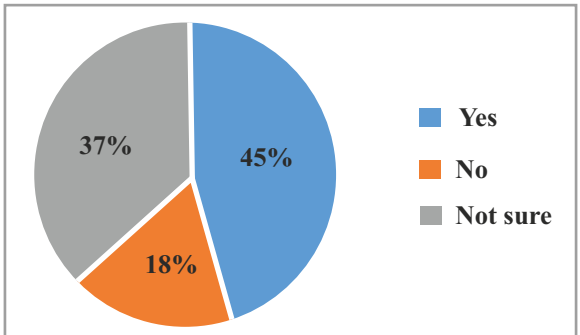
% of awareness that gum diseases are influenced by hormonal imbalance (Puberty, Menstruation, Menopause)
Figure.no.7

When it comes to clinical practice, an encouraging 63.2% of the respondents embraced the practice of examining the oral cavity as a mandatory diagnostic procedure for patients presenting with systemic issues. In contrast, 35.3% limited their oral examinations solely to the patient's complaints, revealing a diverse approach in medical practice. Figure No. 8



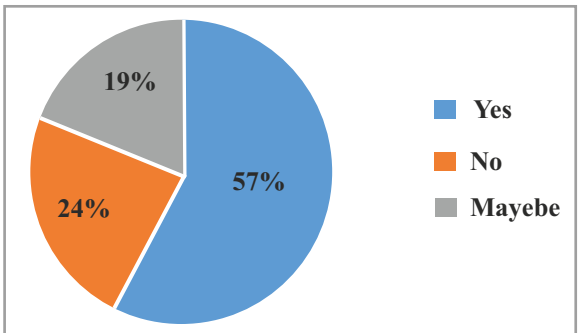
% of awareness that examination of oral cavity as a mandatory measure when patient is having any systemic problem
Figure.No. 8

Highlighting the intricate connection between gum diseases and cardiovascular health, an informed 45.6% of the medical practitioners recognized that microorganisms contributing to gum diseases can precipitate the narrowing of blood vessels, potentially leading to a spectrum of heart-related conditions. However, a more tentative 36.8% held reservations about this association Figure No.9



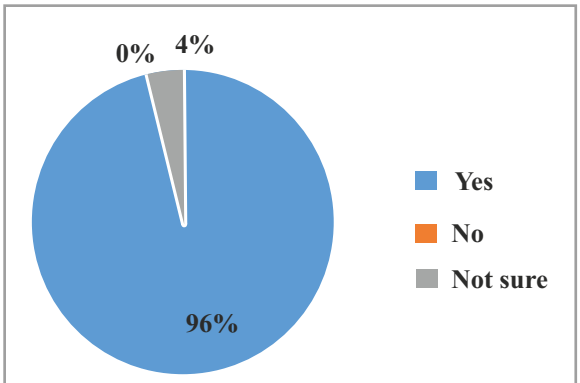
% of awareness that microorganisms causing gum diseases can lead to narrowing of blood vessels leading to various heart diseases
Figure No. 9

Shifting focus to diagnosis, a notable 57.4% of the respondents comprehended that gum ailments such as gingivitis and periodontitis often develop silently, devoid of noticeable pain, underscoring the criticality of thorough examinations. Contrarily, 23.5% were not privy to this fact, and 19.1% remained unsure. Figure.No. 10



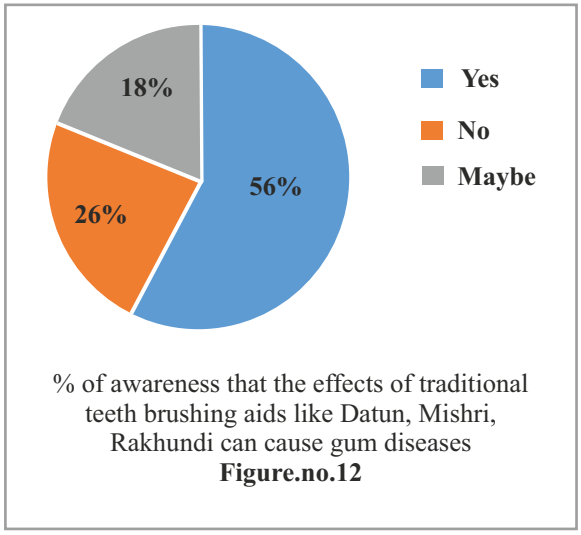
% of awareness that gum diseases like gingivitis and periodontitis in majority cases are painless and they are diagnosed only on examination
Figure.No. 10

On the matter of tooth loss, an overwhelming 95.6% of the participants were cognizant of the dire consequences of poor oral hygiene, which can culminate in the loss of teeth, emphasizing the significance of maintaining oral health. Figure No. 11



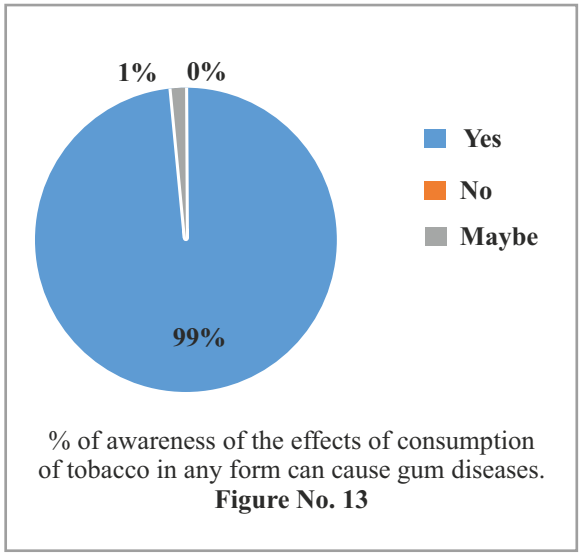
% of awareness that bad oral hygiene will lead to loss of teeth
Figure No.11

Exploring traditional oral care practices, 55.9% of the respondents demonstrated familiarity with the potential drawbacks of utilizing age-old methods such as Datun, Mishri, and Rakhundi, which can inadvertently contribute to the development of gum diseases. Figure No. 12



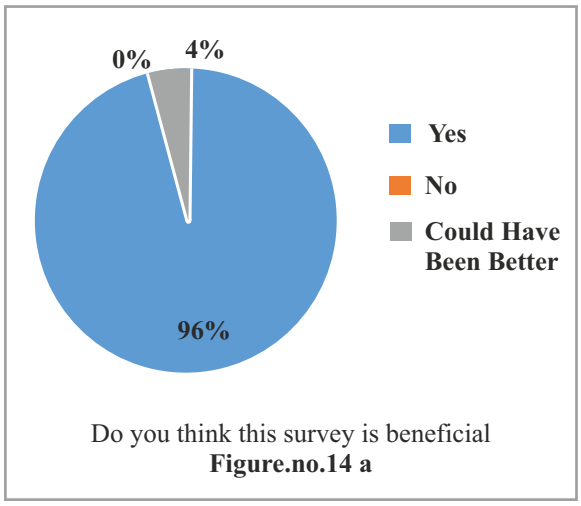
% of awareness that the effects of traditional teeth brushing aids like Datun, Mishri, Rakhundi can cause gum diseases
Figure.no.12

Lastly, the pernicious effects of tobacco consumption on oral health were widely recognized, as an impressive 97.1% of the participants acknowledged the connection between various forms of tobacco usage and the onset of gum diseases. Figure. No. 13

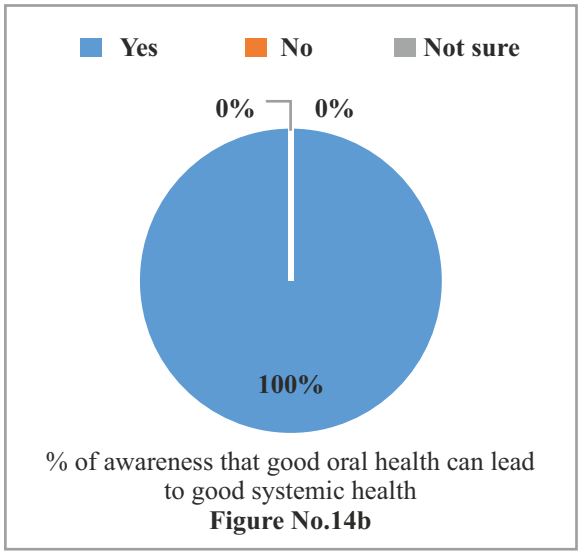


% of awareness of the effects of consumption of tobacco in any form can cause gum diseases.
Figure No. 13

Lastly the medicos were asked for the feedback of the above survey for which they responded with a positive 96% response, While some responded with an opinion of some scope of improvement, Also there were convinced good oral hygiene will have good systemic Figure 14a, 14b



Do you think this survey is beneficial
Figure.no.14 a



% of awareness that good oral health can lead to good systemic health
Figure No.14b

Discussion:

Periodontitis, classified under the umbrella of periodontal diseases, is a chronic inflammatory condition affecting the supporting structures of teeth. This condition manifests as the gradual destruction of the periodontal ligament, alveolar bone, and connective tissues that anchor teeth in their rightful positions. It is more than just a dental concern—it's a complex interplay between microbial assault, genetic susceptibility, and systemic factors that jeopardize both oral health and overall well-being.[15]

The general populace largely lacks awareness regarding the interconnection between oral hygiene and systemic conditions such as cardiovascular disease and diabetes. As a result, oral hygiene has often been disregarded and overlooked as a societal concern. The study underscores the importance of enhancing awareness regarding periodontal medicine among Ayurvedic doctors. By promoting interdisciplinary collaboration and education, the integration of periodontal medicine principles into Ayurvedic practice could contribute to improved patient care and overall health outcomes. This investigation delved into the awareness status

within a segment of society presumed to possess greater knowledge and consciousness compared to the general population. The survey was initiated with the primary objective of assessing the levels of oral health awareness among Ayurvedic doctors in the Aurangabad District.

An investigation conducted within the Dakshina Kannada District aimed to evaluate the level of oral health awareness and familiarity with periodontal diseases among students enrolled in medical, Ayurveda, and Engineering Colleges. The results of the study indicated a significant deficiency in comprehension regarding oral hygiene and a restricted acquaintance with oral care practices, even among those pursuing health-related professions and engineering disciplines.[16]

R Dhulipalla et al conducted a study where they found out that only 39.3% of the total participants were aware that periodontal disease is a risk factor for preterm low-birth-weight infants. This is comparable to our study where 38.2% of the respondents were aware of this information.[17]

In a distinct research endeavor, R Dhulipalla et al embarked on a study that revealed: a mere 39.3% of the total participants displayed an awareness of the correlation between periodontal disease and the heightened risk of preterm, low-birth-weight infants. Strikingly similar to our own investigation, where 38.2% of the respondents exhibited familiarity with this vital insight.[17] Moreover, a compelling statistic surfaced—88.6% of the participants demonstrated cognizance of the intricate interplay between periodontal health and systemic well- being. This remarkable figure, highlighted repeatedly, underscores the widespread recognition of the association between periodontal and systemic diseases. Remarkably, Narendran et al delved into the perceptions of medical professionals through a questionnaire-based study, unearthing a matching proportion of awareness—88.6%— regarding this profound connection.[18]

Conclusion: Diverse levels of awareness exist among practitioners of Ayurvedic medicine concerning the broader impacts of periodontal ailments. Thus, it is suggested that greater emphasis be laid upon the amalgamated instruction of Ayurvedic practices and dental sciences. This approach aims to nurture comprehensive experts capable of serving humanity effectively. Additionally, expanding the dental sciences' footprint within the Ayurvedic curriculum holds the potential to augment physicians' contributions to oral well-being.

The revelations stemming from this investigation underscore the necessity for expanded enlightenment efforts and awareness initiatives targeting Ayurvedic practitioners. Fostering synergy between Ayurvedic doctors and contemporary dental professionals could pave the way for a well-rounded healthcare system.

To heighten awareness and facilitate seamless integration, it is recommended to institute educational endeavors tailored for Ayurvedic practitioners. Such endeavors encompass workshops, seminars, and online modules designed to instill a foundational grasp of periodontal medicine principles. By bridging knowledge disparities and addressing pertinent concerns, a conducive environment for interdisciplinary collaboration can flourish, culminating in benefits for both patients and healthcare cohorts.

Allied health practitioners should thoroughly assess the oral health of their patients and subsequently make referrals to dentists when necessary. This proactive approach ensures comprehensive healthcare management and promotes timely intervention for any dental concerns.

It's crucial to understand that healthcare practitioners who possess an awareness of the systemic repercussions of periodontal diseases are the ones capable of making referrals to dentists for their patients.

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References:

1. Newman MG, Carranza FA, Takei H, Klokkevold PR. Carranzas clinical Periodontology. 10th ed. Elsevier health sciences; 2006.
2. Beck, J. D., Papapanou, P. N., Philips, K. H., & Offenbacher, S. (2019). Periodontal Medicine: 100 Years of Progress. *Journal of dental research*, *98*(10), 1053–1062. https://doi.org/10.1177/0022034519846113
3. Saini, R., Marawar, P. P., Shete, S., & Saini, S. (2009). Periodontitis is a true infection. *Journal of global infectious diseases*, *1*(2), 149–150. https://doi.org/10.4103/0974-777X.56251
4. Nery EB, Meister F Jr, et al, Prevalence of medical problems in periodontal patients obtained from three different populations. J Clin Periodontol. 1987; 58(8):564-68.
5. Scannapieco FA, Bush RB, Paju S, Associations between periodontal disease and risk for atherosclerosis: A systematic review. Ann Periodontol. 2003;8(1):38.
6. Kamer, A. R., Craig, R. G., Dasanayake, A. P., Brys, M., Glodzik-Sobanska, L., & de Leon, M. J. (2008). Inflammation and Alzheimer's disease: possible role of periodontal diseases. *Alzheimer's & dementia: the*

journal of the Alzheimer's Association, *4*(4), 242–250. https://doi.org/10.1016/j.jalz.2007.08.004

7. Cestari, J. A., Fabri, G. M., Kalil, J., Nitrini, R., Jacob-Filho, W., de Siqueira, J. T., & Siqueira, S. R. (2016). Oral Infections and Cytokine Levels in Patients with Alzheimer's Disease and Mild Cognitive Impairment Compared with Controls. *Journal of Alzheimer's disease: JAD*, *52*(4), 1479–1485. https://doi.org/10.3233/JAD-160212
8. Bui, F. Q., Almeida-da-Silva, C. L. C., Huynh, B., Trinh, A., Liu, J., Woodward, J., Asadi, H., & Ojcius, D. M. (2019). Association between periodontal pathogens and systemic disease. *Biomedical journal*, *42*(1), 27–35. https://doi.org/10.1016/j.bj.2018.12.001
9. A. Bosnjak et al., Advances in the Relationship between Periodontitis and Systemic Diseases. Acta Stomatol Croat. 2001;35: br. 2
10. Ameet M, M., Avneesh H, T., Babita R, P., & Pramod P, M. (2013). The relationship between periodontitis and systemic diseases - hype or hope? *Journal of Clinical and diagnostic research: JCDR*, *7*(4), 758–762. https://doi.org/10.7860/JCDR/2013/4500.2906
11. Nishimura, F., Iwamoto, Y., Mineshiba, J., Shimizu, A., Soga, Y., & Murayama, Y. (2003). Periodontal disease and diabetes mellitus: the role of tumor necrosis factor-alpha in a 2-way relationship. *Journal of Periodontology*, *74*(1), 97–102. https://doi.org/10.1902/jop.2003.74.1.97
12. Güncü, G. N., Tözüm, T. F., & Cağlayan, F. (2005). Effects of endogenous sex hormones on the periodontium--review of literature. *Australian dental journal*, *50*(3), 138–145. https://doi.org/10.1111/j.1834-7819.2005.tb00352.x
13. Jafri, Z., Bhardwaj, A., Sawai, M., & Sultan, N. (2015). Influence of female sex hormones on periodontium: A case series. *Journal of natural science, biology, and medicine*, *6*(Suppl 1), S146–S149. https://doi.org/10.4103/0976-9668.166124
14. Scannapieco FA, Bush RB, Paju S, Periodontal disease as a risk factor for adverse pregnancy outcomes: A systematic review. Ann Periodontol. 2003;8(1):70-78.
15. Nazir M. A. (2017). Prevalence of periodontal disease, its association with systemic diseases and prevention. *International journal of health sciences*, *11*(2), 72–80
16. Dayakar, M. M., Kumar, J., Pai, G. P., Shivananda, H., & Rekha, R. (2016). A survey about awareness of periodontal health among the students of professional colleges in Dakshina Kannada District. *Journal of Indian Society of Periodontology*, *20*(1), 67–71. https://doi.org/10.4103/0972-124X.168487
17. Dhulipalla, R., Marella, Y., Keerthana, A. J., Pillutla, H. P. D., Chintagunta, C., & Polepalle, T. (2016). Awareness of periodontal disease and its management among medical faculty in Guntur district: A questionnaire-based study. *Journal of Indian Society of Periodontology*, *20*(5), 525–530. https://doi.org/10.4103/jisp.jisp_253_16
18. Narendran, Nirosha & Vamsi, Raghavendra & Shenoy, Santhosh. (2022). Awareness of the Influence of Periodontitis on Systemic Health among Medical Professionals: A Questionnaire Study. Journal of Health and Allied Sciences NU. 13. 10.1055/s-0042-1751066.

Pakshaghat Rehabilitation Through Ayurveda: A Pathway to Better Quality of Life

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Abstract

Pakshaghat (hemiplegia), a neurological condition characterized by paralysis of one side of the body, significantly impairs quality of life. Contemporary management often involves prolonged rehabilitation with physiotherapy and pharmacological intervention. Ayurveda, the ancient Indian medical system, offers a holistic approach through Panchakarma therapies, internal medications, and lifestyle modifications. This short communication explores how Ayurvedic interventions can complement conventional therapy and enhance functional outcomes and quality of life in patients with Pakshaghat.

Keywords: Pakshaghat, Ayurveda, hemiplegia, Panchakarma, rehabilitation, quality of life

Introduction

Pakshaghat, described in Ayurvedic classics as a Vata-dominant disorder, closely resembles hemiplegia in modern medicine. It often follows ischemic or hemorrhagic strokes and presents with unilateral motor deficit, speech impairment, and functional limitations. Conventional rehabilitation focuses on physiotherapy, occupational therapy, and neuropharmacology, which, though effective, often fall short in restoring full quality of life. Ayurveda provides an integrative and individualized approach, potentially addressing not only the physical but also the psychological and functional deficits in hemiplegic patients.

Ayurvedic Understanding and Intervention

In Ayurveda, Pakshaghat is primarily attributed to aggravated Vata dosha affecting the brain and motor channels (Sira and Snayu). The classical management includes:

1. Snehana (Oleation): External (Abhyanga) and internal (Snehapana) oleation pacify aggravated Vata and nourish neural tissues[(1)].

2. Swedana (Sudation): Local and whole-body sudation therapies help relieve stiffness and improve mobility[(2)].

3. Basti (Medicated enema): Recognized as the best therapy for Vata disorders, Basti helps regulate neurological functions and bowel regularity[(3)].

4. Nasya (Nasal therapy): Nasya is employed to deliver medicated oils directly to the brain via nasal routes, which may enhance neuroregeneration[(4)].

5. Oral Medications: Rasayana (rejuvenators) like Ashwagandha (Withania somnifera), Brahmi (Bacopa monnieri), and Medhya formulations support neural repair and cognitive function [(5)].

Clinical Evidence

Several clinical studies have reported improvements in motor function, quality of life, and daily living activities in patients undergoing Ayurvedic therapies alongside standard physiotherapy. A randomized controlled trial by Sriram et al. (2020) reported that patients receiving Panchakarma showed statistically significant improvement in Barthel Index scores compared to the control group[(6)].

Another observational study highlighted that integrated Ayurvedic treatment led to better patient-reported outcomes, including reduced muscle spasticity and improved mood[(7)].

Discussion

Pakshaghat, understood in Ayurveda as a Vata-dominant nanatmaja vyadhi (neurological disorder), finds its closest modern correlate in hemiplegia, commonly resulting from cerebrovascular accidents (CVA). Despite advancements in acute stroke management, long-term rehabilitation remains a significant challenge, often leaving patients with residual motor deficits, speech difficulties, and compromised quality of life. In this context, Ayurvedic therapies offer a complementary and holistic approach that addresses not only neurological recovery but also systemic rejuvenation.

The Ayurvedic paradigm emphasizes the restoration of doshic balance, particularly Vata, which governs neurological functions. The use of **medicated oils**, like Mahanarayana Taila and Dhanvantaram Taila, has been shown to facilitate neuroprotection and muscular nourishment through transdermal absorption[(8)].

Basti (medicated enema) holds a unique place in Vata-related disorders.. Clinical outcomes have demonstrated improved voluntary movement and functional independence following Basti therapy in hemiplegic patients[(9)].

Nasya (nasal administration of medicated oils) offers a route for central nervous system access. As per Ayurvedic texts and emerging neuropharmacological insights, nasal administration bypasses the blood-brain barrier, facilitating direct drug delivery to the brain[10]. These drugs may support axonal regeneration, synaptic plasticity, and psychological well-being—factors crucial in post-stroke recovery[11].

Importantly, the holistic focus of Ayurveda—addressing physical, mental, and spiritual health—offers a broader perspective on recovery. It empowers patients through Dinacharya (daily routines), dietary guidance, and personalized therapy, contributing to long-term wellness and reducing recurrence risk. However, standardization and rigorous clinical validation of these therapies remain critical. There is a pressing need for multicentric randomized controlled trials and integration of Ayurvedic protocols into public health stroke rehabilitation strategies.

Conclusion

Ayurvedic rehabilitation offers a promising adjunct to conventional therapy for Pakshaghat. With its focus on holistic healing, Panchakarma therapies, and Rasayana medicines, Ayurveda can significantly contribute to improved functional outcomes and quality of life in hemiplegic patients. Larger clinical trials and interdisciplinary integration are essential to validate and optimize this approach.

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References

1. Sharma, R.K., & Dash, B. (2005). *Caraka Samhita* (Vol. 1-6). Chaukhambha Sanskrit Series.
2. Singh, R.H. (2007). Panchakarma Therapy: An overview. *AYU*, 28(1), 3–10.
3. Patgiri, B.J., et al. (2013). Role of Basti in management of neurological disorders. *Journal of Ayurveda and Integrative Medicine*, 4(2), 95–100.
4. Tiwari, P.V. (1999). *Ayurvediya Panchakarma Vigyan*. Chaukhambha Orientalia.
5. Kulkarni, R.R., et al. (2012). Efficacy of Medhya Rasayanas in neurological rehabilitation. *Journal of Research in Ayurveda and Siddha*, 33(4), 45–52.
6. Sriram, S., et al. (2020). A clinical study to evaluate the effect of Panchakarma in Pakshaghat. *International Journal of Ayurveda Research*, 11(3), 180–185.
7. Mehta, H.S., & Joshi, N. (2018). Integrative Approach in Hemiplegia: A Case Series. *Journal of Ayurveda Case Reports*, 2(1), 25–30.
8. Bhalerao S., Patwardhan B. Therapeutic potential of traditional oils in neurological disorders. *J Ayurveda Integr Med.* 2012;3(3):143–147.
9. Tripathi J.S., et al. Efficacy of Basti Karma in post-stroke hemiplegia: A pilot study. *AYU*. 2014;35(2):147–152.
10. Illum L. Nasal drug delivery—possibilities, problems and solutions. *J Control Release*. 2003 ; 87(1–3):187–198.
11. Rege N.N., et al. (1999) Adaptogenic properties of six rasayana herbs used in Ayurvedic medicine. *Phytother Res*. 1999;13(4):275–291.

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Dhatusamya: The Ayurvedic Concept of Homeostasis and its Clinical Significance

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Abstract

In Ayurveda, equilibrium of *Dhatus*, *Doshas*, *Agni* and *Mala* is considered foundation of individual's health. This balance is refereed as homeostasis of body, which reflects healthy state of body and mind. This concept of homeostasis resembles body's ability to maintain a stable internal environment. Self-regulation, driven by the coordination of various physiological mechanisms, is essential for maintaining stability. Disruption in this homeostasis or equilibrium state may leads to a pathological state, which manifests in the form of various diseases. Every individual desires a long and healthy life, Ayurveda provides profound insights into achieving this goal. To achieve this goal of long and healthy life Ayurveda suggested various dietary and daily routine. According to Ayurveda to ensure homeostasis of body maintaining the equilibrium state of both internally and with the external environment is essential. This balance sustains physical health and also nurtures mental well-being. This article explain Ayurveda concept of *Dhatusamya* or homeostasis along with its Clinical Significance.

Key-Words: ***Ayurveda, Dhatusamya, Homeostasis, Doshas, Agni***

Introduction

Living a virtuous life is a universal aspiration and Ayurveda serves as a guiding science to achieving this goal. Optimal or desirable health arises from the harmonious equilibrium of various elements within the body, this equilibrium referred as homeostasis of body. This homeostasis considered essential for acquiring good health status. In Ayurveda concept of *Dhatusamya* resembles similar context. Regulation of internal environment and adjustment with external condition is essential to balance the equilibrium of bodily element [1-3].

The five fundamental elements (*Panch Mahabhutas*) form framework of nature and combine in varying proportions to create life as well as universe. Similarly *Shaddhatu* govern the existence of human internal environment and the external world. These different environments interact with each other and exchanging materials to maintain equilibrium or homeostasis of living organism. In this context it can be said that health and disease are depends upon the ability to synchronize internal and external environmental conditions. Disruptions in this balance may lead to dysfunction or diseased state. Therefore balance between internal and external environments is required to achieve homeostasis and to prevent diseases [4-6].

Role of *Hitahara Vihara Sevana*:

As per the concept of *Hitahara Vihara Sevana/ Arogya Hetava* (secret of good heath) following ancient quote can be correlated with *Dhatusamya*. Ayurvedic approaches emphasizes to maintaining health by advocating a balanced lifestyle. It highlights the importance of consuming wholesome food and engaging in beneficial activities while practicing mindfulness and moderation in actions. Detachment from excessive sensory pleasures, along with cultivating virtues like generosity, truthfulness, forgiveness, and impartiality, are essential for mental and emotional balance [6].

According to above mentioned quote *Hitahara Vihara Sevana* is the key to maintaining optimal health, it also brings state of *Dhatusamya*. Good health can be achieved by regularly consuming suitable food, leading a life aligned with health-promoting practices, acting thoughtfully, avoiding overindulgence in sensory pleasures, being generous, maintaining calmness, practicing truthfulness, showing patience, and seeking guidance from wise and knowledgeable individuals. This comprehensive approach promotes harmony within the body and promotes well-being by sustaining state of *Dhatusamya* [6].

When internal environment aligns with external environment, then *Samyavastha* arises; conversely, failure to adapt this alignment results *Aswasthavastha* which may reflected in the form of diseased state. The inherent constitution of individual in the form of *Prakriti* reflects innate nature and physiological state which are greatly influenced by the "equilibrium of *Dhatus*" (*Dhatusamya*). In Ayurveda, maintaining or restoring *Prakriti* is very important and balancing state of *Dhatus* directly affects synchronization of *Prakriti* with conditions thereby influences overall health and well-being [6-8].

Opposite qualities to one's nature (*Prakriti*) in food and lifestyle, as per the principles of *Swasthavritta* (guidelines for health), are beneficial for individuals with specific constitutions like *Vata*, etc. For individuals with a balanced constitution (*Samadhatu*), it is beneficial to consume all tastes in appropriate proportions while avoiding contradictions. This fact is attributed to the following quote of *Acharya Charaka* [9]:

Qualities opposite to those causing imbalance (*Viparita Guna*) helps to maintain health, as imbalances in *Doshas* are corrected by their opposites. Additionally, a balanced diet that includes all *Rasas* in appropriate proportions, along with compatibility *Satmya* and proper nourishment of *Dhatus*, is essential for sustaining equilibrium and overall well-being [9].

According to above mentioned *Shloka* the diet and lifestyle should be chosen based on the qualities opposite to the natural attributes of *Vata*, *Pitta*, and *Kapha* as described. For those with a balanced constitution, the use of all tastes has been recommended in moderation. For example, if a certain substance contradicts another, that contradiction should be avoided, and useful practices in diet and lifestyle should be properly applied.

Sadaatura here means even those who follow healthy practices may still experience minor ailments due to natural predispositions such as irregular digestion or susceptibility caused by dominant *Doshas* like *Vata*. Even those considered healthy may show signs of imbalance; hence requiring continuous care to avoid disease.

Health and *Dhatusamya*:

Ayurveda recommends *Hitaahara* & *Vihara* for sustaining good health; in this regards *Acharya Charaka* identified three key causes of pathology referred as *Trividh Aayatana* which depicted in **Figure 1**.

Figure 1: *Trividh Aayatana*; causes of pathology

As mentioned above *Kala Viparyaya* resembles seasonal variations, *Prajnaparadha* means intellectual errors and *Asatmya-Indriyartha-Samyoga* referred to improper interaction of senses objects. These factors cause imbalances leading to the diseases. Concept of *Dhatusamya* helps to avoid these factors and restore bodily balance. *Kala* refers to the natural rhythm of *Ritu*, which govern biological clock of body. The combination of appropriate season with time synchronizes to maintain equilibrium of bodily elements. Any imbalance in this synchronization leads health issues. The Ayurvedic approach of treating disease aims to restoring this balance. For this, elimination of metabolites and supply of nutrient must remain unobstructed. This process governs by *Srotamsi* (channels) thus proper functioning of these channels is prerequisite for maintaining haemostatic of body [7-9].

***Dhatusamya* helps to achieve followings:**

- ✓ Balanced state of *Tridoshas*.
- ✓ Proper elimination of *Mala*.
- ✓ Synchronization amongst *Atma, Indriyas* and *Mana.*
- ✓ Optimal functioning of *Agni*.
- ✓ *Swastha Purusha* having equilibrium state of *Dhatus.*

As mentioned above *Dhatusamya* helps to achieve *Swastha Purusha* while imbalance of *Dhatus* leads to a diseased state. Thus maintaining equilibrium of *Dhatu* is very important to restore homeostasis of body.

Characteristics of *Dhatusamya* State:

- *Dhatusamya* brings state of *Ruk Upashamanam* (free from pain).
- The balancing state of *Dhatusamya* provides healthy voice and complexion.
- *Dhatusamya* leads *Sharira Upachayah* in which proper nourishment of the body occur which further gives *Bala* and vitality.
- Individual with the state of *Dhatusamya* is having desire to eat and *Ruchi Aharakale*.
- This state is also responsible for *Samyag Jaranam* (proper digestion of food) and *Nidralabho Yathakalam* (proper sleep).
- Person having balance state of *Dhatu* waking up early morning with refreshed feeling.
- It also facilitates smooth elimination of bodily wastes.
- *Dhatusamya* brings state of *Sarvakaraih Manobuddhindriyanam Avyapattih* which describes as a condition where the mind, intellect and senses are remains free from distress.
- State of *Dhatusamya* helps to achieve *Prakrit Varna*, *Bala Vriddhi*, *Ojas* and *Ruchi Aharakale*, etc [8-10].

***Dhatusamya* and Diseases:**

Dhatusamya helps to restore health and balance in specific diseases as mentioned in **Table 1**.

Table 1: Correlation of concept of *Dhatusamya* in specific diseases

Disease	**Affected *Dhatu***	**Imbalance (*Dhatukshaya*/*Dhatuvriddhi*)**	**Role of *Dhatusamya***
Sandhigata Vata	*Asthi, Majja*	*Asthikshaya*	Restores joint integrity and reduces pain.
Amavata	*Rasa, Rakta, Mamsa, Asthi*	*Rasadushti (Ama), Rakta & Asthi Vikruti*	Balances *Rasa* and clears *Ama* to reduce inflammation and pain.
Prameha	*Meda, Mamsa, Shukra*	*Medavriddhi*	Balances *Meda* for glucose metabolism and controls *Prameha* symptoms.
Kasa	*Rasa, Rakta*	*Rasakshaya, Vata-Kapha* imbalance	Restores moisture and strength in respiratory channels.
Sthaulya	*Meda, Asthi*	*Medavriddhi*	Reduces excess *Meda* while preserving *Dhatusamya*.

Disease	Affected *Dhatu*	Imbalance (*Dhatukshaya*/*Dhatuvriddhi*)	Role of *Dhatusamya*
Panduroga	*Rakta, Rasa*	*Raktakshaya*	Improves hematopoiesis and overall vitality.
Vatarakta	*Rakta, Asthi*	*Raktadushti, Vata* aggravation	Balances *Rakta* and *Asthi* to reduce joint inflammation.
Shvitra	*Rakta, Meda, Mamsa*	*Raktadushti, Meda-Mamsa* imbalance	Balances *Rakta* for pigmentation and cellular repair.
Agnimandya	*Rasa, Anna Dhatu*	*Agni Dushti*	Ensures optimal digestion and nutrient absorption.
Shukradushti	*Shukra, Rasa, Meda*	*Shukrakshaya or Shukravriddhi*	Supports reproductive tissue health and improves fertility.

Regimen for Maintaining Homeostasis (*Dhatusamya*):

Ayurveda employs two major approaches to sustain *Dhatusamya* which includes *Samshodhana* and *Samshamana*. *Samshodhana* refer to purification therapy and *Samshamana* is palliative therapy. *Samshodhana* maintain *Dhatusamya*, during seasonal imbalances of the *Doshas*. In this context *Vasti* is suggested for *Vata* imbalance, *Virechana* used for *Pitta* vitiation and *Vamana* is recommended to maintain *Kapha* balance. *Samshamana* involves balancing *Doshas* through appropriate diet and medications. In this regards *Taila* preparations are used to relieve *Vata*, *Ghrita* is considered good for maintaining *Pitta Dosha* and *Madhu* should be used for *Kapha* restoration.

According to the principles of *Samanya* and *Vishesha* substances with similar constitution tend to increase the corresponding *Dosha*, whereas those with contrasting compositions help to mitigate it. This concept can be used for planning dietary therapy in Ayurveda, where the *Rasa* and *Guna* play a significant role in maintaining *Dosha* balance.

Ayurveda also emphasizes *Rasayana* therapy for maintaining balance of *Dhatu*. *Kamya Rasayana* and *Naimittika Rasayana* works significantly in this regards. *Rasayana* drugs induce purification processes, helping to expel *Doshas* and maintain metabolic stability, etc. These drugs also cleanse channels, removing impurities and sustain balance of *Dhatus* [9-12].

Conclusion

The literature highlights that human body sustains homeostasis by restoring altered variables to their normal states. External factors can influence the body's self-regulation, and failure to maintain homeostasis leads to disorders and diseases. The equilibrium between the external and internal environments ensures the body's *Samyavastha*. The balanced physiological state can be achieved by *Dhatusamya* which is essential for optimal health. Ayurveda advocated *Samshodhana* and *Samshamana* therapies for acquiring state of normalcy or *Dhatusamya*. Physical and mental well-being merely associated with the balancing state of *Dhatu*. This "balancing state of *Dhatu*" (*Dhatusamya*) not only keep individual away from diseases but also promote general health.

References

1. Agnivesh, Charak Samhita Sutra 1/41, In K R Srikantha Murthy Charak Samhita (text book with english translation) vol 1, Reprint edition, Varanasi, Chaukhambha Orientalia, 2009.
2. Agnivesh, charak samhita sutra 26/10, in K R Srikanth murthy charak samhita vol 1, reprint edirion, Varanasi, chaukhambha orientalia, 2009.
3. Sushrut, Sushruta Sutra 14/7, in P V Sharma Sushruta Samhita vol 1, Reprint edition, Varanasi, Chaukhambha Vishvabharati, 2005.
4. Sushrut, Sushrut Sutra 4/62, in P V Sharma Sushruta Samhita vol 1, Reprint edition, Varanasi, Chaukhambha Vishvabharati, 2005.
5. Dr Lakshmidhar Dwivedi, Dr B.K.Dwivedi, Charaka Samhita (Ayurvedadipika, Tattvapraksini Teeka), Chaukhamba Krishnadas Academy, Varanasi, Edition, 2019; Ch su 30/26.
6. Charaka. (200 B.C.E.-200 C.E.). *Charaka Samhita: Sutrasthana, Chapter 25, Verse 36*. (Translators and Editors may vary based on edition)
7. Dr Lakshmidhar Dwivedi, Dr B.K.Dwivedi, Charaka Samhita (Ayurvedadipika, Tattvapraksini Teeka), Chaukhamba Krishnadas Academy, Varanasi, Edition, 2019; Ch su 7/49.
8. Kaviraj Atrideva Gupta, Astanga Samgraha with Hindi Commentary, Chaukhamba Krishnadas Academy, Varanasi, Edition, 2014; Sutra 1/18.
9. Charaka. (200 B.C.E.–200 C.E.). Charaka Samhita: Sutrasthana, Chapter 5, Verse 93.
10. Dr Lakshmidhar Dwivedi, Dr B.K.Dwivedi, Caraka Samhita (Ayurvedadipika, Tattvapraksini Teeka), part, Chaukhamba Krishnadas Academy, Varanasi, Edition, 2019; p. 594 Ch su 28/7 chakr.
11. Dr Lakshmidhar Dwivedi, Dr B.K.Dwivedi, Charaka Samhita (Ayurvedadipika, Tattvapraksini Teeka), Chaukhamba Krishnadas Academy, Varanasi, Edition, 2019; Ch chi 15/16.
12. Dr. Ambikadatta Shastri, Sushruta Samhita - Ayurveda Tatva Sandipika - Hindi Vyakhya, by Kaviraj Chaukhambha Sanskrit Sansthan, Varanasi, edition, 2017; Su su 14/20..

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Role of Kshar Sutra Karma in infected pilonidal sinus: A case study

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Abstract
Pilonidal sinus is a very common anorectic problem often arises in the hair follicles of natal cleft of the sacrococcygeal area due to penetration of hair thought into the skin. Which forms unhealthy granulation tissue in infective origin and occurs in between the buttocks. More common in hair dressers, jeep drivers, 2Q-40 years of age group. It is common in males and mostly hairy men. Prevalence rate of pilonidal disease is about 26 per 100,000 population. When we read Shalyaja Nadi Vrana mentioned by Acharya Sushruta we can correlate this disease with Pilonidal Sinus. Treatment of Nadi Vrana is either Chedana Karma or Kshara Karma.

Keywords: Pilonidal Sinus, Shalyaja Nadi Vrana, Chedhana, case report

Introduction
Pilonidal sinus is epithelium lined tract, situated short distance behind anus, containing hair and unhealthy diseased granulation tissue. It is due to penetration of hair through the skin into subcutaneous tissue. It forms unhealthy granulation tissue. It is an infective origin which occurs in sacral region in the umbilicus, axilla more commonly between the buttocks. Pilonidal sinus usually thought with hair and debris which leads to cause severe pain and can often become infected. If it becomes infected, it may ooze pus, blood and foul odour.
A Pilonidal sinus is a condition that mostly affects men and common in young adults. It's also more common in people who sit a lot like Jeep drivers.
Ayurveda described the whole Nadi Vrana with its management in Sushruta Samhita Nidana sthan 10th chapter and its management mentioned in Chiktsa Sthana 17th chapter [1].
According to Ayurveda one who neglects a wound with full of pus and continues unhealthy foods and activities, then the pus goes deep inside, affect the tissue to destroy(skin and muscle) because of its changes seen inside greatly it is known as Gati and since the spread is through a tube it is called as Nadi (sinus).
It is divided into Vataja, Pittaja, Kaphaja and Shalyaja Nadi Vrana. Here Pilonidal sinus can be co-related with Shalyaja Nadivrana.

Shalyaja Nadi Vrana
Any foreign body which enters into the skin to produces a sinus quickly, which exudes a warm liquid, frothy, clear /blood mixed, accompanied with pain. It can be either managed through remova] of Shalya (foreign body) or debridement of track by using ksharsutra which detailed described by Acharya till the wound is completely healed.

Materials and Methods
- To review the Nadi Vran as a Pilonidal Sinus in Ayurvedic Aspect.
- To study the role of ksharsutra in the management of Nadi Vran

Case Report
A 38 years old male came to Shalya Tantra OPD on 22-02-2023 with complaints of severe pain, swelling and mild discharge at lower ·back region (Sacrococcygeal).
Patient was apparently normal 1 month back, he had history of Pilonidal sinus 1 years back, for which he underwent I and D, Since 1 month he has noticed severe pain, swelling and mild pus discharge which used to aggravate on persistent sitting and used to reduce on taking rest for long duration in prone position. Hence, he has approached our hospital on 22-02-2023 for further treatment.

- General Examination
- Temperature 98°F
- Pulse Rate - 84 BPM
- RR 18 cycles/min
- Blood Pressure130/80 mmHg
- No evidence of cyanosis I koilonychias
- Systemic Examination
- CNS - Conscious and well oriented.
- CVS - Nothing significant
- R, S - Clear

Surgical H/0: I and D done for Pilonidal sinus (LYR Back)
Family H/0: Nothing significant.
Local Examination-External opening seen at 7 me away of anal verge (Natal Cleft) with mild skin Discoloration and hair tight bunch with pus track felt at natal cleft.

Preoperative

- Informed consent for procedure & Local Anaesthesia taken.
- Injection Xylocaine 0.3ml SIC test dose given.
- Part preparation done

Operative Procedure

With all Aseptic precaution, Patient gives prone position External opening seen at 7 me away of anal verge upon the previous operative scar mark.
Probing done Under Local Anaesthesia and track identified anteriorly about < 2.5cm from the external opening.
A small incision taken on skin at the end of sinus track and probe is taken out.
Removal of foreign body of bunch of hair through sinus forceps.

Haemostasis achieved

- With the probing ksharsutra inserted through the sinus which was approx. 2.5 cm long.
- Both end of ksharsutra tied outside the sinus track.
- Dressing done.

Post-Operative

- Immobilization of patient afire half an hours.
- Intravenous Fluid-DNS and NS one point, each 100 ml hour is professed Vitals Recorded.
- Follow up on every 5th day.

Management

- Triphala Guggulu 2BD
- Gandhak Rasayan 1 BD
- Aampachak vati 2 BD
- Tb. Limcee 5100mg 1 O D
- Guduchi ghan vati 2BD

	Follow Up				
	Before	**5th day**	**10th day**	**15th day**	**20th day**
Pain (VAS scale)	10 (Severe Pain)	8 (Less Severe pain)	5 (Mild Pain)	1 (No Pain)	0 (No Pain)
Swelling	Present	Mild in Present	Absent	Absent	Absent
Discharge	Present	Present	Present	Absent	Absent
Size	Approx 2.5cm	<2cm	<1.5cm	< 0.5cm	Healed

Discussion

There are newer Surgeries being tried for the management of Pilonidal sinus Still all these surgery causes with high reoccurrence. When we look at Acharya Sushruta concept, the main line of Nadi Vrana is Shastra Chikitsa by either Chedhana Karn1a or by ksharsutra ligation gives positive result without recurrence.
Kshar sutra [2] is a medicated thread prepared by coating of Kshar, kheer and haridra to linen thread (harbour's thread no. 20) as Ksheer acting as a binding agent, Kshar as alkali and Haridara powder has antiallergic, antiseptic and healing properties. Kshar sutra has property to dissolve tough fibrous tissue of sinus tract and finally drains it out creating a healthy base for healing. Its chemical action which removes debris from During Treatment After ligation of ksharsutra, site encourages the healthy granulation. Kshar sutra in the sinus tract keeps the passage clear and helps in the drainage of pus. Kshar sutra ligation exerts mechanical pressure along with chemical cauterization.

Before Treatment During Treatment After Treatment

Conclusion

In this case of Pilonidal sinus we successfully managed by Sushrutokta ksharsutra ligation treatment. As we have discussed regarding the advantages and disadvantages in the management of Pilonidal sinus in contemporary science are associated with high recurrence rate and low success rate, which is not acceptable from the patient perspective. Hence, ksharsutra ligation having high success rate with low reoccurrence rate still holds good on first line of management for Shalyaja Nadi Vrana vis-a-vis Pilo Nidal Sinus.so it considered as satisfactory para surgical procedure to approach the treatment of Nadi Vran as pilonidal sinus.

Declaration of patient consent

The authors confirm that they have acquired a patient consent form, in which the patient has granted permission for the publication of the case, including a companying images and other clinical details, in the Journal the patient acknowledges that their name and initials will not be disclosed, and sincere attempts will be undertaken to safeguard their identity. However, complete anonymity cannot be assured.

References

1. Shastri AD. Sushruta Samhita of Sushruta, Vol. 1, Chikitsasthana, Chapter 17. Varanasi: Chaukhamba Prakashan, p. 101.
2. Deshpande PJ, Sharma KS. Treatment of fistula in ano by advanced technique: Review and follow-ups of 200 cases. Am J Proctol. 1973 Feb;24(1):49-610.
3. Sridhar TM, Naidu CV. An efficient callus induction and plant regeneration of *Solanum nigrum* (L.) - An important antiulcer medicinal plant. J Phytol. 2011;3(5):23-28.
4. Mat Yunus N, Jaafar HZE, Nakasha JJ, Hakiman M. Shoot multiplication and callus induction of *Labesia pumila* var. alata as influenced by different plant growth regulators treatments and its polyphenolic activities compared with the wild plant. Molecules. 2021;26(11):3229. DOI: 10.3390/molecules26113229.
5. Rathore V, Gupta D. *In vitro* clonal propagation of Solanum nigrum L. Res J Chem Environ Sci. 2013;1:32-33.

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A case study on ayurvedic management of urethral stricture in an elderly male through Uttar Basti with Til Tail

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Abstract
Urethral stricture disease is the common problem occurred in the patients after chronic urinary tract infection, urethral injury or post-surgical interventions performed through per urethra. In Ayurvedic literature urethral stricture may be correlated as *mutrotsanga* mentioned in Sushruta Samhita. There are advance surgeries available as the science advances with technology various surgeries like Urethroplasty, Visual Internal Urethrotomy, and Dilatation of urethra. The way to overcome this problem is surgery i.e. urethroplasty. But the recurrence rate is high enough to think the alternative. *Uttar basti* is explained as one of the treatment modality for *mutraghata* explained in *Susruta Samhita*. In *Sushruta Samhita* a separate chapter for *mutraghata rogas* has been explained which evident the importance of urological problems since ancient times. Uretheral stricture *(mutramarga sankocha*) is a very common disease of urinary system.
Urethral stricture is not explained or mentioned as a separate disease in ayurveda but the symptoms correlate with Mutrotsanga which is one of the 12 type of mutraghata explained by Sushruta in Utttar tantra. Acharya Sushruta explains that in Mutrosanga, pathology may be in urinary bladder or urethra anywhere from bladder to tip of penis. Acharya Sushruta also explained both internal medicine of treatment and panchkarma like swedana and uttarbasti for treatment of urinary diseases.

Keywords: Urethral stricture, chronic urinary tract infection, urethral injury, post-surgical interventions

Introduction
Urethral stricture disease remains a common cause of morbidity among men. The urethral stricture is the narrowing of the lumen of the urethra caused by acute injury, inflammatory condition and iatrogenic surgical interventions. Urethral stricture disease is still a prevalent problem with an estimated incidence of 0.6% in susceptible populations [1].
The treatment options for urethral stricture vary in their success rates. Urethral dilation and urethrotomy are the most commonly performed procedures but carry the lowest chance for success (0-9%). Urethroplasty has a much higher chance of success (85-90%) but its maj or complication is sexual dysfunction [2]. As per Ayurvedic anatomy, disease related to genitourinary system falls under Mutravaha Shrotas Vyadhi. Acharya Shushruta has classified mutraghata into 12 types [3]. Acharya shushruta has explained uttarbasti as treatment procedure of mutrotsanga [4]. Acharya Charaka has classified urinary disease like mutra krichha into 8 types [5]. Urethral stricture means Pathologically it becomes narrowed by a fibrotic tissue, which obstructs flow of urine. The etiological factors may be Urinary tract infection, injury or post-surgery [6].

Case Report
A 47 year old male patient came to our shalya tantra OPD with complaints of difficulty in micturition, increased frequency of micturition 12-15times in a day, yellow stragnant urination, burning micturition intermittently since 1 year. K/C/O hypertension since 3 years on treatment tab. Prolomet XL (50 mg). No history of diabetes mellitus, initially patient treated by urologist with antibiotics and alkalizers patient got relief for some times then after about 1 month patient suffer with sever urine retention then doctor advised him non invasive urethral dilatation. patient did urethral dilatation and discharge from hospital, later on six month he again suffer from same complaint further doing urethral dilatation at that time his symptom not relieved completely then came toward ayurvedic management.

Treatment Plan

Oral medication

1. Chandraprabha vati 2 BD (luke warm water)
2. Gokshur guggule 2 BD (lukewarm water)
3. Ushirasav 20ml TDS (with cup of lukewarm water)
4. Raspachak Vati 2BD (lukewarm water)
5. Raktpachak Vati 2BD (lukewarm water)

Uttarbasti: Twice week with Til taila [7]

Instruments

- Disposable syringe, 20 ml
- 10% w/v betadine solution,
- Lignocaine jelly
- Sponge-holding forceps, surgical gloves 1 pair
- Sterile hole sheet, cotton gauze pads
- Surgical mask and gown all the instruments are to be properly sterilized and the procedure is to be conducted in the operation theater under strict aseptic measures.

Procedure of Uttrabasti

The method is divided into three parts. 1. Purva karma 2. Pradhan karma 3. Paschat karma

A). Purvakarma

- Preparation of the patient
- Local Abhyanga Swedana to be done before Uttarbasti.
- The patient is advised to empty the bladder before the procedure of Uttarbasti.
- Part preparation, Painting, and draping properly

Dose: 20 ml.

B) Pradhan Karma

Prepration - First mix Makshik + Saindhav Laavan then pinch of Bhimseni Karpoor, and Til tail,

Instillation of medicated Taila into the bladder constitutes Pradhan karma.

- The patient should be in a supine position on the OT table.
- Tail should be warm over hot water in a metal vessel.
- 20 ml Taila to be filled in the syringe inserted with feeding tube.
- The syringe tip will be introduced in the urethra and 20 ml of Taila to be pushed.
- A Penile clamp will be used for better effect.

C) Paschat Karma

- The Patient advised to relax for 30 minutes in the bed and a hot water bag should be given for formulation over the suprapubic area.
- The Patient advised to take plenty of liquids, especially hot water, buttermilk, and barley water, throughout the day.

Outcome: Patient was on medication for one month and uttar basti for one month Frequency of micturition was decreased to 7-9 times from 15-16 times with relief in abdominal distension with a feeling of lightness. Improvement was also found in RUG.

Observation and Results

The efficacy of Uttarbasti therapy was assessed on the basis of patients symptoms which got relief after the one month treatment. The Urogram of the patient before and after treatment shows a significant change. The patient is living a smooth and stressfree life.

Discussion

In Urethral stricture there is vitiation of Vata, especially *Apanvayu* which is located at *Shroni*, *Basti*, and *Medhra* leads to obstruction of urine outflow due to *Marga Avrodhana*. Therefore, the main principle should be to *Vatanuloman* and *Mutrashodhan* to return the normal qualities of *Apan Vayu*. Medication and *uttar basti* of *tila taila* serve the purpose and found effective in management of urethral stricture. *Til taila* possess *ushna, teekshna, sukshma, sara, vikasi, mrudukar, lekhana, vata-kapha prashaman, krimighna* and *vranaropak* quality. It softens tissue, increases elasticity, penetrates up to deep tissue, heals and promote regeneration of tissue. *Saindhav lavan* has *chedana, bhedana, margavishodhankara* and *sharir avayava mridukar* quality. So it softens the fibrosed hypertrophied tissues and It increases active penetration of *til taila.* The *saindhava* acts as *anulomak* of *dosha* and *sandhankara* and ultimately helps in *matramarg vishodhana*. *Makshik (Madhu)* possesses *lekhana, vranashodhana, ropana, srotavishodhana, yogavahi* property. Its action is synergistic to that of til taila and *saindhav lavana*. The medicated oil (*uttarbasti taila)* acts with its lekhan property on local soft tissue and pacifies vata and kapha dosha. The medicinal properties of *Rasapachaka vati* and *Raktapachak* vati on this disorder helps to relieve the symptoms very efficiently. *Rasapachaka vati* has the *mala-anuloman, margvishodhan* & *kledhar* property it helps in easy flow of urine from the passage. *Raktapachak vati* helps in diminishing the *daha* (burning sensation) as *rakta* is the *adhistan* of *pitta*. *Prakopit pitta* have aggravated *daha guna*, this formulation of raktapachak vati decrease the prakopit guna of pitta by pachan kriya.

तैलंघृतंवातत्पेयंतेनवाऽप्यनुवासनम्।।१८।।
दद्यादुत्तरबस्ततचवातकृच्छ्रोपशान्तये।१९। । [8]

Conclusion

Urethral stricture remains a significant urological issue, with various treatment options, including urethroplasty and urethral dilation. While these surgical methods show mixed success rates, Ayurvedic treatments such as Uttarbasti with Til Taila offer a promising alternative. The case study demonstrates that Uttarbasti therapy can significantly alleviate symptoms like frequent urination and discomfort. By addressing the underlying vitiation of Vata and utilizing Ayurvedic formulations like Rasapachaka and Raktapachak Vati, this approach not only helps in symptom management but also promotes tissue healing and restores normal urinary flow, enhancing patient well-being.

References

1. Santucci RA, Joyce GF, Wise M. Male urethral stricture disease. J Urol. 2007;177(5):1667-1674.
2. Gallegos MA, Santucci RA. Advances in urethral structure management. F1000Res. 2016;5:2913. DOI: 10.12688/f1000research.9741.1, PMCID: PMC5225410.
3. Shastri AD. Sushruta Samhita: Ayurveda Tatva Sandipika, nidansthanam, Uttar Tantra chapter 58/3-4. Varanasi: Chaukhambha Sanskrit Sansthan; p. 423.
4. Shastri K, editor. Charaka Samhita of Agnivesha, Siddhi sthana; chapter 9, verses 49-50. Varanasi: Chaukhambha Bharti Academy; 2011. p. 1063. Reprint 2011.
5. Sastri K. Caraka Samhita of Agnivesha with Vidyotani Hindi commentary, Chaukhambha Sanskrit Sansthan, Sutra Sthan, chapter 26; 722.
6. Das S. Textbook of Surgery, 9th ed. Kolkata: S Das, 13, Old Mayor's Court; p. 1300-1303.
7. Susruta S. Susruta Samhita of Maharshi Susruta, Ayurveda-Tattiva-Sandipika Hindi commentary by Kaviraj Ambikadutta Shastri, Varanasi: Chaukhambha Sanskrit Sansthan; Part-2, Uttaratanta 59/3-4.
8. Susruta S. Susruta Samhita of Maharshi Susruta, Ayurveda-Tattiva-Sandipika Hindi commentary by Kaviraj Ambikadutta Shastri, Varanasi: Chaukhambha Sanskrit Sansthan; Part-2, Uttaratanta 59/18-19.

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PHARMACOGNOSTICAL STUDY OF *ASPERAGUS RACEMOSUS* - FROM THE VIEW OF *AYURVEDA* AND BOTANICAL APPROACH

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Abstract *:* Introduction- *Shatavari* is the common most plant used by the Ayurveda physicians; the drug is sourced from the time of Vedas. The data of *shatavari* is dispersed in all texts from Vedas to till date. The data of any drug need to compile so to get easy access for users and new researchers.

Aim- To study the literature available on *Shatavari*

Methodology-- All the available data was studied from Vedas to till date available data.

Discussion- *Asparagus racemosus* possesses a strong rejuvenating, fostering, and stabilizing action on excessive air, gas, dryness and agitation in the body and mind; for this action, the root infusion is traditionally used in treating nervousness, anorexia, insomnia, hyperactive children, and slow growing of humans.

Conclusion- Here in this article we focused to compile the details that are mentioned in various Ayurveda and botanical classics available. It is concluded that a varied uses of shatavari has been mentioned by *acharyas* in different conditions with assorted preparation.

Index Terms **- *Shatavari*, *Asparagus racemosus*, Indian Asparagus, Shatavar, Sparrow grass**

I. INTRODUCTION

Etymological derivation of the word “Drug” is from the French word “Drouge”. It may be defined as “Any substance which when taken by a living Organisms may modify one or more functions”. *Acharya Charaka* has asserted that each substance on this earth is useful in combating illness when applied with *Yukti* (planning) and for a specific purpose. *Ayurveda* describes four basic factors, which are most essential for advocating proper treatment. Among these, *Aushadha (Bhaishajya)* is graded at the second rank, which is the main source of therapeutics. Though the Physician occupies the most important position, but becomes lame without Drug. Hence the Drug is the second important factor for the cure of disease. When we see the Ayurvedic literature it is found that some misconception or misidentification is seen due to similarity in classical names of two drugs, or multiple synonyms with different meanings to a single drug. So the clarification is needed to get the genuine drug.

Also some of drugs have their description given in brief that can be studied through all the available literature. This takes a lot of time. So here in this article we are going to study the detail on the most commonly use drug *Shatavari*. History of any Drug gives insight into its morphology, properties and therapeutic or dietary utility as conceived by various authors at different stages of the history.

Aim- To study the literature available on Shatavari

Objectives- To Study Shatavari from Vedas, Samhitas and Nighantus

To study Shatavari from botanical aspects

Methodology- All the available sources was considered for study starting from Vedas to till date available data on Shatavari/ ***Asperagus racemosus***

Discussion

***i. Vedik* Literature**

Shatavari mentioned in *Vedic* literature[1] with various names as follow.

Shatavri is mentioned as *Shatavar* in *Yajurveda*. *Shatmoola* and *Shatankura* in *Braahman Grantha*. *Shatapatra, Shatavar,* and *Shatavari* in *Kalpa Sutra*. *Shatapatra* and *Shatavari* in *Paniniya Astaadhyai*[2].

ii. Samhita literature

a. *Charak Samhita* (*Agnivesha*; 1000-1500 B.C.)[3]

There is comprehensive description of *Shatavari* in various chapters where its properties, actions, contraindications and therapeutic uses all are detailed.

1. *Shatavari*-

Table No 1-Charak Samhita reference for *Shatavari*

Sr.No	Reference For	*Sthan*	*Shloka*	Page No
1	*Shatavari* mentioned in *Vayasthapan mahakashaya*	*Sutrasthan*	4/50	77
2	*Shatavari* mentioned in *Anu tail*	*Sutrasthan*	5/65	97
3	*shatavari* described under 11 *moolaasave* in 84 asav	*Sutrasthan*	25/49	348
4	*Gunas* of leaves of *shatavari* are described under *Shaak varga* that pasifies *vaat* and *pitta*	*Sutrasthan*	27/107	399
5	*Shatavari* mentioned under *Madhur Skanda,* for preparation of *Basti*	*Vimansthan*	8/139	662
6	*Shatavari* mentined under *Garbhasthapan* medicine group	*Sharirsthan*	8/20	780
7	*Shatavari*- contain of *Bramha Rasaayan*	*Chikitsasthan*	1-1/44	10
8	*Shatavari*- contain of *Dvitiya Bramha Rasaayan*	*Chikitsasthan*	1-1/58	10
9	*Shatavari*- contain of *Aamlak Ghrit*	*Chikitsasthan*	1-2/4	11
10	*Shatavari*- contain of *Indrokt Rasaayan*	*Chikitsasthan*	1-4/6	38
11	*Shatavari*- contain of *Dwitiya Indrokt Rasaayan*	*Chikitsasthan*	1-4/15	40
12	*Shatavari*- contain in *Brihaniya Gutika*	*Chikitsasthan*	2-1/25,28	50
13	*Shatavari*- contain in *Vajikaran Ghrit*	*Chikitsasthan*	2-1/34	51
14	*Shatavari*- contain in *Shashtikadi Gutika*	*Chikitsasthan*	2-2/6	54
15	*Shatavari*- contain in *Apatyakar Swaras*	*Chikitsasthan*	2-2/14	5
16	*Shatavari*- contain in *Vrishya Kseer*	*Chikitsasthan*	2-2/18	55
17	*Shatavari*- contain in *Vrishya Shatavari Ghrit*	*Chikitsasthan*	2-3/18	60
18	*Shatavari*- contain in *Apatyakar Ghrit*	*Chikitsasthan*	2-4/28	66
19	*Shatavari*- contain of *Jivantyadi Anuvasan Basti*	*Chikitsasthan*	3/250	105
20	*Shatavari*- contain of *Chandanadya Tail*	*Chikitsasthan*	3/258	106
21	*Shatavari*- contain of *kalpa* in *Raktapitta*	*Chikitsasthan*	4/85	133
22	*Shatavari*- contain in *Shatavri Ghrit*	*Chikitsasthan*	4/97	133
23	*Shatavari*- contain in *Drakshadya Ghrit*	*Chikitsasthan*	5/123	158
24	*Shatavari*- contain of *Mahatikta Ghrit*	*Chikitsasthan*	7/145	158
25	*Shatavari*- contain in *pradeha* used for *shula* in *rajyakshma*	*Chikitsasthan*	8/79	217
26	*Shatavari*- contain in *Shatavri Ghrit* used in *daha*	*Chikitsasthan*	8/105	219
27	*Shatavari*- contain in *ubtan*	*Chikitsasthan*	8/175	226

28	*Shatavari*- contain in five *yoga* used in *Apasmaar*	*Chikitsasthan*	10/64	256
29	*Shatavari*- contain in *Amritprash Ghrit*	*Chikitsasthan*	11/36	262
30	*Shatavari*- contain in *Shawdanshtradi Ghrit*	*Chikitsasthan*	11/46	263
31	*Shatavari*- contain in *Chatuhsarpi guda*	*Chikitsasthan*	11/65	265
32	*Shatavari*- contain in *Tryaushnadya Ghrit*	*Chikitsasthan*	18/40	443
33	*Shatavari*- contain in *Rasnadya Ghrit*	*Chikitsasthan*	18/43	444
34	*Shatavari*- contain in *Shatpuushpadi Anuvasan Basti*	*Chikitsasthan*	19/62	476
35	*Shatavari*- contain in *Nyogradi pralep* for *visarp*	*Chikitsasthan*	21/84	514
36	*Shatavari*- contain in *Amrit Ghrit*	*Chikitsasthan*	23/244	573
37	*Shatavari*- contain in *Vijayadi Pradeha*	*Chikitsasthan*	25/47	610
38	*Shatavari*- contain in *Sneha Sharkara*	*Chikitsasthan*	25/75	613
39	*Shatavari*- contain in *Punarnavadi mishrak Sneha*	*Chikitsasthan*	26/46	632
40	*Shatavari*- contain in *Shatavaryadi Kwath*	*Chikitsasthan*	26/50	632
41	*Shatavari*- contain in *Karpaasmooladi Yoga*	*Chikitsasthan*	26/70	635
42	*Shatavari*- contain in *Trayushnadi Ghrita*	*Chikitsasthan*	26/88	638
43	*Shatavari*- contain in *Mahamayur Ghrita*	*Chikitsasthan*	26/169	652
44	*Shatavari*- used in *abhyang* oil	*Chikitsasthan*	28/110	706
45	*Shatavari*- contain in *Amritaadya tail*	*Chikitsasthan*	28/160	712
46	*Shatavari pathya* in *vaatrakta*	*Chikitsasthan*	29/52	738
47	*Shatavari*- contain in *Bala Grita*	*Chikitsasthan*	29/56	738
48	*Shatavari*- contain in *Parushak Grita*	*Chikitsasthan*	29/58	738
49	*Shatavari*- contain in *Jivniya Grita*	*Chikitsasthan*	29/61	739
50	*Shatavari*- contain in *Jivakadi Mahasneha*	*Chikitsasthan*	29/72	740
51	*Shatavari*- contain in *Sthiradi tail* and *Ghrita*	*Chikitsasthan*	29/76,77	740
52	*Shatavari*- contain in *Baladi Kseerpaak*	*Chikitsasthan*	29/81	740
53	*Shatavari*- contain in *Kashmaryadi Ghrita*	*Chikitsasthan*	29/53	762
54	*Shatavari*- contain in *Brihat shatavari Ghrita*	*Chikitsasthan*	29/64,65	764
55	*Shatavari* used with *jimutak, jivak, rishabhak* in fever	*Kalpasthan*	2/12	817
56	*Shatavari* combine with *Dhamaargav* for *avaleha yoga*	*Kalpasthan*	4/13	825
57	*Shatavari* cotain in *Chandanadi niruha Basti*	*Kalpasthan*	3/49	906
58	*Shatavari* contain in *Dashmooladya anuvasan Tail*	*Kalpasthan*	4/5	910
59	*shatavari* contain in oil prepared for *uttar bati*	*Kalpasthan*	9/8	947
60	*Shatavari* contain in *viryavardhak basti*	*Siddhisthan*	10/28	966
61	*Shatavari* contain in *jiva-rakta-rodhak basti*	*Siddhisthan*	10/38	967
62	*Shatavari* contain in *Chatuhsneha* and *Balaadi yamak anuvasan Basti*	*Siddhisthan*	12/19	988-989

b. Sushruta Samhita (*Sushruta*; 1000-1500 B.C.)[4]

The References of *Shatavari* in *Sushruta Samhita* are as follows

Table No 2- Sushruta samhita reference for *Shatavari*

Sr.No	Refrence For	Sthan	Shlok	Pg No
1	Shatavari contain in yoga used for Karshya Treatment	Sutrasthan	15/40	63
2	Shatavari contain in abhyang oil	Sutrasthan	16/24	68
3	Shatavari described in Vidarigandhadi gan	Sutrasthan	38/4	141
4	Shatavari described in Varunadi gan	Sutrasthan	38/8	142
5	Shatavari described in Kantak panchamool	Sutrasthan	38/74	146
6	Shatavari described in vatta and pitta sanshaman varga	Sutrasthan	39/7,8	148
7	Shatavari described in kanda varga	Sutrasthan	46/298	208
8	Guna of Shatavari are described	Sutrasthan	46/301	208
9	Shataviri contain in yoga of ksheerpaka used in Vatarakta	Chikitsasthan	5/7,8	29
10	Shavari contain yoga used as palepa in vatarakta	Chikitsasthan	5/12	31
11	Shatavari used in treatment of Arsha	Chikitsasthan	6/13	38
12	Shatavari contain in oil used for vataj ashmari	Chikitsasthan	7/5	41
13	Shatavari contain in Mahatikata Ghrita	Chikitsasthan	9/8	50
14	Shatavari contain in Bala Tail for sutika roga	Chikitsasthan	15/33	75
15	Shatavari contain in Guduchyadi Tail for sutika roga	Chikitsasthan	15/44	76
16	Shatavari contain in Vajikaran ksheer	Chikitsasthan	26/34	120
17	Shatavari contain in Balamool rasayan yoga	Chikitsasthan	27/10	122
18	Shatavari contain in shatavari Ghrita	Chikitsasthan	28/21	126
19	Shatavari pathya in Timir	Uttartantra	17/48,49	63
20	Shatavari contain in ghrita for ayshchotan	Uttartantra	17/93	66
21	Shatavari contain in lapa for shankhak	Uttartantra	26/39	140
22	Shatavari used for Dharankarma in balgraha	Uttartantra	30/8	148
23	Shatavari contain of Guduchyadi swaras in Vattajwar	Uttartantra	39/174	195
24	Shatavari contain of Trifladi ghrit	Uttartantra	39/245	201
25	Shatavari contain in Yavagu for Pittatisaar	Uttartantra	40/59	221
26	Shatavari contain in shatavari ghrit for Kasa	Uttartantra	52/49	392
27	Shatavari contain in Madhuradi yoga for Swarbheda	Uttartantra	53/14	395
28	Shatavari contain in Mootradosh-har-Bala ghrit	Uttartantra	58/58	430
29	Shatavari contain in Trivritta tail/ghrita for vattamutrakricha	Uttartantra	59/17	434

c. Ashtang Hridya (*Vagbhata*; 5th -7th century)[5]

Table No 3-Refrence of Shatavari in Ashtang Hridya

Sr.No	Reference For	Sthan	Shloka	Page No
1	Properties of Shatavari described	Sutrasthan	6/97	53
2	Shatavari described in Varunadi Gana	Sutrasthan	15/21	121
3	Shatavari contain of yoga used for Garbhastrav	Shaarirsthan	2/54	236
4	Shatavari contain in yoga used in jwar	Chikitsasthan	1/122	371
5	Shatavari contain in Kwath for Raktapitta	Chikitsasthan	2/26	379
6	Shatavari contain of Rasnadi ghrit	Chikitsasthan	3/6	382
7	Shatavari contain of Shavdanshtradi ghrit	Chikitsasthan	3/103	390

8	Shatavari contain of Vasishthokta Haritaki Rasayan	Chikitsasthan	3/133	392
9	Shatavari Kalka for Raktatisaar	Chikitsasthan	9/88	450
10	Shatavari contain in Shatavari Yoga	Chikitsasthan	9/98	451
11	Shatavari contain inn Drakshadi Ghrita	Chikitsasthan	13/16	472
12	Shatavari contain in Sukumar Rasayan	Chikitsasthan	13/41	474
13	Shatavari Contain of Mahatikta Ghrita	Chikitsasthan	19/9	508
14	Shatavari contain in yoga used for Vatarakta	Chikitsasthan	22/8	531
15	Shatavari contain in Dhamargava Kalpa	Kalpasiddhisthan	1/36	542
16	Shatavari Contain in Snehabasti yoga	Kalpasiddhisthan	4/55	559
17	Shatavari contain of Yamak sneha	Kalpasiddhisthan	4/60	560
18	Shatavari contain of Ashtang Ghrita	Uttarsthan	1/44	586
19	Shatavari contain in Apasmaar nashak Yoga	Uttarsthan	7/34	624
20	Shatavari contain of Drakshadi Ghrita	Uttarsthan	13/5	643
21	Shatavari contain of abhyang oil in Pali shosh	Uttarsthan	18/40	679
22	Shatavari contain of Mahamayur Ghrita	Uttarsthan	24/52	717
23	Shatavari contain of Shatavari Avleha	Uttarsthan	34/36,37	736
24	Shatavari contain of Phalsarpi	Uttarsthan	34/64	772
25	Shatavari contain in Rasayan yoga	Uttarsthan	39/61	805
26	Shatavari contain in Shatavari Rasayan	Uttarsthan	39/157	814
27	Shatavari contain in *Sharmooladi Vajikarn Yoga*	Uttarsthan	40/13,18	819
28	*Shatavari* contain in *Shatavari* Yoga	*Uttarsthan*	40/32	820
29	*Shatavari* contain in Gokshuradi yoga	*Uttarsthan*	40/34	820

2. Other Synonyms of Shatavari

Beside *shatavari* other synonyms are also used in *samhita* by *acharya* these are mention below-

Table No 4 - Other Synonyms of *Shatavari*

Synonyms of Shatavari	**Specification**	***Charaka Samhita***	***Shushrut Samhita***	***Ashtang Hridyam***
Mahapurushdanta	a synonym for Mahameda or Shatavari	Chi 9/46	Not mentioned	Not mentioned
Abhiru	A synonym for Shatavari	Not mentioned	Chi 5/13, Chi 37/24, Chi 38/57, Ut42/71	Su6/168, Su10/23, Su15/6, Chi2/37, Chi3/121, Chi9/56, Chi11/2, Chi21/66, Chi22/42, Ut2/13, Ut34/28
Abhirupatri	A synonym for Shatavari	Vi 8/146	Not mentioned	Not mentioned
Vari	a synonym for Shatavari	Chi 29/92	Chi7/10, Chi15/44, Chi37/20, Ut17/34	Su20/37, Sha2/50, Chi3/93, Chi9/71, Chi11/18, Kas4/13, Ut13/51, Ut24/46
Sahastravirya	synonym for shatavari or a verity of Durva	Su4/49, Chi4/102	Su19/29, Ut58/58	Not mentioned

Note: Su= Sutrasthan, Sha= Shaarirsthan, Chi= Chikitsasthan, Kas= Kalpasiddhisthan, Ut= Uttartantra/Uttarsthan

iii. Nighantu literature

a. Dhanvantri Nighantu

Shatavari Mentioned in Guduchyadivarga- Dh.Ni.Guduchyadivarga 281, 282, 283[6]

Table no 5- Detail of Shatavri in Dhanvantari Nighantu

Sr.No	Title	Description
1	**Nighantu**	Dhanvantri Nighantu
2	**Gana**	Guduchyadi varg
3	**Synonyms**	Shatavari, Shatpadi, Pivari, Indivari, Vari, Rishyaprokta, Dwipishatru, Dvipika, urdhvakantaka
4	**Guna**	Rasa-Madhur; Virya-sheeta, Guna-Guru, Snighda,
5	**Karma**	Rasayan, Shukra-Stanya-kar, Balya, Vaat-pitta-shopha-har

b. Shodhal Nighantu[7]

Table no 6- Detail of Shatavri in Shodhal Nighantu

Sr.No	Title	Description
1	**Nighantu**	Shodhal Nighantu
2	**Gana**	Guduchyadi varg
3	**Synonyms**	Shatavari, Shatpadi, Pivari, Indivari, Vari, Rishyaprokta, Dwipishatru, Dvipika, Adharkandaki, Sahastravirya, Bhiru, Tungini, Bahupatrika, Mahapurushdanta, Urdhvakantaka
4	**Guna**	Rasa-Madhur, tikta; Virya-sheeta, Guna-Guru, Snighda,
5	**Karma**	Vrishya, Medya, hridya, Tridoshhar

c. Madanpal Nighantu

Shatavari describe in Haritkyadivarga- Md.Ni.Haritkyadivarga78,79,80[8]

Table no 7- Detail of Shatavri in Madanpal Nighantu

Sr.No	Title	Description
1	**Nighantu**	Madanpal
2	**Gana**	Haritkyadi
3	**Synonyms**	Shatavari, Dvipirshatru, Dvipika, Dharkantaka, Shatpadi, Narayani, Shatpathupatrika
4	**Guna**	Rasa-Madhur; Virya-sheeta, Guna-Guru, Snighda,
5	**Karma**	Rasayan, Shukra-Stanya-kar, Balya, Vaat-pitta-shopha-har

d. Raj nighantu

Shatavari describe in Shatavahadi Varga116,117,118,119,120,121,122[9].

Table no 8- Detail of Shatavri in Raj Nighantu

Sr.No	Title	Description
1	**Nighantu**	Rajnighantu
2	**Gana**	Shatavahadi
3	**Synonyms**	Shatavari, Shatpadi, Pivari, Vari, Bhiru, Amarkantika, Sukshmapatra, Supatra, Bahumoola, Shatavaha, Narayani, Swadurasa, Laghuparnika, Aatmashalya, Jatamoola, Shatvirya, Mahaudani, Madhura, Shatmoola, Keshika, Shatnetrika, Vishvadvya, Vaishnavi, Kaarshni, Vasudevi, Variyasi, Durmara Tejvalli, shastraastryas
4	**Guna**	Rasa-Madhur, Tikta; Virya-sheeta, Guna-Guru, Snighda, Kaphavata-Har
5	**Karma**	Rasayan, pittahar, Kaphavaata-har
6	**Specifications**	Badi Shatavari is Hridya, Medya, Vrishya, Rasayni, Arsha-Grahani Netra rogahar

e. **Kaiydev Nighantu**

Detailed description of *Snuhi* is available in the *Aushadhi Varga*[10]- Kai.Ni.Aaushadhivarga 917,918,919,920,921

Table no 9- Detail of Shatavri in Kaiydev Nighantu

Sr.No	Title	Description
1	**Nighantu**	Kaiydev Nighantu
2	**Gana**	Aushadhi varg
3	**Synonyms**	Bahupatra, Shatpadi, Shatmuli, Shatavari, Narayani, Adharkantaka, Dwipishatru, Dvipiika
4	**Guna**	Rasa-Tikta, Madhur, Virya-Sheeta, Guna-Guru
5	**Karma**	Rasayan, Shukral, Balya, Stanya, Cakshushya, Vata-pitta har

f. Bhavprakash

Detailed description of *Shatavari* is Available in *Guduchyadi Varga*[11]-Bha.Ni.Guduchyadi Varga/73-77

Table no 10- Detail of Shatavri in Bhavpakash Nighantu

Sr.No	Title	Description
1	**Nighantu**	Bhavprakash
2	**Gana**	Guduchyadi
3	**Synonyms**	Shatavari, bahusuta, Bhiru, Indivari, Vari, Narayani, Shatpadi, Shatvirya, Pivari
4	**Guna**	Rasa-Madhur, Tikta; Virya-sheeta, Guna-Guru, Snighda
5	**Karma**	Rasayan, Medha-Vardhak, Agni-Vardhak, Balya, Netrya, Shukravardhak, Stanya, Gulma-vata-pitta-Rakta-Shothahar
6	**Specifications**	Badi Shatavari is Hridya, Medya, Vrishya, Rasayni, Arsha-Grahani Netra rogahar

g. Priya Nighantu[12]

Table no 11- Detail of Shatavri in Priya Nighantu

Sr.No	Title	Description
1	**Nighantu**	Priya Nighantu
2	**Gana**	Pippalyadi varg
3	**Synonyms**	Shatavari, Shatvirya, Shalini
4	**Guna**	Rasa-Tikta, madhur, Virya-Sheeta,
5	**Karma**	Rasayan, Shukravardhak, Balya, stanya, Vata-Pitta Har
6	**Specifications**	Shreshtha in all medicines

C] Classification

As the plant kingdom is very vast, it is necessary to arrange these plants in a systemic manner. This trend of classification of plants started from *Vedic* period. *Vedas* has classified drugs mainly based on their nature, growth, and development, properties, uses, etc. the authors of *Samhitas* have followed the line of *Vedic* classification, but they have given more importance to pharmaco-theraputic classification, of drugs, such as *Balya*, *Brihaniya*, etc, the authors of *Nighantu* have made a new approach in the classification of drugs, they introduced descriptive terms in the form of synonyms and given the prominent name of the drugs in the classification.

I. *Samhita*

Table no 12- Classification of Shatavri in Brihat-tryai

Sr. No	***Samhita***	**Classification Of *Shatavari***
1	*Charak Samhita*[13]	*Balya Mahakashaya, Prajasthapan Mahakashya, vayasthapan Mahakashya, Madhurskanda*
2	*Sushrut Samhita*[14]	*Vidarigandhadi, Varunadi, Kantak panchamool, Pitta prashaman, Vata prashaman*
3	*Ashtang Hridaya*[15]	*Varunadi, Jivaniya panchmool, Madhur Skanda*

II. *Nighantu*

Table no 13- Classification of Shatavri in Nighantu

Sr. No	***Nighantu***	***Shatavari***
1	*Bhavprakash*	*Guduchyadi*
2	*Raj Nighantu*	*Shatavhadi*
3	*Madanpal*	*Haritkyadi*
4	*Kaiydev*	*Aushadhi Varga*
5	*Dhanvantari*	*Guduchyadi*
6	*Priyanighantu*	*Pippalyadi*

III. Botanical

It was botanically described in 1799.

Table no 14- Classification of Shatavri from botanical view

Kingdom	Plantae
Clade	Angiosperms
Clade	Monocots
Order	Asparagales
Family	Asparagaceae
Subfamily	Asparagoideae
Genus	Asparagus
Species	Racemosus
	A.racemosus

D] Paryayi naam, nirukti and vernacular names[1]

I. *Paryayi Naam*/Vernacular Names

i. ***Sanskrit*** - *abhiru, aisva, amoda, ardhakantaka, atirasa, atmagupta, atmasalya, bahumula, bahuputra, bahuputrika, bahusuta, bhhya, bhirupatri, darakantika, divya, durmana, durmara, durnamacatana, dvipashatru, dvipika, dvipishatru, hiranyasringi, indivari, iru, jata, kanchanakarini, karambha, karshni, keshika, laghuparnika, madabhanjini, madhura, mahapurushadanta, mahashita, mula, narayani, pivari, rangini, rishagata, rishyaprokta, rsyaprokta, satamuli, satapadi, satavari, satavirya, shatamuli, shatapadi, shatavari, shatavhaya, shatavirya, shvetamuli, sukshmapatra, supatra, supatrika, svadurasa, tailavalli, vaishnavi, vari vasudevapriyankari, vishvasya, visva, vrishya*

ii. ***Hindi*** - *satamuli, satavar, satavari*

iii. ***Kannada*** - *aashaadi baeru, naaraayani, satamuli*

iv. ***Malayalam*** - *sadavarti, schada-veli-kelangu, shatavari*

v. ***Marathi*** - *asvel, shatavar, shatmooli, shatmuli, zatar*

vi. ***Tamil*** – *aikkuncu*

vii. ***Telugu*** – *challa*

viii. ***Tibetan*** - *ne u sin*

ix. ***Urdu*** - *shaqaqul-i-misri n*

x. **English**- Asparagus firn, Indian Asparagus, Sparrow Grass,Buttermilk root, water root, Wild carrot, Mang tay

xi. Synonyms in Nighantu

Table no 15- Synonym of Shatavri from Nighantu

Sr.No	Synonyms	Bha	RN	KN	DN	MN	PN
1	*Shatavari*	+	+	+	+	+	+
2	*Bahusuta*	+	-	-	-	-	-
3	*Abhiru*	+	+	-	-	-	-
4	*Vari*	+	+	-	+	-	-
5	*Indivari*	+	-	-	+	-	-
6	*Narayani*	+	+	+	-	+	-
7	*Shatpadi*	+	+	+	+	+	-
8	*Shatviryaa*	+	+	-	-	-	+
9	*Pivari*	+	+	-	+	-	-
10	*Amarkantika*	-	+	-	-	-	-
11	*Sukshmapatra*	-	+	-	-	-	-
12	*Supatra*	-	+	-	-	-	-
13	*Bahumoola*	-	+	-	-	-	-
14	*Shatavaha*	-	+	-	-	-	-
15	*Swadurasa*	-	+	-	-	-	-
16	*Laghuparnika*	-	+	-	-	-	-
17	*Aatmashalya*	-	+	-	-	-	-
18	*Jatamoola*	-	+	-	-	-	-
19	*Mahaudani*	-	+	-	-	-	-
20	*Madhura*	-	+	-	-	-	-
21	*Shatmoola*	-	+	+	-	-	-
22	*Keshika*	-	+	-	-	-	-
23	*Shatnetrika*	-	+	-	-	-	-
24	*Vishvadvya*	-	+	-	-	-	-
25	*Vaishnavi*	-	+	-	-	-	-
26	*Kaarshini*	-	+	-	-	-	-
27	*Vasudevi*	-	+	-	-	-	-
28	*Variyasi*	-	+	-	-	-	-
29	*Durmara*	-	+	-	-	-	-
30	*Tejvalli*	-	+	-	-	-	-
31	*Shastraastryas*	-	+	-	-	-	-
32	*Adharkantaka*	-	+	-	-	+	-
33	*Dvipirshatru*	-	+	-	+	+	-

34	*Shatpathupatrika*	-	-	-	+	+	-
35	*Rishyaprokta*	-	-	-	+	-	-
36	*Urdhvakantaka*	-	-	-	+	-	-
37	*Bahupatra*	-	+	-	-	-	-
38	*Dvipika*	-	+	-	+	+	-

II. *Nirukti*

Abhiru- It is free from external invasion.
Adharkantaka- It has recurved spines.
Durmara- It is climber difficult to perish.
Sukshmapatra- It has thin liner leaves.
Phanijivhaparni- Its leaves like snakes tongue.
Shatavari, pivari, Bahusuta, Shatpadi- It has numerous succulent tuberous roots.
Narayani- It is soumya- Watery in nature
Dvipishatru- It is antagonistic to tikshna substance due to its predominance of water eliment.
Swadurasa- It is tasteful (Madhur rasa)
Vari- It regards as one of the best drug.

१. शतवरी- शतकन्दैरावृता, अथवा- शतमूली श्रेष्ठा च।
२. अधरकण्टका- अधोमुखाः कण्टका अस्या।
३. अभीरुः- न भीरु भयाक्रान्तः, कण्टकित्वात्ः व्याधितानां भयहरणाद्वा 'न भीरवो व्याधिता अनया।
४. दुर्मरा- दुष्करं मरणं नाशोऽस्याः।
५. द्वीपिशत्रुः- द्वीपी चित्रव्याघ्रस्तीक्ष्णप्रकृतिः, तस्य शत्रुः संहारकः, सौम्यत्वात्।
६. नारायणी- नारा आपः, ता अयनमस्याः, सौम्यत्वात्ः अथवा विष्णुवद्रक्षिका, श्रीप्रदा वा।
७. पीवरी- स्थूलकन्दा।
८. फणिजिव्हापर्णी- सर्पजिव्हावत् पत्राण्स्याः।
९. बहुसुता- बहवः सुताः कन्दा अस्य।
१०. वरी- ओषधिषु श्रेष्ठा।
११. शतपदी- शतं पदानि मूलान्यस्याः।
शतवीर्या- शतं वीर्याण्यस्याः, बहुवीर्योत्यर्थः।
१२. सूक्ष्मपत्रा- सूक्ष्माणि पत्राण्यस्याः।
१४. स्वादुरसा- स्वादुः रसोऽस्याः।

E] Morphology (macroscopic and microscopic)

a. Macroscopic[17]

Family- Liliaceae

Herbs with fibrous roots or a creeping root stock or a bulb or corn. Leaves various, flowers usually hermaphrodite, axilary, or terminal, solitary or twin or umbellate, spicate, racemose paniculate or longitudinally, overy 3 celled 2 or more from inner angles of the cells, Anatropous (rarely orthorotous) style uselly simple, often long or style 3, fruit a capsule or berry. Genera 250, Species 2700s.

Asparagus

Rootstock is stout, creeping, stem erect, climbing terete grooved or angled. Leaves minute scales, often spinescent, bearing in their axils tufts of needle. Flowers are small axillary rarly unisexual, stamens on the bases of sebments anthers oblong, overy 3 gonous, style 1, stigma 3, cell 2.

Asperagus racemosus

A tall climbing under shrub with annual woody teret stems. Branch lets triquetrous, spines 5-13 long, recurved or rarely stright cladodes 1.3-2.5 cm long, in tufts of 2 to 6 curved. flowers with fragment, in solitary or fascicled, simple or branched racemes 2.5-5 cm long; pedicles 5mm long jointed in the middle, perianth abot 3.0 mm long, stamens as long as the perianth. Berry 5-6 mm diameter, red in color.

Root tuberous, 10 to 30 cm in length and 0.1 to 0.5 cm thick, tapering at both ends with longitudinal wrinkles; colour cream; taste, sweetish.

b. Microscopic[18]

Shows an outer layer of piliferous cells, ruptured at places, composed of small, thin-walled, rectangular asymetrical cells, a number of cells elongated to form unicellular root hairs; cortex comprises of 25 to 29 layers, distinct in two zones, outer and inner cortex; outer cortex consists of 6 or 7 layers, compactly arranged, irregular to polygonal, thick walled, lignified cells; inner cortex comprise of 21 to 23 layers, oval to polygonal, thin-walled, tangentially elongated cells with intercellular spaces; stone cells, either singly or in groups, form a discontinuous to continuous ring in the upper part of this region; raphides of calcium oxalate also present in this region; 2 or 3 layers of stone cells encirle the endodermis; endodermis composed of thin-walled parenchymatous cells; pericycle present below endodermis; stele ex arch and radial in position; xylem consist of vessels, tracheids and parenchyma; xylem vessels have pitted thickening; phloem patches consists of usual element; pith composed of circular to oval parenchymatous cells, a few cells slightly lignified.

F] *Guna-karma*

a. *Guna*

Table no 16- Guna of Shatavri from Brihat-trayi

Sr.No	*Guna*		*Charaka Samhita*	*Sushruta Samhita*	*Ashtang Hridya*
1	***Rasa***	*Madhura*	+	+	+
		Tikta	-	-	-
2	***Guna***	*Guru*	+	-	+
		Snigdha	+	-	+
3	***Virya***	*Sheeta*	+	+	+
4	***Vipaka***	*Madhura*	+	+	+
5	***Doshaghnata***	*Vatta-Pitta Shamak*	+	+	+

Table no 17- Guna of Shatavri from Nghantu

Sr.No	*Guna*		DN	RN	MN	KN	Bha	PN
1	***Rasa***	*Madhura*	+	+	+	+	+	+
		Tikta	-	+	-	+	+	+
2	***Guna***	*Guru*	-	-	+	+	+	-
		Snigdha	-	-	+	+	+	-
3	***Virya***	*Sheeta*	+	+	+	+	+	+
4	***Vipaka***	*Madhura*	+	+	+	+	+	+

b.Karma

Table no 18- Karma of Shatavri from Nighantu

Sr.No	*Karma*	DN	RN	MN	KN	Bha	PN
1	***Rasayan***	+	+	-	-	+	+
2	***Medya***	-	-	-	-	+	-
3	***Agnivardhak***	-	-	-	+	+	-
4	***Balya***	-	-	+	+	+	+
5	***Netrya***	-	-	-	+	+	-
6	***Shukravardhak/ Shukral***	-	-	+	+	+	+
7	***Stanya***	-	-	+	+	+	+
8	***Vata-pitta Har***	+	+	+	+	+	+
9	***Shoth har***	-	-	+	+	+	-
10	***Raktapitta har***	-	-	-	-	+	-
11	***Vrishya***	-	+	-	-	-	-
12	***Gulma, Atisaar***	-	-	-	+	-	-
13	***Kshya har***	+	-	-	-	-	-

c. Pharmacological activity *Shatavari*

Table no 19- Researched Pharmacological activity of Shatavari

Sr.No	Part	Activity
1	**Dried Root**[19]	antibacterial, anti-inflammatory, antiseptic, antipyretic, diuretic, expectorant, stomachic, nervous stimulant and tonic
2	**Biological property of Plant**[20]	antioxidants, immunostimulants, anti-inflammatory, antihepatotoxic, antibacterial, antioxytocic, and reproductive agents
3	**Research proved activity**[21]	Immunomodulatory activity, Antidepressant activity, Anti-inflammatory effects, Aphrodisiac activity, Diuretic activity, Potential to prevent hepatocarcinogenesis, Anti-stress activity, Reduce blood glucose, Cytotoxicity, analgesic and antidiarrhoeal activities, Antiurolithiatic activity, Galactogogue effect, Antisecretory and antiulcer activity, Antitussive effect, Adaptogenic activity, Antibacterial activity, Antiprotozoal activity, Gastrointestinal effects, Effect on uterus, Molluscicidal activity, Antihepatotoxic activity, Antineoplastic activity, Cardiovascular effects, Teratogenicity effects, Antilithiatic effects, Antioxidant effects, Toxic effect, Immunoadjuvant potential activity.

G] Chemical constituents[22]

The major bioactive constituents of Asparagus are a group of steroidal saponins. This plant also contains vitamins A, B1, B2, C, E, Mg, P, Ca, Fe, and folic acid. Other primary chemical constituents of Asparagus are essential oils, asparagine, arginine, tyrosine, flavonoids (kaempferol, quercetin, and rutin), resin, and tannin.

Shatavarin IV is a glycoside of sarsasapogenin having 2 molecules of Asparagus rhamnose and 1 molecule of glucose [Picure 1]. The major bioactives (Chemical constituents) of Asparagus species are shown in Picure 2. Sarsasapogenin and shatavarin I-IV are present in roots, leaves, and fruits of Asparagus species. A isoflavone, 8-methoxy-5,6,4'-trihydroxyisoflavone-7-O-β-D-glucopyranoside present in A. racemosus previously. The isolation and characterization of polycyclic alkaloid called asparagamine, a new 9,10-dihydrophenanthrene derivative named racemosol and kaempferol present in A. racemosus. Oligofurostanosides (curillins G and H) and spirostanosides (curilloside G and H) [Picure 2] found in roots.

Asparagus racemosus as an Antioxidant[23]:

Antioxidants are intimately involved in the prevention of cellular damage – the common pathway for cancer, aging, and a variety of diseases. Asparagus racemosus possess antioxidant properties. Methanolic extract (100mg/kg BW p. o.) given to orally for 15 days and it increase the antioxidant defense, that is, enzymes superoxidase dimutase, catalase and ascorbic acid, increase significantly whereas a significantly decrease in lipid peroxidation. The anti oxidant properties was found due to presence of Isoflavons specially racemofuran, asparagamine A and racemosol.

Medicinal Use[24]

Asparagus racemosus is mainly known for its phytoestrogenic properties. With an increasing realization that hormone replacement therapy with synthetic oestrogens is neither as safe nor as effective as previously envisaged, the interest in plant-derived oestrogens has increased tremendously making Asparagus racemosus particularly important. The plant has been shown to aid in the treatment of neurodegenerative disorders and in alcohol abstinence-induced withdrawal symptoms. Asparagus racemosus cleanses, nourishes, and strengthens the female reproductive organs and so, it is traditionally used for PMS, amenorrhea, dysmenorrhea, menopause and pelvic inflammatory disease (PID) like endometriosis. Asparagus racemosus is considered as the most potent female health tonic. Asparagus racemosus also supports deeper tissue and builds blood, helping in treating infertility, prevents miscarriage and acts as a post-partum tonic as it increases lactation, regularizes the uterus and balances hormones, probably due to phyto-estrogens. A. racemosus is also suggested for its soothing agent upon systemic dryness which is part of the natural aging process. It endorses positive emotions that calming fresh sensitivity and the sizzling emotions such as irritability, anger, jealousy, resentment, and hatred. It also helps with pain, restless sleep, disturbing dreams, and those who have weak emotional and physical heart. Asparagus racemosus possesses a strong rejuvenating, fostering, and stabilizing action on excessive air, gas, dryness and agitation in the body and mind; for this action, the root infusion is

traditionally used in treating nervousness, anorexia, insomnia, hyperactive children, and slow growing of humans.

H] kalpa

Table no 20- Some important Kalpa of Shatavri

Sr.No	Kalpa	Rogadhikar	Anupan	Refrence
1	Bramha Rasayan	Rasayan	Milk	Cha.Chi 1-1/44
2	Shatavari Ghrit	Mutrakruccha	Jaggary	Bhai.R34/47-55
3	Narayan Tail	Vataroga	Abhyang	Bhai.R26/332-342
4	Vishnu tail	Vataroga	Abhyang	Bhai.R26/315-324
5	Narsimha churna	Sarwarog har	Dugdha, Takra	Bhai.R74/37-48
6	Shatavaryadi Swarasa	Prameha	Milk+Sugar	Bhai.R37/10
7	Shatavaryadi Kwath	Raktapitta	Jaggary=+Sugar	Bhai.R30/30
8	Shatavari Mandur	Shool	Water	Bhai.R30/188-194
9	Shatavari Modak	Rasayan	Milk	Bhai.R74/208-224
10	Shatavari tail	Vata roga	-	Y.R

Conclusion

Shatavari is an important drug focused for its properties that are used to cure diseases of females (Narayani). Here in this article we focused to compile the details that are mentioned in various Ayurveda and botanical classics available. It is concluded that a varied uses of shatavari has been mentioned by acharyas in different conditions with assorted preparation.

But to get the desired result from the drug there is need of genuine raw material availability. Today we get cultivated verity of Shatavri. This may not show the results as mentioned in texts, due to use of fertilizers and other chemicals while cultivation.

So to get the desired effect of any drug as mentioned in the classics we should promote organic cultivation, plantation of medicinal plants near or in the barren land available with forest area.

REFERENCES

1. Sharma, P.V., editor. Dravyaguna Vigyana. Vol4.In. Varanasi:Chaukhamba Bharati Academy. 1993.P.25-26
2. Sharma, P.V., Dravyaguna vigyana. Vol-4.In.Varanasi: Chaukhamba Bharati Accademy.1993.
3. Acharya Vidyadhar Shukla, Prof. Ravidatta Tripathi, Charksamhita, Vaidyamanorama- Hindi commentary, Vol-1, Vol-2 Chaukhamba Sanskrit Pratishthan, Delhi, 2003.
4. Shastri A. Sushruta Samhita Varanasi: Vol- 1, Vol-2, Chaukhambha Sanskrit Sansthan; 2005.
5. Vaid L. Ashtanghridyam Varanasi: Motilal Banarasidas; 2005.
6. Sharma P. Dhanvantari Nighantu Varanasi: Chaukhambha Oriental; 1982.
7. Sharma P. Shodhal Nighantu Varanasi: Chaukhambha Oriental; 1971.
8. Badhopadhya R. Madanpal Nighantu Bambai: Khemraj Shriramkrushna; 1990.
9. Tripathi I. Raj Nighantu Varanasi: Krishnadas Academy; 1982.
10. Sharma P. Kaidev Nighantu Varanasi: Chaukhambha Oriental; 1979.
11. Chunekar KC. Bhavprakash Nighantu Varanasi: Chaukhambha Oriental; 1979.
12. Sharma P. Priya Nighantu Varanasi: Chaukhambha Oriental; 2010.
13. Acharya. Vidyadhar Shukla, Prof. Ravidatta Tripathi, CARAK SAMHITA of AGNIVESH-VIDYAMANORAMA COMMENTARY, Volume 1, Chapter 4, CHAUKHAMBA SANSKRIT PRAKASHAN, DELHI, 2003
14. Shastri A. Sushruta Samhita Varanasi: Vol- 1, Chaukhambha Sanskrit Sansthan; 2005, pg.142, Sutrasthan 38/8 &74
15. Vaid L. Ashtanghridyam Varanasi: Motilal Banarasidas; 2005. Pg 84, Sutrasthan 10/23
16. Indian Medicinal Plant Database. [Online].; 2010 [cited 2016 january Thrusday. Available from: http://www.medicinalplants.in/searchpage/showdetails/xplant_id/739a42451fb9c14fd1f382b72baf507d/keywords/shata/languages/SK

17. Kirtikar KR, Basu BD. Indian Medicinal Plants. In: Singh B, Singh MP, editors. Dehradun India: New Connaught Place; 1984. p.2499.
18. Indian Medicinal Plant Database. [Online].; 2010 [cited 2016 january Thrusday. Available from: http://www.medicinalplants.in/searchpage/showdetails/xplant_id/739a42451fb9c14fd1f382b72baf507d/keywords/shata/languages/SK.
19. N B Samad, T Debnath, Phenolic Contents, Antioxidant and Anti-inflammatory Activities of Asparagus cochinchinensis (Loureiro) Merrill, Journel of food Biochemistry, 5 April 2013
20. J. S. Negi, P. Singh, G. P. Joshi, M. S. Rawat, and V. K. Bisht1, Chemical constituents of Asparagus, Pharmacognocy Review, Jul-Dec 2010, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3249924/
21. Shashi alok SkJ. Plant Profile, Phytochemistry and pharmacology of Asparagus resemosus (Shatavari) a review. Asian pacific Journal of Tropical Disease.
22. J. S. Negi, P. Singh, G. P. Joshi, M. S. Rawat, and V. K. Bisht1, Chemical constituents of Asparagus, Pharmacognocy Review, Jul-Dec 2010, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3249924/
23. Shashi alok SkJ. Plant Profile, Phytochemistry and pharmacology of Asparagus resemosus (Shatavari) a review. Asian pacific Journal of Tropical Disease.
24. Arti Sharma, Vandana Sharma A Brief review of medicinal properties of Asparagus racemosus (Shatawari) International Journal of Pure & Applied Bioscience

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Efficacy of *Mahatiktakam Ghrita* as *Avapeedak Snehapan* in the management of *Rakta Arsha* (first-degree bleeding hemorrhoids): A study protocol for a single-arm, open-label clinical trial

Megha Raosaheb Survase, Deepak Kumar Parida

Abstract

BACKGROUND: *Avapeedak Snehapan*, the oral administration of medicated ghee, is used for symptomatic relief in first-degree bleeding hemorrhoids. A single-arm, open-label clinical trial was conducted to assess the safety and therapeutic potential of *Mahatiktakam Ghrita* for managing this condition.

OBJECTIVE: This study evaluates the therapeutic effects of *Mahatiktakam Ghrita* as *Avapeedaka Snehapana* in managing first-degree bleeding hemorrhoids and reducing associated symptoms.

MATERIALS AND METHODS: This single-arm, open-label clinical trial will enroll 61 participants, aged 30–50 years diagnosed with first-degree bleeding hemorrhoids, indicated for *Snehapana* therapy, as per selection criteria from the Outpatient Department of Chattrapati Shahu Maharaj Shikshan Sansthan's Ayurved Mahavidyalaya, Aurangabad, Maharashtra, India. Participants will undergo a preparatory phase of *Deepana–Pachana* using *Gandharvahastadi Kashaya*, administered in a dose of 15 mL mixed with 45 mL of lukewarm water, taken twice daily on an empty stomach until optimal digestive capacity (*Agni Deepti*) is achieved. Once attained, a trial dose of 30 mL *Mahatiktakam Ghrita* will be administered in the morning, allowing for assessment of the time required for complete digestion. The optimal dose (*Uttama Matra*) will be calculated based on this trial dose to determine the amount of ghee digestible within 24 h. *Snehapana* therapy with *Uttama Matra* will then be administered on alternate days, ranging from three to seven doses, depending on symptomatic relief. Symptoms such as anal pain, bleeding frequency, appetite, and stool consistency will be monitored. The first follow-up will be performed after the completion of oleation therapy, and a second follow-up will take place after the completion of the dietary regimen (*Samsarjana Krama*), lasting 12–28 days based on the number of administered doses of *Sneha*. Primary outcomes include changes in the level of bleeding, pain appetite, stool consistency and secondary outcomes include complete blood count, bleeding time, clotting time, and erythrocyte sedimentation rate assessed at baseline, post-*snehapana*, and post-*Samsarjana karma*..

DISCUSSION: This research explores the effectiveness of *Mahatiktakam Ghrita* as an accessible Ayurvedic treatment for first-degree bleeding hemorrhoids, assessing symptom relief and safety, and its effect on bleeding, pain, and hematological parameters. Findings may support integrating Ayurvedic therapies into broader hemorrhoid management strategies.

The study is registered with the CTRI (CTRI/2023/07/054623; dated July 3, 2023).

Keywords:

Avapeedak Snehapan, Gandharvahastadi Kashaya, hemorrhoids, Mahatiktakam Ghrita, Rakta Arsha

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Introduction

Hemorrhoids, classified among the eight major afflictions (*Ashta Mahagada*),[1] present as either dry (*Shushka*) or bleeding (*Sravi*) conditions.[2] Globally, 4.4% of the population is affected, with 40 million cases reported annually in India.[3] Factors such as stress, sleep deprivation, constipation, and poor dietary choices[4] contribute to its increase, especially in individuals aged 21–50 years.[5] *Acharya Sushruta* outlines treatment protocols that include *Bhaishajya Chikitsa* (therapeutic *measures*), *Kshara Chikitsa* (therapeutic application of caustic material), *Agni Chikitsa* (thermal cauterization), and *Shastra Chikitsa* (surgical procedures).[6] Most research works on bleeding hemorrhoids primarily focus on surgical interventions or medicinal approaches, such as topical agents and oral medications.[7,8] Alternative treatments such as leech therapy have also been explored for their potential to relieve symptoms by improving circulation and reducing venous congestion in thrombosed piles.[9] Some studies explore minor procedures such as applying *Kshara*.[10] However, despite its prevalent use in clinical settings, research often fails to adequately explore the potential therapeutic benefits of traditional Ayurvedic procedures and practices.

The lack of rigorous studies on *Avapeedak Snehapan* represents a significant research gap in the management of hemorrhoids, limiting its potential to be utilized to improve treatment outcomes through a holistic approach. However, to fully understand its therapeutic efficacy and mechanisms of action, comprehensive scientific investigation is imperative. Addressing this gap could facilitate the integration of *Avapeedak Snehapan* into contemporary treatment protocols for hemorrhoids, ultimately enhancing patient care. Unlike many studies on other interventions, there is a significant lack of investigation into the efficacy of *Mahatiktakam Ghrita* in this *Rakta Arsha*.[11] This research could provide valuable insights into the possibility of using *Avapeedaka Snehapana* as a therapy for managing bleeding hemorrhoids. This research gap emphasizes the need for a study evaluating the effectiveness of unctuous medicine in treating bleeding hemorrhoids.

The rationale for this intervention lies in the effectiveness of *Mahatiktakam Ghrita* as a form of internal oleation therapy. *Mahatiktakam Ghrita* possesses *Tikta Rasa*, which is known to enhance digestive power, promote homeostasis, and facilitate the *Pachana* (metabolic transformation) of the *Doshas*. This therapy particularly targets *Pitta Dosha*, making it effective in managing *Raktarsha* (hemorrhoids).[12] It is also effective in *Pakwashaya Gata Vata*,[13] linked to bleeding hemorrhoids. The Ayurvedic approach prioritizes addressing *Apan Vaigunyata*, considering the patient's *Agni Bala* (metabolism).[14] While previous research has highlighted the benefits of unctuous medicine in various conditions, bleeding hemorrhoids are largely unexplored. The decision to opt for a single-arm study was carefully considered and based on factors such as the primary goal being to assess the safety, feasibility, and initial efficacy of the novel treatment approach. At this early stage, this study focuses on understanding the potential benefits and risks associated with the intervention. A single-arm study is particularly suitable when the objective is to explore the performance of a new treatment without directly comparing it to an existing standard of care. In situations where the new mode of treatment represents a significant departure from established practices, it may be more meaningful to establish its effects independently. This study seeks to address this gap by exploring to evaluating the potential therapeutic effect of *Mahatiktakam Ghrita*, administered internally as *Avapeedaka Snehana*, on bleeding hemorrhoids.

Objective

The study objective is to evaluate the effect of *Mahatiktakam Ghrita* as *Avapeedak Snehapan* in the management of first-degree bleeding hemorrhoids.

Materials and Methods

Posology of drug:

Mahatiktakam Ghrita shall be given for *Avapeedak Snehapan*. Therefore, the trial dose of 30 mL shall be given first on the day before starting *Snehapan*. Then, after calculating the time taken for digestion of *Mahatiktakam Ghrita,* the *Uttam Matra* shall be calculated, which can be 100–150 mL. It will differ in each patient according to their *Agni* and *Koshta*. This *Uttam Matra* calculated dose shall be given early in the morning on alternate days, with an average of three doses to seven doses. Every dose shall be calculated and given, which should be digested in 24 h.

Study design and study setting

The study is designed as an open-label, single-arm clinical trial to be conducted in the outpatient department and inpatient department settings at Chattrapati Shahu Maharaj Shikshan Sansthan's (CSMSS) Ayurveda Mahavidyalaya in Aurangabad, Maharashtra, India. The study aims to enroll a total of 61 patients, fulfilling the selection criteria, over 36 months.

Study Participants

Inclusion criteria

The inclusion criteria for this study consist of individuals diagnosed with *Rakta Arsha* (first-degree internal hemorrhoids) aged between 30 and 50 years, selected

without regard to sex, religion, or socioeconomic status, and who are indicated for *Snehapana.* (oleation therapy). A dry constitution, predominance of *Vata Prakriti*, chronic nature of the disorders, frail and lean appearance, and history of blood disorders will characterize the eligibility for *Snehapana*.

Exclusion criteria

The exclusion criteria for this study will include subjects who are below 30 years of age or above 50 years, as well as those with second-, third-, or fourth-degree hemorrhoids. Individuals suffering from congenital anomalies of the rectum or any systemic diseases requiring management, such as hypertension, diabetes mellitus, human immunodeficiency virus, tuberculosis, hemophilia, hepatitis B, and other blood disorders, will also be excluded. Pregnant females, patients with complicated pile masses, those presenting with papillomas or condylomas, individuals with fistula involvement in conjunction with piles and fissures, and those diagnosed with Crohn's disease or ulcerative colitis will not be eligible for participation in the study.

Diagnostic assessment

The diagnosis of first-degree bleeding hemorrhoids involves a comprehensive assessment that includes clinical history, physical examination, and proctoscopy, along with the exclusion of other conditions. The initial history-taking focuses on the presence of symptoms such as bright red blood on the surface of the stool, toilet paper, or in the toilet bowl after defecation, typically associated with minimal to no pain. A physical examination shall reveal an absence of visible external hemorrhoids, but a digital rectal examination may detect soft, bulging tissue within the anal canal. Proctoscopy would be subsequently employed to directly visualize the anal canal and rectum, confirming the presence of hemorrhoids without prolapse.

Investigation

The laboratory investigation parameters include complete blood count (CBC), erythrocyte sedimentation rate, clotting time, and bleeding time.

Study Interventions

The treatment plan begins with administering *Gandharvahastadi Kashaya* (15 mL) mixed with lukewarm water (45 mL), along with rock salt and jaggery as adjuvants, to be taken twice daily on an empty stomach. This regimen will continue until satisfactory digestion and symptoms of *Agnideepthi* are observed.

Mahatiktakam Ghrita shall be given for *Avapeedak Snehapan*. Therefore, the trial dose of 30 mL shall be given first on the day before starting *Snehapan*; then, after calculating the time taken for digestion of *Mahatiktakam Ghrita*, the *Uttam Matra* shall be calculated, which can be 100–150 mL. It will differ in each patient according to their *Agni* and *Koshta*. This *Uttam Matra*, calculated for each participant, shall be given early in the morning on the alternate days at an average of three doses to seven doses until desirable oleation symptoms such as *Vatanuloma*, *Deepatagni*, and *Varchas Snigdhata* are observed and decrease in clinical symptoms also. The oleation and postoperation dietary regimen focuses on gradually reintroducing easily digestible foods after oleation therapy. It begins with rice water and then gradually transitions to *Khichadi*. Follow-up assessments are scheduled at two key points: the first between 6 and 14 days postoperation and the second between 12 and 28 days after transitioning to a normal diet.

Outcome measures

The primary outcomes include changes in the amount of bleeding through the anus during defecation, measured using a grading scale to document the volume of blood observed; the frequency of bleeding, recorded as the number of bleeding episodes and gradation for the type of bleeding; appetite, assessed using a subjective scoring system to document any increases or decreases in food intake; consistency of feces, evaluated using a subjective assessment scale; and pain during defecation, measured on a numerical rating scale using the Visual Analog Scale (VAS) assessed at two timepoints from baselines, one after oleation, and the final assessment at the time of transitioning to normal diet following *Samsarjana Karma*. The primary outcomes will be analyzed based on the subjective gradings given in Tables 1–6.[15]

Secondary outcomes include laboratory evaluations such as CBC to monitor hemoglobin levels, white blood cell counts, lipid profile, and platelet counts, as well as bleeding time, clotting time, and erythrocyte sedimentation rate assessed at the aforementioned timepoints [Table 7].

Safety Outcomes

Safety outcomes will be evaluated by monitoring adverse events during each follow-up visit. Any observed adverse events will be documented following Good Clinical Practice guidelines.

Table 1: Gradation of the amount of bleeding through the anus during defecation

Grade	Amount of bleeding
0	No bleeding
1	Dropping
2	Syringing
3	Streaming

Table 2: Gradation of frequency of bleeding

Grade	Frequency of bleeding
0	No bleeding
1	Once in a week
2	Twice in a week
3	Three to five times a week
4	Daily

Table 3: Gradation of appetite

Grade	Appetite
0	Normal
1	Reduced; taking food with less quantity than before
2	Reduced; taking food unwillingly with a significant reduction in food quantity
3	Loss of appetite; not taking regular meals/taking meals on the insistence of family members
4	Loss of appetite; skip one meal irregularly

Table 4: Gradation of *Avagaad Purish* (constipation/consistency of feces)

Grade	*Avagaad Purish* (constipation/consistency of feces)
0	Regular bowel evacuation
1	Hard stool once a day
2	Hard stool after 2 days
3	Hard stool after more than 2 days

Table 5: Gradation of pain (based on the Visual Analog Scale)

Grade	Pain
0	No pain
1 (1–3)	Mild
2 (4–6)	Moderate
3 (7–10)	Severe

Table 6: Overall assessment criteria of *Rakta Arsha* treatment

S no	Gradation	Reduction in signs and symptoms
1	Excellent	>75% relief in signs and symptoms of bleeding hemorrhoids
2	Good	75%–50% relief in signs and symptoms of bleeding hemorrhoids
3	Fair	50%–25% relief in signs and symptoms of bleeding hemorrhoids
4	Poor	Below 25% of relief in signs and symptoms of bleeding hemorrhoids

Withdrawal criteria

The participants experiencing serious adverse events or adverse drug reactions during the study will be withdrawn from the study. These individuals will receive necessary medical attention or be referred to a higher-level medical facility. Participants expressing unwillingness to continue in the study or not adhering to the trial-specific interventions shall also be withdrawn.

Sample size

Employing a nonprobability sampling method, all selected patients will have bleeding hemorrhoids, graded on a subjective scale of assessment criteria such as the amount of bleeding, frequency of bleeding, appetite, *Avagaad Purish* (constipation—consistency of feces), and gradation of pain (based on VAS) [Tables 1–5].[16] Sample size estimation is based on the previous clinical study[17] assuming that in patients with moderate bleeding hemorrhoids at baseline in 80%, it was assumed that after the treatment with *Mahatiktakam Ghrita* as *Avapeedak Snehapan* symptom of 20% participants would become mild. The sample size calculation is given below:

$$N = \frac{p_0 q_0 \left\{ z_{1-\alpha/2} + z_{1-\beta} \sqrt{\frac{p_1 q_1}{p_0 q_0}} \right\}^2}{(p_1 - p_0)^2},$$

$$q_0 = 1 - p_0$$
$$q_1 = 1 - p_1,$$

$$N = \frac{0.8 \times 0.2 \left\{ 1.96 + 0.84 \sqrt{\frac{0.64 \times 0.36}{0.8 \times 0.2}} \right\}^2}{(0.64 - 0.8)^2}$$

$$N = 55.$$

At 5% level of significance and 80% power,[18] the calculated sample size is 55. Further, expecting a dropout

Table 7: Study schedule of treatment

Event	Screening	Baseline	Preprocedure	Main procedure*	Postprocedure
Written informed consent	✓				
Screening	✓				
Laboratory investigation (CBC, CTBT, and ESR)		✓			
Demographics and medical history		✓			
Clinical assessment		✓			
Administration of *Gandharvastadi Kashaya*			✓		
Administration of the trial dose of *Mahatiktakam Ghrita*			✓		
Administration of the optimal dose of *Mahatiktakam Ghrita*				✓	
First follow-up (after completion of the main procedure)				✓	
Strict dietary regimen					✓
Second follow-up (after strict dietary regimen completion)					✓

CBC = complete blood count, CTBT = clotting factor and bleeding factor, ESR = erythrocyte sedimentation rate.
*To be given on alternate days

rate of 10% in the calculated sample size, the final sample size was fixed at 55 + 6 = 61.

Recruitment

Informed written consent forms will be taken from patients with first-degree bleeding hemorrhoids after screening. Subjects will be recruited from the outpatient department of CSMSS's Ayurved College based on the inclusion and exclusion criteria.

Ethical consideration

This study was approved by the Institutional Ethics Committee (IEC) of the Maharashtra University of Health Sciences, Nashik, India. The IEC reference is PSM/LRPAMHPG/632/2022. Written informed consent would be obtained from the patients by the investigator before enrolling. The Indian Council of Medical Research National Ethical Guidelines for Biomedical and Health Research on Human Participants (2017) will be followed to execute the study.

Concomitant and rescue medication

Any concurrent medication being taken for unrelated health issues will be recorded in the case report form (CRF). In instances where rescue medication is deemed necessary, it will be prescribed and duly noted in the CRF.

Compliance

The evaluation of compliance will be based on the amount of trial medication consumed throughout the intervention period. Participants must exhibit a compliance rate equal to or exceeding 80%.

Data collection and documentation

Data of the participants would be collected at baseline and throughout the intervention. The assessment will be at baseline, based on the first and second follow-up, and tabulated in the CRF. The data of discontinued patients will also be collected based on their willingness.

Deviation from protocol

In the event of any protocol deviation during the study, the investigator will document the deviation in detail and assess its impact on participant safety and study outcomes; appropriate corrective actions will be implemented, and necessary adjustments to the study protocol will be submitted for approval from the ethics committee if required. All protocol deviations will be systematically documented and informed to the IEC.

Confidentiality

Confidentiality of participant information will be strictly maintained throughout the study by assigning unique identification numbers to each participant. Access to confidential data will be limited to authorized research personnel, and all data will be securely stored.

Monitoring

The study will be monitored by the concerned supervisor of the department, where the study will be conducted.

Statistical analysis

The data will undergo a comprehensive analysis utilizing statistical tests, specifically the Chi-square test, Wilcoxon signed-rank test, and paired *t* test. The analysis will be conducted using IBM Statistical Package for Social Sciences version 24.0 (IBM Corp., Armonk, NY, USA).

Discussion

Bleeding hemorrhoids affect nearly 10 million individuals annually in India.[19] *Mahatiktakam Ghrita* pacifies *Pitta* and *Vata* predominantly.[20,21] The unique composition of *Mahatiktakam Ghrita*, comprising *Kalka*, *Ghee*, *Kwatha*, and *Amalaki Swarasa* in specified proportion, is well suited to this condition because of its potential to pacify *Pitta Dosha*, reduce inflammation, and promote healing of the affected tissues.[20] Internal oleation therapy with *Mahatiktakam Ghrita* can pacify the *Pakvashaya Gata Vata* (*Vata* located in the lower part of the abdomen), which is a crucial factor in bleeding hemorrhoids.[13] This form of internal oleation, advocated by *Acharya Hemadri*, is a *Swasthana* (site-directed) *Shamana* (pacification) procedure intended to mitigate *Dosha* imbalances.[21] *Avapeedaka snehapana* is one kind of samana snehapana especially indicated in *Adhonabhija Vikaras*, by Acharya Vagbhatta. However, it is understood as a therapeutic application to correct the *Pratiloma Vayu* in *Anulomagati*. The procedure is aimed specifically at correcting *Apana* and *Vyana Vayu* by incorporating the principles of *Aushada Kala*. This procedure is well documented in diseases of *Apana* and *Vyana* dysfunction such as *Mutravega Rodha* and *Rakta Arsha*. *Avapeedaka snehapana* plays a crucial role in regulating *Vatanulomana* and correcting *Apana Vaigunya*, which are important factors in bleeding hemorrhoids, thereby alleviating the signs and symptoms of *Rakta Arsha*.

Acharya Charaka emphasized the role of *Shamana Snehapana* (method of internal administration of oleation) in alleviating the aggravated *Doshas* without expelling them and bringing them back to their normal state.[22] The time of administration of *Snehapana* can affect its effect, as when the patient has a good appetite, *Ghee* gets digested easily without adhering to the *Srotas* (micro and macro channels).[23] This *Ghee* spreads throughout the body, gains access to the microchannels, and reaches the site of vitiated *Doshas* under its penetrating character.[23] After reaching the site of vitiation, it alleviates the *Doshas*

with its *Tikta Rasa* (bitter taste) quality of *Mahatiktakam Ghrita*.[20]

Samsarjana Krama (strict dietary regimen) after the oleation procedure ignites metabolism. The sequential dietary plan, as mentioned by *Acharya Vagbhata*, ensures and enhances the potential to digest food and is an essential parameter in the effectiveness of the therapy.[24] The internal administration of *Mahatiktakam Ghrita* from *Avapeedak Snehapan*is expected to present a promising avenue for addressing the contemporary surge in first-degree bleeding hemorrhoidal cases. By integrating this therapeutic modality into clinical practice, we may provide a safe and effective alternative for patients, enhancing their overall well-being and potentially reducing the need for more invasive interventions.

Access to data

The investigator and co-investigator would have full access to the treatment dataset for data validation.

Ancillary and posttrial care

No ancillary studies are proposed with this clinical study. However, the subject will be given medical care as and when required.

Dissemination

The outcomes of the study will be disseminated through original research articles in peer-reviewed journals or presentations at national conferences.

Clinical Trial Registry of India (CTRI) registration Trial status

Recruitment of patients has not yet begun for the trial.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Mamidi P, Gupta K. Avaaraneeya Adhyaya of *Sushruta Sutra Sthana*-An explorative study. J Integr Health Sci 2021;9:107-21.
2. Gaudar SA, Kumar S. Conceptual study on management of *Raktarsha*. Asian J Pharm Res Dev 2022;10:53-7.
3. Kibret AA, Oumer M, Moges AM. Prevalence and associated factors of hemorrhoids among adult patients visiting the surgical outpatient department in the University of Gondar Comprehensive Specialized Hospital, Northwest Ethiopia. PLoS One 2021;16:e0249736.
4. Amarprakash D, Anaya P, Kumar A, Mukesh S. A comprehensive review on management of hemorrhoids (Gudarsha) – An integrated approach. Int J Res-Granthaalayah 2019;7: 310-20.
5. Mehra R, Makhija R, Vyas N. A clinical study on the role of Ksara Vasti and Triphala Guggulu in Raktarsha (bleeding piles). Ayu 2011;32:192-5.
6. Shah B, Dudhamal TS. Efficacy of Apamarga Kshara application and sclerotherapy in the management of Arsha (1st and 2nd degree piles)–An open-labeled, randomized, controlled clinical trial. AYU (Int Q J Res Ayurveda) 2018;39:213-9.
7. Morinaga K, Hasuda K, Ikeda T. A novel therapy for internal hemorrhoids: Ligation of the hemorrhoidal artery with a newly devised instrument (Moricorn) in conjunction with a Doppler flowmeter. Am J Gastroenterol 1995;90:610-3.
8. Sudarmi K, Dudhamal TS. Comparative clinical study of *Apamarga Kshara* application, infrared coagulation and *Arshohara Vati* in the management of *Arsha* (1st and 2nd degree hemorrhoids). Ayu 2017;38:122-6.
9. Kumar S, Dobos GJ, Rampp T. Clinical significance of leech therapy in Indian medicine. J Evid Based Complementary Altern Med 2013;18:152-8.
10. Dudhamal TS, Gupta SK, Bhuyan C, Singh K. The role of *Apamarga Kshara* in the treatment of *Arsha*. Ayu 2010;31:232-5.
11. Agnivesha, Charaka Samhita, Acharya BT (editor) forwarded by Deshpande P.J. Vol 2, Chikitsa Sthana, 7/144–150. Varanasi: Choukhamba Surabharati Prakashan; 2005. p. 327.
12. Agnivesha, Charaka Samhita, Acharya BT (editor) forwarded by Deshpande P.J. Vol 2, Chikitsa Sthana, 14/182–183. Varanasi: Choukhamba Surabharati Prakashan; 2005. p. 538.
13. Anandu V, Pujar R, Mohan N, Gopikrishna S. Critical analysis of *Pakwashaya Gata Vata*. Int J Ayurveda Pharm Chem 2021;14:188-95.
14. Jondhale PB, Atram S. The comparative study of *Adrakadi Quath Sidha Dugdha* and *Ashwagandha Churna* in the management of *Arshas* (hemorrhoids). Int J Ayur Pharma Res 2013;1:54-9.
15. Balkunde DSM. A clinical study of *Rakt Arsha* managed with Ayurvedic treatment w. s. r. to 1st degree internal haemorrhoid. NJRAS 2020;8:1-6.
16. Gupta, ML, Gupta SK, Bhuyan, C. Comparative clinical evaluation of *Kshara Sutra* ligation and hemorrhoidectomy in *Arsha* (hemorrhoids). Ayu 2011;32:225-9.
17. Keong SY, Tan HK, Lamawansa MD, Allen JC, Low ZL, Ostbye T. Improvement in quality of life among Sri Lankan patients with haemorrhoids after invasive treatment: A longitudinal observational study. BJS Open 2021;5:zrab014.
18. Saxena SK, Jha A, Hajela S, Pandey S, Singh J. A comparative analysis on conservative versus surgical treatment in haemorrhoidal disease patients: Retrospective study. Int J Toxicol Pharmacol Res 2023;13:212-8.
19. Trueman RS. Minor rectal conditions. South Afr Med J 1949;23:939-42.
20. Agnivesha, Charaka Samhita, Acharya BT (editor) Ayurveda Dipika commentary by Datt C, Chikitsa Sthana, 7/144–150. 2nd ed. Varanasi: Choukhamba Surabharati Prakashan; 2009. p. 327.
21. Vagbhata, Aṣṭāṅgahṛdayam, Vaidya Parādkar H (editor), Sarvanga Sundar commentary by Arunadatta and Ayruveda Rasayan by Hemādri, Chikitsa Sthana 19/8–10. 4th ed. Varanasi: Chaukambha Krishnadas Academy; 2006. p. 711.
22. Agnivesha, Charaka Samhita, Acharya BT (editor) forwarded by Deshpande P.J. Vol 2, Chikitsa Sthana, 14/222–224. Varanasi: Choukhamba Surabharati Prakashan; 2005. p. 545.
23. Vagbhata, Aṣṭāṅgahṛdayam, Vaidya Parādkar H (editor), Sarvanga Sundar commentary by Arunadatta and Ayruveda Rasayan by Hemādri, Sutra Sthana 16/19. 4th ed. Varanasi: Chaukambha Krishnadas Academy; 2006. p. 246.
24. Vagbhata, Aṣṭāṅgahṛdayam, Vaidya Parādkar H (editor), Sarvanga Sundar commentary by Arunadatta and Ayruveda Rasayan by Hemādri, Sutra Sthana 18/31. 4th ed. Varanasi: Chaukambha Krishnadas Academy; 2006. p. 253.

हिंदी सारांश

महातिक्तक घृत का अवपीडक स्नेहपान के माध्यम से रक्त अर्श (प्रथम डिग्री ब्लीडिंग हेमोरॉइड्स) के प्रबंधन में प्रदर्शित प्रभाव: सिंगल-आर्म, ओपन-लेबल क्लिनिकल ट्रायल का प्रोटोकॉल

मेघा रावसाहेब सुरवासे, दीपक कुमार परिदा

पृष्ठभूमि: अवपीडक स्नेहपान, रोगसूचक राहत प्रदान करने और अंतर्निहित दोष असंतुलन को शांत करने में अपनी दोहरी भूमिका के लिए पहली डिग्री के रक्तस्रावी बवासीर में रणनीतिक रूप से नियोजित किया जाता है। महातिक्तक घृत रक्तस्रावी बवासीर से जुड़े बढ़े हुए दोषों को संतुलित करता है। इस इलाजकी प्रभावकारिता और सुरक्षा का वैज्ञानिक मूल्यांकन करने के लिए, प्रथम डिग्री रक्तस्रावी बवासीर के प्रबंधन में अवपीडक स्नेहपान के रूप में महातिक्तक घृत, एक सिंगल-आर्म, ओपन-लेबल नैदानिक परीक्षण शुरू किया जाएगा।

उद्देश्य: यह अध्ययन इसके संकेतों और लक्षणों को कम करने के लिए प्रथम डिग्री रक्तस्रावी बवासीर के प्रबंधन में अवपीडक स्नेहपान के रूप में महातिक्तक घृत की प्रभावकारिता का मूल्यांकन करने पर केंद्रित है।

अध्ययन विधि: प्रथम-डिग्री रक्तस्रावी बवासीर वाले 30 से 50 वर्ष की आयु के 61 रोगियों का नामांकन, पूर्वनिर्धारित मानदंडों के आधार पर, सिंगल-आर्म, ओपन-लेबल नैदानिक परीक्षण में होगा। गंधर्वहस्तादि कषाय का उपयोग करते हुए दीपन पाचनकिया जायेगा। 30 एमएल महातिक्तक घृत की परीक्षण खुराक से पहले लेंगे। इष्टतम खुराक वैकल्पिक दिन प्रशासन के माध्यम से निर्धारित की जाएगी, जब तक कि रोगसूचक राहत स्पष्ट न हो जाए, तीन से सात खुराक तक। अवपीडक स्नेहपान के बाद, पहला अनुवर्ती किया जायेगा।तत्पश्चातरोगियों को सख्त आहार व्यवस्था का पालन करना होगा।आहार व्यवस्था पूरी करने के बाद दूसरा नैदानिक अनुवर्तीआयोजित किया जाएगा। रोग की स्थिति के आधार पर अध्ययन की अवधि 12 से 28 दिन होगी। रक्तस्रावी बवासीर के लक्षणों का आकलन करने वाले प्राथमिक परिणामों में रक्तस्राव की मात्रा और आवृत्ति, भूख, मल की स्थिरता और दर्द परीक्षण से पहले, बाद में और अनुवर्ती के बाद किया जायेगा।माध्यमिक परिणामों में सीबीसी, रक्तस्राव का समय, थक्के बनने का समय और ईएसआर जैसे हेमेटोलॉजिकल पैरामीटर शामिल होंगे, जो परीक्षण से पहले, बाद में और अनुवर्ती के बाद दर्ज किए जाएंगे। परिणामी उपाय परीक्षण से पहले, परीक्षण के बाद और अनुवर्ती कार्रवाई के बाद प्राथमिक और माध्यमिक परिणामों में प्रभावकारिता का मूल्यांकन करेंगे।

विमर्श: संभावित परिणामों में रक्तस्राव की गंभीरता में कमी, दर्द में कमी और रक्तस्रावी बवासीर से जुड़े समग्र लक्षणों में सुधार शामिल है। यह परीक्षण प्रथम डिग्री के रक्तस्रावी बवासीर में अवपीडक स्नेहपान के रूप में महातिक्तक घृत के अनूठे लाभों के बारे में जानकारी प्रदान करेगा। रक्तस्रावी बवासीर में अचूक दवा के आंतरिक प्रशासन पर शोध की कमी है, क्योंकि पिछले अधिकांश अध्ययनों में अन्य अन्तःक्षेप किए गए हैं। यह अध्ययन समाज और इस क्षेत्र में आयुर्वेदिक चिकित्सा की प्रगति के लिए बहुमूल्य अंतर्दृष्टि और लाभ प्रदान कर सकता है।

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Ayurvedic management of Kaphaj Kasa: A case study

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Abstract
Every person wishes to be healthy everyday. The health of every person depend partially pn his respiration. Nowadays due to urbanization, everyone is more prone to respiratory diseases. Polluted air, sedentary lifestyle, wrong dietary habits are the main causes of respiratory diseases. A sudden loud hacking sound based on air clearing the throat or irritation of the airways is called a cough. Cough can be associated with Kasa vyadhi. Kasa is one of the respiratory disease described in ayurveda. Irritation of throat and airway by pollutants, bacteria, tobacco, smoke etc results in Kasa. Kasa vyadhi in ayurveda have five different presentation modes described in classical texts. We are now discussing about the case of kaphaj kasa, who is experiencing following symptoms since 10 days- peenas (headacheand noseblock), uragaurav (heaviness in chest), aruchi (tastelessness), kaphanishtivan (cough expectoration). Ayurvedic preparation such as sitoaladi choorna, abhrak bhasma, tankanbhasma, kanakasava have been used internally to treat the patient. Gandharvaharitaki choorna was given to the patient for vatanuloman. External treatment includes snehan with til tail and Nadi swedan with dashmool kwath. The patient displays impressive results from the above treatment.

Keywords: Cough, kaphaj kasa, sitopaladi churna, abhraka bhasma, kanakasava, gandharvaharitaki

Introduction
Irritation of mucous membrane lining the respiratory tract due to irritants like smoke, dust, cold air etc results in coughing. The onset of coughing may be acute or chronic and may show diurnal variation. This is more common in smokers. Cough may be dry or wet depending on the production of sputum. The mucuos secretion may be purulent or non purulent. In recent systematic review and meta-analysis on the global epidemiology of chronic cough in general adult populations, it has been identifed four studies that met the requisite criteria for inclusion from India. Compared to the pooled global prevalence of 9.6%, that from India was less than 5% [9]. In Ayurveda, there are many references for Kasa vuadhi in Charaka, Sushrut, Vagbhata and many other samhitas. According to Charaksamhita, there are five types of Kasa given, namely Vataj, Pittaj, Kaphaj, Kshataj, Kshayaj. Hetus (causative factors) of Kaphaj Kasa explained in charaksamhita are Raja(dirt), Dhoom (smoke), Diwaswap (sleeping in daytime), Atimadhur Guru Aharsevan (intake of excessive sweet and heavy diet).
The unbalanced Gati of Pranvayu and Udanvayu results in Gharshana causing Kasa. The vitiation of Kapha and Vata dosha results in Agnimandya which further results into obstruction and heaviness in chest area. The Gharshana between Pranvayu and Udanvayu further increases and Kapha gets more vitiated resulting into Kaphanishtivan, known as Kaphaj kasa. The symptoms of kaphaj kasa mainly includes Agnimandya, Aruchi, Peenas, Utklesh, Lomharsh, Shirogaurav, Urogaurav, Sakaphanishthivan. It can be treated with Ushna Tikshna and Kaphashodhak Kalpas.

Materials and Methods
Case Study: Past History
A 34 yr old male patient came to Kayachikitsa opd with complaints of,
1. Peenas (Nose block with headache)
2. Kaphanishthivan (Cough Expectoration)
3. Uragaurav (Heaviness in chest)
4. Aruchi (Tastelessness)

Patient was having all these symptoms From 1 month, but more since last 10 days. Patient had taken Allopathy treatment previously but got only symptomatic relief.

H/O Past Illness
Patient did not have any history of, hypertension/ diabetes mellitus/ epilepsy/ tuberculosis. No any history of surgery
History of addiction – Personal History
Occupation: Teacher Diet: mixed
Appetite: loss of appetite Allergy: no any allergy noticed.
Addiction: chronic smoker since last 7 yrs but not done smoking in last 2 yrs.

General Examination
The general condition of patient was fair and afebrile. Pulse – 87/min
Blood Pressure – 126/94 mm of Hg Respiratory Rate – 24/min
SPO2 – 93% on RA
Chest Xray does not show any fndings of Tuberculosis and other respiratory disorder. Only shows haziness over both lungs.
Sputum test was negative. RTPCR Test was negative.

Systemic Examination
- **Respiratory system:** Crepitations all over the chest.
- **Cardiovascular system:** Normal
- **Digestive system:** Abdomen was distended, non tender and bowel sounds are normal Pt is well oriented and conscious.

Local Examination
Nose blocked and ear appear normal functioning. Throat: Congested

Management
Internal medication
1. Sitopaladi Churna 2gm + Abhrak Bhasma 2gm + Rasasindur Bhasma 1gm + Tankan Bhasma 1gm Anupan Madhu
2. Gandharvaharitaki Churna 3gm: at night before sleep Anupana Koshna Jal
3. Kanakasawa 15 ml twice a day with lukewarm water.

External medication
1. Bahya Snehan with Koshna Til Tail mixed with Saindhava at Urapradesh twice a day
2. Bahya Swedan with Nadi swedana with Dashmool Kwath twice a day

Duration
All bove medications were given for 30 days.

Follow up
On 15th and 30th day of treatment.

Pathya-Apathya
Patient was advised to take Koshna Ahara and Koshna Jal avoiding chilled, fried, sour, Ruksha ahar, fermented food, spicy and oily food. He was advised to avoid contact with fumes, smoke and stress. He was advised to do regular Pranayam, Meditation and Yoga.

Assessment Criteria
Peenas (Nose block with headache)
- **Grade 0:** No nose blocks
- **Grade 1:** Nose block relived after mild sneezing and no headache.
- **Grade 2:** Nose block relived after more sneezing and mild headache
- **Grade 3:** Severe Nose block, not relived even if sneezed and severe headache 2.

Kaphanishthivan (Cough Expectoration)
- **Grade 0:** No Kaphanishthivan
- **Grade 1:** Sakaph nishthivan easily (expectoration).
- **Grade 2:** Sakaph nishthivan with slight difficulty
- **Grade 3:** Sakaph nishthivan with restlessness because of difficulty in expectoration

Uragaurav (Heaviness in chest)
- **Grade 0:** No urogaurav
- **Grade 1:** Urogaurav relived after some expectoration
- **Grade 2:** Urogaurav relived after heavy expectoration
- **Grade 3:** Urogaurav not relived even after heavy expectoration 4.

Aruchi (Tastelessness)
- **Grade 0:** No aruchi
- **Grade 1:** Mild aruchi
- **Grade 2:** Moderate aruchi
- **Grade 3:** Sever aruchi

Readings were taken before starting the treatment, on 15th Day and on 30th day

Table 1: Observation and Results

Sr. No.	Symptoms	Before Treatment	After 15 Days	After 30 Days
1	Peenas	Grade 3	Grade 2	Grade 0
2	Sakaphanishthivan	Grade 4	Grade 2	Grade 0
3	Uragaurav	Grade 4	Grade 2	Grade 0
4	Aruchi	Grade 3	Grade 1	Grade 0

Discussion
The symptoms of kaphaj kasa mainly includes Agnimandya, Aruchi, Peenas, Utklesh, Lomharsh, Shirogaurav, Urogaurav, Sakaphanishthivan. The pratiloma apan vaayu causes disturbances in the prana vaayu and udana vaayu gati, which ultimately causes gharshana in between them causing symptom as kasa, when it is more with vitiated kapha, resulted in the kaphaj kasa. The Katu rasatmaka, Ruksha, Tikshna gunatmaka predominance with rasadravyas like Abhraka Bhasma, Tankan Bhasma with madhu anupana, acts on the vitiated kapha and vata, causing kapha nissaraka and kaphahara effect. Also, Eranda and Haritaki causing agnivardhana and Vata anuloman causing anuloman of apan vaayu with regulation of Prana and Udan vaayu. The abhraka Bhasma is balyakar and rasayan, helps in the formation of new mucous membrane and its nourishment.Tankan Bhasma leads to kaphashoshana and helps in the expectoration.The local application of Til oil with saidhava causes kapha vilayana and swedana with Dashmool kwathcauses laghuta in the uropradesh.

Conclusion
From the above data, it is concluded that, mixture of sitopaladi churna and gandharvaharitaki choorna with rasadravyas like Abhrak Bhasma,and Tankan Bhasma with

Madhu Anupana and kanakasava can relive kaphaj kasa effectively. The external snehan and swedana acts as supportive in the nature.

References

1. Association of Physicians of India. API Textbook of Medicine. 6th ed. Mumbai: Association of Physicians of India; 1999. p. 214.
2. Tripathi B. Charak Samhita. Reprinted ed. Varanasi: Chaukhambha Surbharati Prakashan; c2002. Vol. 2, Chikitsasthana, Kasachikitsa, 18/04-189. p. 641-667.
3. Tripathi B. Charak Samhita. Reprinted ed. Varanasi: Chaukhambha Surbharati Prakashan; c2002. Vol. 2, Chikitsasthana, Kasachikitsa, 18/18-19. p. 644.
4. Tripathi B. Charak Samhita. Reprinted ed. Varanasi: Chaukhambha Surbharati Prakashan; c2002. Vol. 2, Chikitsasthana, Rajyakshmachikitsa, 08/103-104. p. 360.
5. Mishr S. Ayurvediya Rasashstra. 14th ed. Varanasi: Chaukhambha Orientalia; c2004. Dwitiya Adhyaya, Maharasa Varga, Abhraka Prakarana. p. 350-369.
6. Mishr S. Ayurvediya Rasashstra. 14th ed. Varanasi: Chaukhambha Orientalia; c2004. Dwitiya Adhyay, Kshar Varga. p. 699-703.
7. Shastri A. Bhaishajya Ratnavali. 17th ed, Reprinted ed. Varanasi: Chaukhamba Sanskrit Sansthan; c2004. Hikkashwasadhikara, shlok no. 99-102.
8. Shastri A. Bhaishajya Ratnavali. 17th ed, Reprinted ed. Varanasi: Chaukhamba Sanskrit Sansthan; c2004. Amavatachikitsa Prakaran, 14. p. 435.
9. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4663888

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Role of Ayurveda in premenopausal sympotoms

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Abstract
Women now spend a third of their lives following menopause due to longer life expectancies. Therefore, perimenopausal symptoms require greater care. The best treatment is hormone replacement therapy, but it has drawbacks of its own. Investigating novel approaches to the treatment of perimenopausal symptoms is currently necessary. The goal of a yogic lifestyle is to cultivate pranayama and dhyana in the body, mind, and day. Yoga has been used as a therapeutic tool to regulate and treat sickness as well as to promote positive health.
It's unclear exactly how yoga helps with different medical situations. In every diseased circumstance, neurohormonal pathways may have a selective influence. Several research have examined the impact of yoga on perimenopausal symptoms by combining its various facets into a general yoga session. An integrated yoga therapy method can help with night sweats and hot flashes. Research indicates that yoga, an ancient therapy, is a somewhat effective way to manage perimenopausal symptoms. There is growing evidence that even brief yoga practice can reduce psychological and physiological risk factors for cardiovascular disease.

Keywords: Yoga therapy, quality of life, perimenopausal women, perimenopausal symptoms

Introduction
The continuation of a species is a fundamental aspect of nature. In human reproduction, women play a central role. From birth to adolescence, when they become biologically capable of motherhood, and later to menopause, they experience various physiological transitions.
Menopause is commonly defined as the absence of menstruation for 12 consecutive months or a duration equal to three previous cycles, marking the end of ovarian activity and leading to permanent cessation of menstruation. This natural phase typically occurs between the ages of 45 and 55, bringing significant hormonal changes. These shifts can lead to various symptoms that may impact daily life.
Throughout history, women have often lacked independence. However, in today's era of information and technology, this has drastically changed. Women now exhibit a multidimensional perspective and have secured a significant place in society through their remarkable achievements across various fields. Every stage of a woman's life carries its own beauty and grace.
The transitions of menarche and menopause play crucial roles in shaping a woman's physical, psychological, social, and emotional well-being. The term "menopause" originates from the Greek words "meno", meaning month or menses, and "pause", meaning to stop or cease. It marks the permanent end of menstruation, typically occurring around the average age of 51.
Menopause is not merely defined by the cessation of menstrual cycles and the conclusion of a woman's reproductive phase, it significantly impacts overall health and brings substantial lifestyle changes. On average, a woman spends nearly one-third of her life in this stage, marking the end of natural fertility.
The collection of symptoms and signs experienced during this transition is referred to as "menopausal syndrome." This process unfolds gradually over several years and is a natural part of aging. Various factors, including physical, functional, emotional, social, and cognitive aspects, influence the quality of life for up to 85% of menopausal women. In Ayurveda, menopause is viewed differently and is termed "Rajonivritti", signifying the cessation of *Artava Pravritti* (menstrual flow) or cessation of menstruation. Rajonivrittiis not described separately as a pathological condition, but as normal physiological state. In Ayurveda, Menopause deals with 'Jara Pakva Avastha' [5] of body.

Jara (aging) and Rajonivritti (menopause) occur due to a gradual decline in the functional capacity of *Agn**, leading to inadequate tissue nourishment. This nutritional imbalance results in irreversible degenerative changes in the *Sapta Dhatus*. Since menopause is a significant health concern, it requires a safe and effective approach to management.

In modern medicine, Hormone Replacement Therapy (HRT) is considered the primary option for addressing menopausal health issues. While it offers significant benefits, it is also associated with serious health risks, including vaginal bleeding, breast cancer, endometrial cancer, and gallbladder disease. Additionally, psychological changes during menopause may not be effectively managed through hormonal therapy. Conventional medicine often relies on long-term use of sedatives, hypnotics, and anxiolytics, which can lead to side effects such as drowsiness, impaired motor function, memory loss, allergic reactions, behavioral changes, and drug dependence.

Ayurveda, on the other hand, provides a natural and holistic approach to managing menopausal syndrome without harmful side effects. This has increased the focus on effective and safe treatments for this transitional phase. According to *Acharya Sushruta* and other classical references, the age of Rajonivritti is stated to be around 50 years, marking the body's full transition.

Modern perspective on menopause

Menopause is characterized by the permanent cessation of ovarian function, leading to the complete absence of menstruation. It typically occurs between the ages of 45 and 50, with the average age being around 47 years. The *climacteric* phase refers to the gradual decline in ovarian activity. As a result, the corpus luteum ceases to form, preventing the secretion of progesterone. This leads to anovulatory cycles, causing irregular menstrual patterns.

Eventually, the formation of *Graafian follicles* stops, reducing estrogen production and causing endometrial atrophy, which ultimately results in amenorrhea. The decline in estrogen levels triggers a compensatory increase in Follicle-Stimulating Hormone (FSH) and Luteinizing Hormone (LH) due to feedback from the anterior pituitary gland.

Menopausal Symptoms

- Hot flushes
- Insomnia
- Mood changes
- Vaginal dryness
- Atrophic vaginitis
- Cystitis
- Drying out and thinning out of skin
- Palpitations
- Loss of libido
- Osteoporosis
- Anxiety/Depression

Management

1. Counseling
2. Antioxidants and multivitamins
3. HRT (hormonal replacement therapy)

HRT has wider range of secondary health complications like vaginal bleeding, breast cancer, endometrial cancer etc. There is increased incidence of malignancy and thromboembolic disease.

Perspective of Acharya *Arundatta* on *Rajonivritti*.

Acharya Arundatta states that the age of 50 years for *Rajonivritti* is an estimated figure rather than an absolute one, as variations may occur. Ayurveda emphasizes the significance of *Ahara* (diet) and *Vihara* (lifestyle) in maintaining overall health, and these factors play a role in determining the variations in the onset of menopause.

Nidana (Causative Factors)

In Ayurvedic texts, *Rajonivritti* is not classified as a distinct disease but is mentioned in scattered references. Based on possible causes (Nidana), several factors contribute to this transition. *Acharyas* have described certain elements under *Rajah Utpatti Hetus* (factors responsible for menstruation), which can also be interpreted as *Rajah Nivritti Hetus* (factors responsible for menopause). Some specific causes are considered influential in the occurrence of Rajonivritti, are as follows.

- Swabhava
- Jarapakvasharira due to Kala
- Dhatukshaya
- Effect of Dosha
- Vayu
- Abhighata
- Karma or environment.
- RajastravaTypes

Ayurveda has divided all diseases into 4 major types Agantuja, Sharira, Manasand Swabhavika. Concentrating on ‘Swabhavika’ type it includes all those conditions, which are naturally occurring. Acharya Sushruta has considered naturally occurring diseases under the heading of ‘Swabhavabalapravritta’ Includes.

- Kshudha (hunger)
- Pipasa (thirst)
- Nidra (sleep)
- Jara (aging)

Types of Rajonivritti (Menopause) in Ayurveda

Menopause, like aging and death, is a natural biological process. However, in certain cases, external factors can contribute to its occurrence, classifying it as a Doshaja condition. Based on its onset, *Rajonivritti* is categorized into two types:

1) Kalaja Rajonivritti (Timely Menopause)

When menopause occurs at the expected age, it is referred to as *Kalaja Rajonivritti*. Acharya *Sushrutaexplains* that natural menopause happens when an individual maintains good health practices throughout life. This condition can be managed with Rasayana (rejuvenating therapies) to support overall well-being.

2) *Akalaja Rajonivritti* (Untimely Menopause)

When menopause takes place earlier or later than the usual age range, it is termed *Akalaja Rajonivritti*. This condition often results from inadequate health maintenance. Acharya Dalhana suggests that its treatment should be based on the underlying illness and the specific dosha imbalance involved. Since *Akalaja Rajonivritti* arises due to identifiable causes, it is generally easier to manage compared to Kalaja Rajonivritti.

According to Acharya Charaka in Vimana Sthana, the symptoms and experiences of Kalaja and *Akalaja Rajonivritti* differ among individuals based on their Prakriti (body constitution).

Samprapti (Pathogenesis) of Rajonivritti

Acharya Sushruta describes that as a woman reaches old age (Vrudhavastha), the body gradually weakens (*Shareera Shithilata*), leading to Rajonivritti, usually around the age of 50. This stage is primarily influenced by Vata dosha, which significantly impacts the female body.

The Laghu (light) and Ruksha (dry) qualities of Vata reduce the Dravata (fluidity) of Rasa Dhatu (nutrient plasma). This leads to a decrease in Rasa Dhatu both in quality and quantity, causing Dhatukshaya (tissue depletion), beginning with Rasa and progressing to Rakta and other Dhatus. As a result, Upadhatu (sub-tissues) are also affected, ultimately leading to Artava Nasha (cessation of menstruation).

Moreover, an aggravated Vata dosha can disturb Manas doshas (Rajas and Tamas), contributing to psychological imbalances such as mood swings, anxiety, and emotional disturbances.

Management

Ayurvedic approach to managing menopausal syndrome

Based on the above discussion, it can be inferred that Ayurvedic formulations with Rasayana (rejuvenating), Vata-shamana (Vata-pacifying), and Kapha-vardhana (Kapha-enhancing) properties can play a significant role in managing menopausal symptoms. Addressing imbalances during the early pre-menopausal stage helps reduce the severity of symptoms, making the transition into menopause smoother and more manageable.

Ayurveda offers a holistic and natural approach for a safe and comfortable menopausal transition. Treatment focuses on restoring Dosha balance through dietary modifications, Samshamana therapy (palliative care), internal detoxification (Panchakarma or Samshodhana therapy), Sattvavajaya Chikitsa (mental well-being therapies), Yoga, and Rasayana therapy for rejuvenation.

Diet for Vata-Dominant Menopause

- Include warm foods and beverages, maintain regular meal timings, and use digestive spices such as fennel and cumin.
- Reduce or avoid caffeine, refined sugar, cold beverages, salads, and other stimulants.
- Ayurvedic Lifestyle and Dietary Recommendations for Menopause Based on Dosha Dominance.

Vata-Dominant Menopause

Diet

- Favor warm, nourishing foods and beverages.
- Maintain a consistent meal schedule.
- Incorporate spices like fennel and cumin for digestion.
- Reduce or eliminate caffeine, refined sugar, cold drinks, and raw salads.

Lifestyle

- Establish an early bedtime routine.
- Regular oil massages using almond or olive oil.
- Practice meditation, yoga, and light exercises such as walking.

Herbs

Ashwagandha (*Withania somnifera*), Arjuna (*Terminalia arjuna*), Cardamom (*Elettaria cardamomum*), Garlic (*Allium sativum*), Guggulu (*Commiphora mukul*), Sandalwood (*Santalum album*), and Ziziphus (*Ziziphus jujuba*).

Pitta-Dominant Menopause

Diet

- Emphasize cooling foods and increase water intake.
- Include sweet, juicy fruits like grapes, pears, plums, mangoes, melons, apples, zucchini, yellow squash, and cucumbers.
- Opt for organic produce whenever possible.
- Use spices such as cinnamon, cardamom, and fennel.
- Avoid hot, spicy foods, heated beverages, and alcohol.

Lifestyle

- Use coconut or sesame oil for massages.
- Engage in meditation and relaxation techniques to manage emotions like anger and frustration.
- Limit sun exposure and intense physical activity.

Herbs

Aloe vera, Arjuna (*Terminalia arjuna*), Amla (*Emblica officinalis*), Saffron (*Crocus sativus*), and Sandalwood.

Kapha-Dominant Menopause

Diet

- Favor light, dry, and warm foods.
- Include fruits, whole grains, legumes, and vegetables.
- Use warming spices like black pepper, turmeric, and ginger.
- Avoid heavy foods like meat, cheese, sugar, cold foods, and chilled beverages.
- Weekly fasting can be beneficial.
- Consume most meals before 6 p.m.

Lifestyle

- Wake up early and maintain an active routine.
- Massage with mustard or linseed oil for circulation and detoxification.

Herbs

Cinnamon, Guggulu (*Commiphora* mukul), Mustard (*Brassica* nigra), Haritaki (*Terminalia chebula*) and Nagarmotha (*Cyperus rotundus*).

Panchakarma

- **Snehan:** (Appling medicated oil all over the body) Bala oil, Mahanarayan oil.
- **Swedan:** (taking steam) using Dashmul decoction, Pottali pind sweda.
- **Shirodhara:** Shirodhara found to be effective in the management of disturbed psychological symptoms. Shirodhara with Shatavari oil, Takra dhara, Dashmool kwath can be helpful [7].
- **Nasya:** (instillation of oil through nasal opening) Panchendriya vardhan oil, Anu tail.
- **Uttarbasti:** (medicated oil is instillation through the vaginal or urethral opening) Yastimadhu tail.
- **Pichu:** (medicated tampons kept in the vagina) Shatavari Tail, Shatdhaut Ghrita.

Ayurvedic Therapies for Menopausal Management

Basti Therapy

Among Panchakarma therapies, Basti (medicated enema) is particularly beneficial for managing Vata imbalance during menopause. Anuvasana Basti (oil-based enema) is commonly recommended to nourish and balance Vata dosha.

Yoga Therapy

Yoga is an ancient holistic discipline that encompasses physical, mental, moral, and spiritual well-being. The Sanskrit term Yoga signifies "union," symbolizing the integration of different aspects of the self.

According to traditional Yoga philosophy, there are eight limbs of Yoga:

- Yama-Ethical principles
- Niyama-Personal discipline
- Asana-Physical postures
- Pranayama-Breathing techniques
- Pratyahara-Withdrawal of senses
- Dharana-Concentration
- Dhyana-Meditation
- Samadhi-State of absorption

Among these, Asana, Pranayama, and Dhyana are the most widely practiced for menopausal well-being.

Recommended Asanas

- Savasana (Corpse pose)
- Padmasana (Lotus pose)
- Vajrasana (Thunderbolt pose)

Pranayama Techniques

- Sheetali Pranayama (Cooling breath)
- Ujjayi Pranayama (Victorious breath)

Scientific evidence suggests that Yoga therapy supports menopausal women by reducing the risk of cardiovascular diseases, insulin resistance, and bone mineral density loss. It also promotes psychological well-being, regulates sleep patterns, and enhances emotional stability.

Rasayana Therapy

Rasayana therapy is not only aimed at slowing down the aging process but also at promoting vitality and youthfulness. It enhances lifespan, memory, intelligence, physical strength, complexion, and overall health.

According to Acharya Charaka, Rasayana contributes to longevity, cognitive enhancement, a youthful appearance, radiant complexion, a strong voice, and physical resilience. It also fosters positive attributes such as truthfulness, self-respect, and vitality. Acharya Sushruta defines Rasayana as a means to slow aging, enhance longevity, boost vitality, and fortify the body against diseases.

Rasayana Herbs for Menopausal Health

- Triphala-A combination of Haritaki (*Terminalia chebula*), Vibhitaki (*Terminalia bellirica*), and Amalaki (*Emblica officinalis*), which balances all three Doshas and serves as a potent anti-aging agent (Vayasthapana).
- Ashwagandha (*Withania somnifera*)-Known for its rejuvenating properties, helping in stress management, hormonal balance, and overall vitality.
  - It is a powerful antioxidant & immune modulator.
  - It is one that improves strength, muscle mass and relieves stress.
  - In Menopause patient, it controls effectively the vasomotor symptoms (Hot flushes, night sweats, palpitation) Yasthimadhu (*Glycerrhiza glabra*).
  - It is another Rasayana drug which is prescribed for Menopause.
  - It is an excellent antioxidant, Immuno modulator & anti-depressant, memory enhancer.
  - It is described as a promoting agent for life, voice, hair, complexion, strength & libido.
  - Classical anti-aging Formulation e.g., Chyavan Prasha & Brahm Rasayan. Medhya Rasayana the Ayurvedic texts describe certain Rasayana drugs which specially influence the Medha and promote mental competence. Such Rasayan are called as Medhya Rasayana. Aacharya Charak has described four Medhya Rasayanas namely Sankhpushpi, Mandukaparni, Guduchi and Yastimadhu. Such Medhya Rasayana drugs have been scientifically studied in recent years and they have been reported to possess varying degree of Anxiolytic and psychotropic activity besides restoration of intelligence and memory.

Conclusion

Diet and Lifestyle Management for Menopause

Health concerns during menopause often stem from existing imbalances in the body. Diet plays a crucial role in maintaining hormonal balance during both premenopause and menopause. A well-rounded diet rich in fruits, vegetables, whole grains, and legumes can be beneficial, as these foods provide natural sources of phytoestrogens. However, balance and moderation are key, as excessive phytoestrogen intake can be as problematic as estrogen dominance post-menopause.

According to Ayurveda, persistent menopausal symptoms arise due to accumulated toxins and metabolic waste, known as AMA, within body tissues. To eliminate these impurities and restore equilibrium, traditional Ayurvedic detoxification methods, particularly Panchakarma, may be recommended.

In addition to dietary adjustments, lifestyle modifications play a significant role in navigating menopause smoothly. Symptoms experienced during this phase serve as a natural reminder to prioritize one's well-being and adopt a more mindful approach to health.

References

1. Wheln TJ, Goss PE, Ingle JN, Pater JL, TUDS, Pritchard K, *et al*. Assessment of quality of life, In M.A.17: A Randomized placebo controlled Trial. J Clin Oncol. 2005; 23(28): 6931-40.
2. US Census Bureau. Global aging into the 21st century. The wall chart by US, 1996.
3. Poomalar GK, Bupathy J. Quality of life during and after menopause among rural women. J Clin Diagn Res. 2013;7(1):135-139.
4. Blumel JE, Castelo-Branco C, Binfa L, *et al*. Quality of life after the menopause: A population study. Maturitas. 2000;34:17-23.
5. Vaidya J. Sushruta Samhita, Nibandhsangrahavyakhya, Sootrasthana-14/7. Varanasi: Chaukhamba Orenatila, 1980, p. 54.
6. Behram S, Anklesaria R, Soneji M. Menopause current concepts: "Risk-Benefit Balance" in management of menopause. New Delhi, Jaypee, 2006, p. 194-205.

7. Ettinger B, Grady D, Tosteson AN, Pressman A, Macer JL. Effect of the Women's Health Initiative on women's decisions to discontinue postmenopausal hormone therapy. Obstet Gynecol. 2003;102(6):1225-1232.
8. Li C, Samsioe G, Lid.
9. Rossouw JE, Anderson GL, Prentice RL. Risks and benefits of estrogen plus progestin in healthy postmenopausal women. Principal results from the Women's Health Initiative randomized controlled trial. JAMA. 2002;288(3):321-333.
10. Shastri AD. Sushruta Samhita with Dalhana commentary, Ayurveda-Tattva-Samdipika Vyakhya, Sutrasthana 14/5. Varanasi: Chaukhambha Samskrit Samsthan, 2nd Ed, p. 36.
11. Sastri SSN. Charaka Samhita of Agnivesa, Vidyotin Hindi Commentary. Varanasi: Chaukhambha Bharati Academy, 2009, p. 5.
12. Shastri KA. Susruta Samhita of Maharsi Susruta Ayurveda, Tattva-Sandinpika Hindi Commentary. Varanasi: Chaukhambha Sanskrit Sansthan, 2010, p. 6.

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Role of Nirgundi Tail in the management of Dushta Vran as a Shodhan and Ropan Karm

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Abstract
Dushta Vrana is a rupture of contuinity of body tissue is called *Vrana* (non-healing ulcer). Normally wounds are healed by itself with hygiene. Factors affecting on wound are Contamination of wound, insufficient blood supply, tissue tension and radiation are the local factors are responsible for delay in wound healing. In Ayurveda non healing ulcer can be correlated with *Dushta Vrana.* The presence of *Dushta Vrana* can damage the condition of the patient. Acharya Shushruta mentioned Shashti (60) upakrama [1] for management of Vrana. Acharya charaka classified vrana into 20 types among them dustha vrana is one of them.

Keywords: Dushta vrana, non-healing ulcer, Shashti upkram

Introduction
Ulcer is discontinuity of skin, which defined as "A local excavation of the surface, of an organ of tissue produced by sloughing of necrotic tissue. Ulcer word is derived from Latin word "ulcus". It means an open sore or lesion of the skin or mucous membrane accompanied by sloughing or inflamed
necrosed tissue. Vrana is the most important and widely described chapter of Shalya Tantra by Acharya Sushrut. Vrana is the condition associated with *Dhatu nasha* i.e. destruction of tissue, which are characterized by *Vedana*, *Srava* and *Vikriti*. The application of medicated oil is Taila Upakrama. Many medicated Taila are used for Vrana especially for Shodhana and Ropana Karmas. Shodhana Taila is applied to Dushta, Utsannamamsi and Alpa SraviVrana whereas Ropana Taila is applied to Shuddha Vrana [2].
A case report of Dushta vran successfully treated by local application of *Nirgundi Tail* [3] as a *Shodhan* and *Ropan* has been presented here. Oil play an important role in woun healing process without major complications, does the shodhana of Dushta Vrana, remove all slough and vrana becomes Shuddha and thus enhances wound healing. Vrana associated with Durgandha, Kleda and Picchilata, Shodhana should be done by using Kashaya of various Dravyas or Shodhana Taila. Ropana Kriya should be adopted in Vranas which show the features of Shuddha Vrana. Kashaya, Varti, Kalka, Sarpi, Taila, Rasakriya and Avachoornan are the different methods for Ropana.

Case Report
Type of Study: Observational single case design.
Study centre: CSMSS Ayurved Mahavidyalaya and Rugnalay, Chhatrapati Sambhajinagar, Maharashtra, India.
A 42years old male came to Shalya Tantra OPD on 04-09-2024 presented with complaints of traumatic non healing ulcer on with severe pain at Rt Ankle region since last 2 month almost, continuously mild pus discharge from wound, inflamed and oedematous skin margins.
H/O - RTA (2month ago)
Local Examination - Rt Ankle region
Active watery discharge
Slough present
Approx size (4*2*1) cm

General Examination
Temperature - 98°F
Pulse Rate - 84/min
RR -20 /min
Blood Pressure -130/80 mmHg
No evidence of cyanosis / koilonychias

Systemic Examination
CNS - Conscious and well oriented.
CVS - Nothing significant
RS - Clear

Management for 21 Days
Cleaning with Trifala kwath to lating wound and dressing with Nirgundi Tail BD
Aampachak vati 2 BD
Gandhak rasayan 1 BD
Sukshma trifala vati 2 BD

Material and Methods
In this study *Nirgundi tail* was used for local application.

Treatment Plan
Wound was cleaned with Triphala Kwath daily, after proper cleaning with sterile swabs, *Nirgundi tail Pichu* was locally applied and dressing was done with sterile guaze and bandage once daily. Total duration of treatment was almost 3 weeks for wound healing.

Observation table

	Noted Observation				
	Before T/t	**3rd day**	**7th day**	**14th day**	**21th day**
Pain	Severe pain	Less pain	Mild pain	Mild pain	No pain
Pus Discharge	Present	Absent	Absent	Absent	Absent
Edema	Present	Present	Absent	Absent	Absent
Size	4*2*1 cm	4*2*1cm	3.5*1.5*0.5 cm	2*1 cm	Healed

Mode of action
Nirgundi tail promotes wound healing as it potent anti-inflammatory properties due to the flavonoids present in the plant which helps to reduce inflammation at the wound site with faster tissue repair due to production of collagen and also act as regeneration, antioxidant activity and improved rate of wound contraction and reduction in healing time.

Results
The clinical sign of *Dushta Vrana* were well improved by the end of 2nd week and the wound was healed completely at the end of 3rd week with minimal scar. Further follow up was continue up to 1month, no hypergranullation or keloid formation were noted.

Discussion
- **Effect on Vrana Vedana:** *Nirgundi Tail* has *shodhan* property, which cleaned the wound, and gradually healthy wound reduce the pain.
- **Effect on Vrana Varna:** Slough was completely reduced and floor was covered with reddish healthy granulation tissue, *Nirgundi Tail* has *shodhan* and *ropan* property which shows amazing result.
- **Effect on Vrana srava:** Purulent discharge was completely reduced at the end of treatment. Shodhan property of Tail, slough out the unhealthy tissue which decrease Vransrav and foul smell also.
- **Effect on Vrana Aakriti:** Application of *Nirgundi Tail* helped to reduce the wound size by promoting healing and the rate of contraction.

Conclusion
On the basis of this case study, it can be concluded that, local application of *Nirgundi Tail Pichu* was found to be very effective in the management of *Dushta Vrana* (non-healing ulcer).
Nirgundi Tail has high efficacy in *Vrana Shodhana and Vrana ropana* with minimal scaring without producing any hypergranullation or any recurrence.
It was significantly helped in reduction of the signs and symptoms of the *Dushta Vrana*, with enhancing process of wound healing and reduces any adverse effect.

References
1. Shastri A. *Sushruta Samhita*, Edited with Ayurveda Tattva Sandipika. Varanasi: Chaukhamba Publications; 2014. Part 2, Sushruta Chikitsasthan, Chapter 1, Shloka no. 8, p. 5.
2. Shastri A. *Sushruta Samhita, Chikitsasthanam* [1/65-67]. Varanasi: Chaukhamba Prakashan; 2006.
3. Chakrapanidatta. *Chakradatta*. Varanasi: Chaukhamba Sanskrit Sansthan; Shloka 45.20/21.
4. Deshpande PJ, Sharma KS. Treatment of fistula in ano by advanced technique: Review and follow-ups of 200 cases. Am J Proctol. 1973 Feb;24(1):49-61.
5. Kumar S, Verma R, Singh R. Role of Nirgundi Taila in wound healing: A clinical case study. J Ayurveda Integr Med. 2022;13(2):123-127.
6. समूलपत्रां निर्गुण्डीं पीडयित्वा रसेन तु। तेन सिद्धं समं तैलं नाडीदुष्टव्रणापहम् ॥ हितं पामाऽपचीनान्तु पानाभ्यञ्जननावनैः । विविधेषु च स्फोटेषु तथा सर्वव्रणेषु च ॥ २१॥

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A complete analysis and management of Bhagandar in the recent era

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Abstract
All the Asthamaharoga, Bhagandara is the most challenging to cure. In line with Ayurveda. Unhealthy granulation tissue lines the fistula in ano, an aberrant communication channel between the anal canal and the perianal area. The main cause of fistula in ano is disturbed bowel and food habits brought on by an inactive lifestyle. conservative management of fistula is completely ineffective. Surgical intervention is essential in allopathy. However, not all cases of fistula in Ano respond well to surgical treatment because they may recur after a while. Thus, Ksharsutra treatment from Ayurveda, the Science of Life, is the only hope for patients with fistula in Ano. The idea behind Ksharsutra is, a medicated thread, is to cut the tract, scrape away the unhealthy granulation tissue, and allow the tract to heal.

Keywords: Bhagandar, Management, Ayurveda

Introduction
The Sushrut Samhita, a textbook on "Ancient Indian Surgery" penned by Sushruta, the Father of Surgery, circa 1000 B.C., provides the most scientific account of Bhagandar. Bhagandar as are single or multiple openings in Guda that are linked to pain and various discharges. Under astamahagada, Acharya Sushruta has explained the ramifications of bhagandara. Because of an unhealthy lifestyle, the disorder has escalated. It's comparable to Fistula in Ano. An irregular hollow tract or cavity lined with granulation tissue is called a fistula in ano. For the patient, it is an unpleasant condition that frequently causes problems that cause anxiety. It has an impact on their way of life. There are several surgical techniques available for the treatment.
Acharya Sushruta has described a number of Ayurvedic treatment modalities, including Ksharasutra therapy and Chedana karma. fistulectomy, fistulotomy, seton, and so on in contemporary science. But Ksharasutra is a significant parasurgical treatment for bhaganadara because of no recurrence, no anal ring damage, incontinence, and complications. A special medicated thread called ksharasutra aids in both cutting and draining the fistulous tract. It functions by simultaneously cutting and healing the fistulous tract. As a result, there is no chance of incontinence and less chance of harm to the anorectal sphincter muscle. It is inexpensive, simple to use, and safe. It functions well on a variety of stages [1].
Fistula in Ano as defined in contemporary texts Ano-in-Ano fistula is an inflammatory tract with an internal (Primary) opening in the anal canal or rectum and an external (Secondary) opening in the perianal skin. Fibrous tissues and unhealthy granulation tissues line this tract [2].
Sushrut Samhita defines bhagandar (Fistula in Ano). Bhagandar is the term for a disease or condition that causes intense referred pain to the Bhag (Perineum), Gud (Anal), and Basti (Pelvis). The symptom, known as Bhagandar, starts as a boil (Abscess) around the perianal area. If left untreated, it may rupture and turn into a discharging track [3]. The pathophysiology of Ano fistula in contemporary literature Incontemporary medical science, aetiology is separated into two groups.

Nonspecific: Crypto glandular infection, anorectal abscess sequel, or prior pyrogenic abscess are the causes of this. Particular Numerous illnesses or underlying pathologies, such as tuberculosis, anal fissures, ulcerative colitis, Crohn's disease, leukaemia, colloid carcinoma, foreign body intrusion, inflammation of the pelvis, trauma, radiation exposure, lymphogranuloma venerum, immunocompromised state, infectious dermatitis, and other rectal, obstetrical, or gynaecological procedures, can cause fistulous conditions.[4] Bhagandar pathogenesis (Samprapti) in Ayurveda Pathogenesis Sushrut has eloquently explained Bhagandar's pathogenesis in Sushrut Samhita. According to his quote, a person's body's Vata becomes aggravated and localised in the anal canal when they engage in Mithya AaharVihaar,

or unhealthful eating and lifestyle habits. Additionally, it vitiates the blood and muscle, resulting in Pitika (Boil). If this condition is not treated promptly, Pitika (Boil) will suppurate and burst, creating a discharging track known as "Bhagandar [5]." The Charak Samhita mentions pathogenesis. Charak has provided a very useful description of the pathogenesis of Bhagandar. The Charak Samhita states that certain etiological factors, such as horseback riding, Krimi Bhakshan, Asthi Kshanan, Pravahan, and Utkataasan, vitiate the doshas and cause boiling at the perianal region, which bursts after suppuration and turns into Bhagandar. In this case, any infection brought on by a microorganism or a crypto glandular infection may be associated with Krimi Bhakshan.

Trin-Asthi Kshanan can be regarded as Bhagandar's sought because of trauma; Pravahan strains during defecation, as evidenced by dysentery, etc., resulting in inflammatory changes in the rectum and anal canal; and Utkataasan sits in a squatting position all the time, which causes ischaemia and micronecrosis at pressure points. In the current context, horseback riding is comparable to excessive motorbike riding in that both lead to ischaemic necrosis at the cellular level, which in turn causes inflammation and infection [6, 7]. According to Ashtanghridayam Samhita, pathogenesis Acharya Vagbhata listed a few specific causes of Bhagandar in Astang Hridayam, including prolonged riding on an elephant or horse, sitting on hard surfaces, squatting posture, the maturation of past sins, mistreating ascetics, etc.

Vagbhata has included two very different causative factors in this case. It is unclear why the development of sinful deeds from past lives and abuse of ascetics are included, but we can interpret this as engaging in indecent behaviour (anti-savorable behaviour as recommended in Sadvritta) by a non-self-possessed individual, which vitiates doshas. Pathogenesis as stated in the Samhita of Vagbhata Indulgence in the aforementioned factors initiates pathogenesis by causing rectum blood and muscle tissue vitiation, which is followed by ulcer formation (Vran), which is preceded by pitika (Boil/Eruption). If left untreated, this condition, known as Bhagandar, results in a discharge opening that can be either external or internal around the perianal area [2].

Clinical characteristics of Ano fistula in contemporary literature recurrent discharging boils with one or more external openings are the hallmark of fistula in ano in ano. According to contemporary science, the other clinical manifestations include internal openings felt as nodules on the ano rectal wall and granulation tissues pouting out from the external opening of the fistula in Ano (chronic cases). Similarly, suppuration may cause skin tenderness and indurations during an inflammatory stage accompanied by fever. Ayurvedic clinical features Clinical characteristics listed in the Sushrut Samhita in the Ayurvedic text, the signs and symptoms of Bhagandar are nicely explained. In order to diagnose Purv roop as soon as possible and improve management, even its prodromal symptoms have been described.

The symptoms of Bhagandar include pain in the anal area following deification, itching and swelling around the perianal area, lower backache with pain at the anal area following prolonged driving, and suppurative induration (abscess formation) at the perianal area associated with pain and burning sensation at the anal area. Bhagandar is characterised by severe refereed pain to Bhag (Perineum), Gud (Anal), and Basti (Pelvis). The clinical features are beautifully described according to the stages, or the progression of the disease, which is known as Shatkrikal. The cardinal features are further explained according to the pre-dominance of doshas, such as in Vataj type, the discharge is associated with flatus, faeces, and pricking pain. Similarly, the Kaphaj type has a sticky discharge and relatively more itching, while the Pittaj type has a very bad odour and burning pain [3-5].

Pathogenesis

Under the heading Shatkriyakal (six periodic stages of fistula in Ano), the Sushrut Samhita describes the entire pathogenesis of Bhagandar. This includes the following stages: Sanchaya (stage of accumulation of dosha at normal sites), Prakopa (stage of provocation), Prasara (stage of propagation), Sthana sanshraya (stage of localisation), Vyakti (stage of manifestation), and Bheda (stage of complication), which accurately depicts the beginning and progression of the disease. Fistula in Ano classification in contemporary texts There are numerous classifications in contemporary texts, including those proposed by Milligan Morgan & Goligher, Ernst Mile, Melcheor Goz, Steltzner, and Park (based on their relationship to sphincters); however, Milligan Morgan & Goligher's classification is more widely used.

Ano's low-level fistula: This fistula opens into the anal canal beneath the ano rectal ring. In Ano, they are further separated into intersphincteric, suprasphincteric, subcutaneous, and submucosal fistulas. High level Fistula in Ano: This type of fistula opens from the ano-rectal ring into the anal canal. They are further subdivided into Pelvicrectal Fistula in Ano, Trans Sphincteric, and Extra Sphincteric or Supra Leva [6-7].

Treatment of bhagandar (Fistula in ano) according to Sushrut Samhita

Bhagandar's stage-by-stage treatment has been exquisitely described by Acharya Sushruta. He has argued that when the perianal area is in the unripened stage, one should follow "Apatarpan" to "Virechan" actions of "Vran chikitsa" (wound management). Once the Pitika (Boil) reaches the ripening stage, one should practise Snehan and Avagah Swedan (oleation and fomentation). Additionally, if the Pitika does not resolve, the Fistula in the Ano probe should be used to search the track (Fistulotomy). Following a fistulotomy, the explored ulcer bed should either be cauterised (Agnikarm) or treated with Kshar (medicated caustic paste). Following surgery, the patient is advised to take a "Swedan" (fomentation/Seitz bath) and "Yashtimadhu tail" (irrigation of medicated oils over the ulcerative lesion) for pain management. "Bhagandar nasahan tail," or medicated oil, can be irrigated through the fistulous track to make the track patent in chronic and recurrent conditions where the fistula in the Ano track is partially fibrotic or the track is not patent, as well as in those who are unwilling to have surgery. Additionally, the Sushrut Samhita's "Visarp Nadi Stanrog chikitsa" chapter describes how "Ksharsutra" can be used to treat patients who are unwilling or unfit for surgery for Nadi vran (sinus). Acharya Sushrut also states that Bhagandar can be treated with the same "Ksharsutra" in this context.

Treatment of bhagandar (Fistula in ano) according to Charak Samhita

After reading the Charak Samhita, we were astounded by how beautifully the treatment plan was explained. In the "Shwayathu Chikitsa" Chapter, Charya Charak discusses Bhagandar's treatment in relation to Bhagandar Chikitsa. According to Charak, the patient should receive purgation if the Pidka (Boil) does not go away on its own. Additionally, a probe should be used to investigate the fistula in the Ano

track. The ulcer bed should be cleaned, cauterised with hot oil, and then treated similarly to a Vran (ulcerative lesion). However, in long-term situations, wound care should be performed and the fistula in the Ano track removed using "Ksharsutra" ligation.

The Chakradata Samhita mentions the treatment of Bhagandar (Fistula in Ano). The chapter titled "Bhagandar Chikitsa" in the Chakradata Samhita discusses Bhagandar's treatment. The Chakradata Samhita describes the following Kriya sutra (Treatment line):

Apakwa stage (Un-ripen abscess)

The anal area should be dried and cleaned as soon as swelling is noticed (Shodhan karma). To prevent suppuration, the patient should be kept on "Apatarpan," which entails a light diet, purging, and bloodletting. The afflicted area should be covered with Vat patradi Lep, a medicated paste poultice. Stage of Pakwa (Suppurative-abscess): Fistula in Ano Probe should be used to explore the track after the Pidka (Boil) has reached the Pakwa stage (Suppuration). Following a fistulotomy, the explored ulcer bed should either have Agnikarm (cauterisation) or Kshar applied. Rasanjanadi Lep and Kushthadi Pralep, or the local application of medicated paste, have been promoted in Chakradatta.As a palliative measure, the internal use of Navkarshik Guggulu and Saptavinshati Gugullu is also mentioned, as is the application of Snuhi dugdhadi Varti (Medicated wicks). Furthermore, Chakradata has supported the use of Ksharsutra in the management of Bhagandar based on the same principle that is mentioned in the chapter "Nadi vran chikitsa," where its usefulness for exploring Nadi Vran (Sinus) is mentioned. Additionally, the Chakradata Samhita's chapter on Arshchikitsa describes the demonstration of Ksharsutra Nirman (The methodology of preparation) and Pratisarniya Kshar (The procedure of local application). However, only Haridra churna (Turmeric powder) and Snuhi Kshir (Latex of Euphorbia nerrifolia) are mentioned in the Ksharsutra preparation. None of the classical texts contain instructions on how to apply Kshar coating. The alkaline property or action of medicated thread (Ksharsutra) is most likely the basis for the nomenclature of medicated thread. Therapy for Bhagandar (Fistula in Ano), as described in Vagbhata Samhita Vagbhata has also outlined the stages of managing Bhagandar (Fistula in Ano): Pitika (Un-ripen abscess) Stage: To prevent ripening or suppuration, induration can be held back with effective treatment, such as Panchkarma techniques like Vaman (Induced emesis), Virechan (Induced purgation), and Raktamokshan (Bloodletting) [8-9].

Pakwa (Ripen-abscess) stage

At the bed of the investigated track, incision and drainage of Pakwa vranashoth (abscess) are described, followed by the local application of Kshar (medicated alkaline paste) or Agnikarma (cauterisation). Regarding "Parikshepi Bhagandar" (high anal complex fistula in Ano), a special mention Vagbhata has explicitly supported the exploration of the fistulous track by "Ksharsutra" ligation in cases of "Parikshepi" type Bhagandar (high anal complex fistula in Ano). The only direct classical text reference that instructs using Ksharsutra for Fistula in Ano ablation is this one. When discussing Nadi vran chikitsa in the chapter "Granthi Arbud Shlipad Apachi Nadi Pratisha Adhyay," Vagbhata suggests using a variety of "Varti" (medicinal wicks) to test the track or medicated oil for "Nadi vran puran" (irrigation purposes). Furthermore, Vagbhata has recommended in "Nadi Vran" management that if a patient refuses surgery or is deemed unfit for it, Ksharsutra can be used to explore the sinuses and investigate the fistulous track. Handling of Bhagandar (Fistula in Ano) in the textbook "Bhaishajya Ratnavali" The management of Bhagandar is explained in detail in the chapter "Bhagandar chikitsa prakaran" of the textbook "Bhaishajya Ratnavali" (Vidyotini Commentary) as follows: Procedures such as Vaman (induced emesis), Virechan (induced purgation), and Raktamokshan (bloodletting) are recommended for the Apakwa stage (unripen abscess).

Bhagandar stage (Established Fistula in Ano)

You can try Vran Varti (medical wicks) made from Daruharidra (Berberis aristata), Ark ksheer (Latex of Calotropis gigantea), and Snuhi ksheer (Latex of Euphorbia nerrifolia). For the first time, a Bhagandar patient's wounds should be cleaned using "Triphala kwath vran dhavan," also known as a Seitz bath with a medicated decoction. Further, Nishaadyam Tailam or Saindhavadi Tail - Vran-puran (medicated oil irrigation) can be tried locally in Bhagandar. Similarly, Narayan ras, Saptavinshati Guggulu or Saptang Guggulu are advocated internally, for the effective administration of Bhagandar. Additionally, the use of Ksharsutra for Bhagandar treatment and a brief explanation of the "Ksharsutra application" procedure are mentioned in the chapter "Nadi Vran Chikitsa." The process for applying for Ksharsutra: The Ksharsutra embedded probe, which resembles a needle with an eye, should be inserted from the Bhagandar's external opening and allowed to follow the track until it reaches the internal opening. It is then smoothly removed through the anal canal. [28] The author has also mentioned indications of Ksharsutra in other hyperplasic conditions, and it has been recommended to ligate Ksharsutra at the base of pedunculated growth, fibroid, tumour, etc. to achieve necrosis-induced excision. The Ksharsutra Nirman, or procedure for preparing Kshar (alkaline paste), is perfectly illustrated in the text book "Ras Tarangini."

Pathya pathya (Do's and Don'ts) advocated for bhagandar

The goal of promoting Pathyapathya, or the Dos and Don'ts, for Bhagandar patients is to prevent the disease from returning. For a year following their recovery from Bhagandar, the patient must refrain from intense physical activity, excessive sexual activity, demanding jobs or fighting until they are exhausted, excessive driving, and heavy meals. The causative factors mentioned are basically responsible for Agnimandya (Digestive process suppressants) and can further vitiate the Vata dosha, ultimately, triggering pathogenesis of Bhagandar [10-12].

Conclusion

According to the comprehensive explanation of Bhagandar in Ayurvedic literature, this illness may be connected to Ano fistula. The Meaning Notwithstanding the numerous advancements in the surgical treatment of ano fistula, the Ayurvedic para-surgical technique Ksharasutra continues to be a more effective and widely accepted scientific treatment, with a lower recurrence rate and a lower risk of incontinence than modern treatment alternatives. We attempted to gather all of the disparate descriptions of Bhagandar that are found in different Ayurvedic texts and include contemporary descriptions as well in this article.

References

1. Gupta SK, Khanna V, Gupta G, Bharadwaj A. A comparative study to evaluate the efficacy of standard Fistulectomy procedure and Kshar-sutra ligation in the management of fistula in ano. Int J Res Ayurveda Pharm. 2014;5(4):470-473.
2. Goligher J, Dutie H, Nitin H. Surgery of Anus, Rectum and Colon. Fistula in Ano. New Delhi: AITBS Publishers and Distributors; c2004. p. 178-80.
3. Srikamth Murthy KR, editor. Sushrut samhita by Prof K.R.Srikamth Murthy with the commentaries Nibandh Sangraha of Dalhanacharya and Nyay Chandrika of Sri Gayadas. Nidansthan, Chapter 4 Bhagandara Adhyaya. Varanasi: Chaukhambha Orientalia; c2005. p. 521.
4. Goligher J, Dutie H, Nitin H. Surgery of Anus, Rectum and Colon. Fistula in Ano. New Delhi: AITBS Publishers and Distributors; c2004. p. 5-10.
5. Srikamth Murthy KR, editor. Sushrut samhita by Prof K.R.Srikamth Murthy with the commentaries Nibandh Sangraha of Dalhanacharya and Nyay Chandrika of Sri Gayadas. Nidansthan, Bhagandara Adhyaya. Varanasi: Chaukhambha Orientalia; c2005. p. 4-521.
6. Sharma RK, Dash B, editors. Charak samhita (Agnivesa) with the commentaries Chakrapani Dutta on Ayurved Dipika. Chikitsa Sthan, Chapter Shotha Chikitsa. Varanasi: Chaukhambha Sanskrit Series Office; c2005. p. 515.
7. Sharma RK, Dash B, editors. Charak samhita (Agnivesa) with the commentaries Chakrapani Dutta on Ayurved Dipika. Chikitsa Sthan, Chapter Shotha Chikitsa. Varanasi: Chaukhambha Sanskrit Series Office; c2005. p. 515.
8. Murthy KRS, editor. Ashtang Hridayam- Vaghbhat. Chikitsa Sthan, Chapter 8 Arsha Chikitsa Adhyay. Varanasi: Chaukhambha Krishna Das Academy; 2006. p. 269-72.
9. Murthy KRS, editor. Ashtang Hridayam- Vaghbhat. Chikitsa Sthan, Chapter 8 Arsha Chikitsa Adhyay. Varanasi: Chaukhambha Krishna Das Academy; c2006. p. 269-72.
10. Murthy KRS, editor. Ashtang Hridayam- Vaghbhat. Chikitsa Sthan, Chapter 8 Arsha Chikitsa Adhyay. Varanasi: Chaukhambha Krishna Das Academy; c2006. p. 265.
11. Srikamth Murthy KR, editor. Sushrut samhita by Prof K.R.Srikamth Murthy with the commentaries Nibandh Sangraha of Dalhanacharya and Nyay Chandrika of Sri Gayadas. Nidansthan, Chapter Bhagandara Adhyaya. Varanasi: Chaukhambha Orientalia; c2005. p. 4-521.
12. Srikamth Murthy KR, editor. Sushrut samhita by Prof K.R.Srikamth Murthy with the commentaries Nibandh Sangraha of Dalhanacharya and Nyay Chandrika of Sri Gayadas. Nidansthan, Chapter Bhagandara Adhyaya. Varanasi: Chaukhambha Orientalia; c2005. p. 4-521.

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To study efficacy of Nimba on Yonikanda WSR to pruritus vagina

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Abstract
Over the few decades man has literatly conquered the "Everest" of advanced Technology However still the indicator of prosperity and happiness of any community is judged by its health index and not merely by its materialistic advancement. Furthermore the overall health index of any community is governed by the health of the women in that community, thus special attention should be provided to maintain a healthy womanhood.

But in daily medical practice varied problems are seen in woman. The most common ones are.

- Raja Kshinata, Rajaovrdhi and Kashtartava.
- Yonikandu, Yonishula, Yonidah.
- Recurrent abortions and infertility.
- Sutika rog and stana-rog etc.

Amongest these various problems Yonikandu (Pruritus) has been studied in the present work because

- It is a very common gynecological problem. Statistical data shows that the revealed percentage of patients with Yonikandu is around 13, 7% which is relatively high.
- For some, patient it becomes very irritating, affects a person's concentration and general efficiency. It may also cause disturbance in sleep.
- The complaint may lead to hazardous complications like shotha Ghrushtavrana, puya utpatti, Yoni Dushti.
- Yonikandu also seen in some cases is indicative of other hidden disorders e.g. diabetes.

Though Yonikandu is quite common and a necessary remarkable problem connected with woman welfare, an adequate and complete remedy is not known or available at preset, in study to assess the undertaken. And treated with Nimb both as internal medicine and locally by kwath. And result were obtained.

Keywords: Raja Kshinata, Rajaovrdhi and Kashtartava, Sutika rog Yonikandu Nimba

Introduction
The complaint may lead to hazardous complications like shotha Ghrushtavrana, puya utpatti, Yoni dushti. Yonikandu also seen in some cases is indicative of other hidden disorders e.g. diabetes. Though Yonikandu is quite common and a necessary remarkable problem connected with woman welfare, an adequate and complete remedy is not known or available at preset, in study to assess the undertaken.

Aims and Objective

- To evolve the better management technique for Yonikandu and to assess the integrity of Ayurvedic medication for the same.
- To evaluate the clinical efficacy of Nimba in Yanikandu.
- To observe side effects if any in the course of treatment.
- To evolve a new innovative strategy in Yonikandu irrespective of the causal factor, for effective treatment of the problem.

Experimental Design
Selection of patients
Patient complaining of Yonikandu were, selected irrespective of their age strivishishta avastha and cause.

Trividha Pariksha

- With the help of darshana, sparshana and prashna pariksha following points were noted.
- Yonikandu and other associated symptoms of patient Yonisrava, Shula, daha, toda, Kashtasanga etc.
- Age, Occupation, Avastha, prakriti, noted along with past history family history.
- The nature of rajah pravartana and vyavaya were recorded previous prasava and history of sagarbhavastha were also noted.
- General examination of pt. carried out yoniparikashana was also carried out yonivranekshna yantra was used whenever necessary, during yoniparikshna the following points were observed and recorded.
- The site of manifestation of Yonikandu (i.e. bahy yoni pradesha/bhagoshta Pradesh Mutrandhra/Prathamavarta)
- Presence of any other local signs like araktata, pitika, karshnya, grishta vrana, shotha, sphota etc were checked.
- While examining prathamavartha the following points were noted

Colouration of prathamavartha, shwetabha, arakta etc. ii) Presence of srava was noted and if any srava was detected following points were recorded.

- Amount of srava.
- Colour of Srava Shweta pita etc.
- Consistency of srava tanu, picchila, dadhiwat etc.
- Smell-foul smell.

Sparsha Ushno/Shita

Sparshasahatva was also noted

With the reference of dwititya-avarta, its shape presence of any growth garbhashaya mukhapaka (erosion) or any other anamoly was specifically mentioned if present.

Bimanual examination was carried out if required and the points regarding size, position, motility of garbhashaya were recorded.

Laboratory Investigations: i) Hb, ii) BSL, iii) Urine (R), iv) VDRL v) HIV

Line of treatment

The general line of treatment designed for the study was as follows:-

- **Abstinence:** The patient was strictly advised to avoid the possible causative factors, namely doshaprakopaka aharavihara, consumption of Fish, cured, milk, products vyavaya vikriti if any, contact with allergic substances etc.
- **Selection of the drug:** Nimba was the drug of choice as it fulfilled most of the required criteria. The material of the drug (Nimba) was authenticated by botanical and pharmacologyical experts.

Route of administration systemic administration combined with local application of Nimba was regime followed

- **Systemic administration:** Nimba has a bitter taste, it was made palatable by making tablets of it the dose was fixed at 1-3 gm daily in divided closes.
  However certain alterations were made according to strivishista avasta presence of any other disease, intensity of the symptoms etc.
- **Local treatment:** Kwatha (decoction of Nimba) was ussed for local treatment. The kwatha was used in the form of yoni parisheka accompanied by yonidhavan. In case of patients contraindicated for douche (acute genital spepsis, menstruation, pregnancy, puerperal period) valval rinse usually accompanied by vulval swabbing was perferred. d) Duration of treatment seven days is prescribed. This in also practically convenient. Considering these two facts the duration of treatment was fixed as seven days.

Sr. No.	Signs and symptoms	I (+)	II (++)	II (+++)
1	Frequency of Yonika du in 24 hrs.	1-2 times	5-6 times	Repeatedly
2	Serenity / intensity experienced by patient	Mild	Moderate	Intense
3	Efficiency and concentration	Not affected	Slightly effected	Affected remarkably
4	Associated local complaints	Srava Nil	Srava mild to moderate	Srava Profuse
5	Local examination	No abnormality	Discoloration	Scrath marks/ulceration rash/boils/oedema etc.

Dravya Vichara Nimba / Azardiracta Indica

Family	Meliaceae	
Gana		
Charaka	Kandughna	
	Aragwadhadi	Tiktaskandha
		Guduchyadi, Lakshyadi
Sushrata	Vamanopaga	
Rasa		Tikt, Katu, Kashay
Vipaka		Katu
Virya		Shita
Dosh Ghnata	Kaphghnapltlaghna	

Daily observations and records

- During observation period the time required for gradual relief of Yonikandu and associated symptoms was noted accordingly.
- A record of the healing of other lesions (i.e. ulcers, scratch marks, oedema, boils, etc) was also kept.
- Examination by yonivranekshana yantra (per speculum examination) was oomeal out, if required, usually on the first, fourth and seventh day of treatment and the findings recorded.
- A note on the relief obtained in seven days was mentioned. In case of patients not getting total relief in seven days, the possible evident causes were mentioned.

- Follow up.

After the schedule was over, the patient was asked to return after a week for a check up to verify any evidence of recurrence which if any was suitable recorded.

Mode of action on Yonikandu

Nimba

- Acts on rasa, rakta and mamsa dhatu which are structurally and functionally associated with tryavarta yoni.
- Its acts on bahirmukhi srotas and scrapes off the accumulated Kha malsa in them.

These facts explain the analysis of Kandughna action of Nimba

Actions of Azardiracta Indica

Antimicrobial activity

It showed antimicrobial activity against e-coli, *staphylococcus aureus* and *salmonella typhi*

- It shows anti amoebic effect,
- It shows antifungal agent.
- It showed inhibitory acitivity against condidia albicans. *C. Tropicalis, C. Globrat*.

Conclusion

- It is noteworthy that the incidence of Yonikandu is quite remarkable 13.7% revolved percentage.
- The incidence of Yonikandu is observed in all possible age group i.e. reproductive period and onwards (i.e. upto senility).
- It is noteworthy that the disease incidence of Kandu is independent of occupation or prakriti.
- There is a high incidence of the disease during pregnanacy and thus seems to be avastha dependet.
- The cases can be classified as Yonikandu due to Doshalakshana, b) Strivishistha Vyadhi, c) Sarvadehika Vyadhi Twakroga, e) Independent Yonikandu vyadhi.

The relief obtained by the study drug was irrespective of above mentioned diagnosis, besides the symptoms like vaivarnya, srava, Ghrushta vrana, Daha also weer relieved in the due course.

Thus to conclude, the test drug *viz*. Nimba kandughna is completely effective against Yonikandu by treating patients through the oral route as well topical application for a period of 4 to 7 days.

It is worth noting that no side effects were notice either during the period of treatment or thereafter. The drug was also safe to be administereed during pregnanacy.

Conclusion

The study indicates that Yonikandu is a common and significant issue among women, affecting individuals across various age groups and especially during pregnancy. The treatment with Nimba (*Azadirachta Indica*) demonstrated significant efficacy in alleviating symptoms such as itching, discharge, and related complications, with no observed side effects. The combination of oral and topical application of Nimba resulted in notable relief within a 4 to 7-day period. The findings suggest that Nimba's Kandughna properties effectively address the underlying causes of Yonikandu, irrespective of the specific diagnosis. Furthermore, the safety of Nimba, including its suitability for use during pregnancy, highlights its potential as a reliable treatment option for managing Yonikandu.

References

1. Pt. Gopala Shashtri Nene, Pt. Haragovinda Shshtri. Manusmriti with Manuartha Muktavali Commentary of Kulluka Bhatta with Maniprabha Hindi Commentary, 7th Ed. Chukhabha Surabharati Prakashana, 2001, p. 478.
2. Acharya JT. Sushruta Samhita Nibandhasangraha Commentary, Sutra Sthana 14/6. 1st Ed. Chukhabha Surabharati Prakashana, 1994, p. 59.
3. Acharya JT. Sushruta Samhita Nibandhasangraha Commentary, Sharira Sthana 10/53. 1st Ed. reprint. Chukhabha Surabharati Prakashana, 1994, p. 392.
4. Acharya JT. Charaka Samhita with Ayurveda-Dipika Commentary, Chikitsa Sthana 30/25, 26. 1st Ed. reprint. Chukhabha Surabharati Prakashana, 2004, p. 635.
5. Acharya JT. Charaka Samhita with Ayurveda-Dipika Commentary, Chikitsa Sthana 30/7. 1st Ed. reprint. Chukhabha Surabharati Prakashana, 2004, p. 634.
6. Acharya JT. Sushruta Samhita with Nibandhasangraha Commentary, Sharira Sthana 3/32. 1st Ed. reprint. Chukhabha Surabharati Prakashana, 1994, p. 274.
7. Acharya JT. Charaka Samhita with Ayurveda-Dipika Commentary, Chikitsa Sthana 30/25,26. 1st Ed. Chukhabha Surabharati Prakashana; 2004. p. 635.
8. Acharya JT. Sushruta Samhita with Nibandhasangraha Commentary, Uttara Tantra 38/9. 1st Ed. Chukhabha Surabharati Prakashana; 1994. p. 274.
9. Acharya JT. Charaka Samhita with Ayurveda-Dipika Commentary, Chikitsa Sthana 30/7-8. 1st Ed. reprint. Chukhabha Surabharati Prakashana, 2004, p. 634.
10. Acharya JT. Charaka Samhita with Ayurveda-Dipika Commentary, Chikitsa Sthana 28/8. 1st ed. Chukhabha Surabharati Prakashana, 2004, p. 616.
11. Pt. Hari Sadashiva Shastri Paradakara Bhishagacharya. Ashtanga Hridaya, Sutra Sthana 12/8 with Sarvangasundari & Ayurvedarasayana Commentaries. 6th Ed. Chukhambha Press, 1997, p. 193.
12. Acharya JT. Charaka Samhita with Ayurveda-Dipika Commentary, Chikitsa Sthana 15/42-44. 1st Ed. reprint. Chukhabha Surabharati Prakashana, 2004, p. 517.
13. Acharya JT. Sushruta Samhita Nibandhasangraha Commentary, Sutra Sthana 14/10. 1st Ed. reprint. Chukhabha Surabharati Prakashana; 1994. p. 61.
14. Acharya JT. Charaka Samhita with Ayurveda-Dipika Commentary, Sutra Sthana 12/8. 1st Ed. reprint. Chukhabha Surabharati Prakashana; 2004. p. 79.
15. Acharya JT. Charaka Samhita with Ayurveda-Dipika Commentary, Chikitsa Sthana 30/25, 26. 1st Ed. reprint. Chukhabha Surabharati Prakashana, 2004, p. 635.

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Ayurvedic Manegement of Primary Desmenorrhoea with Sahachar Tail Matrabasti and Shankhavati W.S.R."Nasti Vatadrute Vedana"- Case Report

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ABSTRACT

Primary dysmenorrhoea is the most common gynaecological problem in menstruating women since menarche. Though prevalence is 90% it varies in different groups[1]. The pain is most upsetting symptom for the college going girls causing negativity for the menstruation naming it as a problem. In modern sciences different theories have been proposed and therefore treated with drugs according to it,which are helpful in relieving the pain. According to Acharya charak before starting chikitsa karm in any dhatu vaishamya Vaidya should know Tribodhya sangrah. Ayurvedic management aims to relieve the pathogenesis of the disease . Here is a case report of an 18 year old girl with complaint of severe pain during menstruation , lowback ache ,nausea and vomiting came to OPD of Prasutitantra & streerog, ASPM Ayurved medical college,buldana is taken for this study. It is evident from the case study that sahachar tail matrabasti along with shankhavati is effective in the management of primary dysmenorrhea.

Keywords- Dysmenorrhoea, Matrabasti.

INTRODUCTION

The term dysmenorrhoea is derived from the Greek word dys meaning difficult/painful/abnormal, meno meaning month and rrhea meaning flow.so the definition of primary dysmenorrhoea is painful menstruation of sufficient magnitude so as to incapacitate day to day activities. Dysmenorrhoea is of two types. Primary and Secondary dysmenorrhea. Primary Dysmenorrhea is one where there is no identificable pelvic pathology. It may be accompanied by other symptom like nausea, vomiting, constipation, diarrrhea, fatigue, loss of appetite, breast tenderness called associated symptom.

The pain is usually spasmodic, suprapubic crampy pain which radiate to back and thigh. The symptoms starts with or just before menstruation and continue for 1-3 days. In Primary dysmenorrhea though recurrent menstrual pain is in the absence of clinical identifiable cause i.e. without any detectable pelvic pathology.

The cause of pain in Primary dysmenorrhea is exactly not found. Till now the etiology and pathophysiology have not fully understood. Science 19th century different theories have been proposed. Cervical obstruction, Dysrhythemic myometrial contractility , Uterine ischemia, Vasopressine harmon, Neuronal cause, Psycological factor, Harmones estrogen and progesterone, Prostagladins, Leukotrienes are the some of that. Even more than one factore may be acting together[2]

In Ayurveda there is no such disease is mentioned which we can exactly correlate to primary dysmenorrhoea. So while doing ayurvedic management we find out the vicar prakruti ,vicar adhisthan and samuthan of the the present symptoms and treat according to it . For that Acharya carak mentioned that the name of the disease doesn't have any importance we should find out the dosha lakshan and treat them according to it[3]. In Ayurvedic classics , the pain symptom is not without vitiation of vata[4]. Apanvayu is responsible for proper expulsion of Shukra, Artav, Shakrut ,Mutra and Garbha[5]. So the Apanvayu is vitiated in this disease. After ahar pachan in katu vipakavastha, vat dosha is formed giving bal to sharirgat vat[6]. If the aharpachan is disturbed the formation and karm of vat get vitiated. Also the associated symptoms in primary dysmenorrhea are moreover like to be due to disturbed digestion of food, In Agnimandya ,Ajirna Shul is the main symptom .

Thus for vitiated vat vatanuloman i.e.dipan pachan anuloman is the management in primary dysmenorrhoea. While explaining the treatment for vata dosha, Acharya said amongst all the treatments basti is the most important. The tree when cut at the root gets definite destruction. Likewise when vatadosha is treated by Basti in main sthan i.e. Pakwashaya, the disorders of vatadosha in other parts of the body are pacified[6]. Shula is most common indication of

Shankhavaati and Agnimandya, ajeerna, Grahani, Gulma, Arochaka and Udara are found indications in majiority of the shankhavati[9]. The aim of the study is to treat underline pathology of the disease without any sideeffect. hence this study includes the treatment modalities, i.e.matrabasti along with shankhavati to manage primary dysmenorrhea effectively.

METHODOLOGY

A female patient diagnosed with primary dysmenorrhoea has been taken for the study and administered with matrabasti and shankhavati for two consecutive months and follow up for two consecutive month.

Case Report
A 18 year old patient came to us with chief complaints of Pain in lower abdomen during mensruation for two days since 12 months Pain radiates to back and thiges # nausea #constipation #fatigue #loss of appetite History of present illness The patient attained menarche at the age of 13 year.Her complaints started since 11-12 months. Crampy pain in lower abdomen starts along with of menstruation and continued for 2 days. Back pain radiating to both thighes starts with 1-2 days priror to menstruation and continued for 2 days. Nausea, constipation, fatigue loss of appetite of various degree. (reason for not to go to school) Past history-Nothing relevant Family history - Nothing relevant

Menstrual history
LMP -10/11/22 Interval 28-30 days Duration (days of bleeding)- 3-4 days (grade 2)Amount (quatity of bledind)-medium (6-7 pads/cycle) (grade 2) Clots- no history of clots, Lower abdominal pain (sevearity of pain) -grade 3, Duration of pain – grade 3

Personal history
occupation-student diet-mixed diet Appetite- Irregular Allergy- no history of any drug or food alllergy.

General physical examination
Built-lean Nutritional status-moderate Height –156 CM Weight-49 kg Pulse rate-72/min Heart rate-72/min
Bp-120/80 mmHg Temperature-98.6 F
Ashtavidh pariksha-1.Nadi-72/min
2.Mala-Malavsthambha (at the time of menstruation,yadakada)
3.Mutra-4-5 times in a day
4.Jivha-Sama
5. Shabda -Prakrit 6.Sparsh- Anushna 7.Drik-Prakrut 8.Akruti-Madhyam

Dashavidh pariksha:
1) Prakruti: vatakapha prakruti
2)Vikruti: Dosha-Vata, dushya-margasth ras
3)Sara–Madhyama
4)Samhanana:Madhyama
5)Satva-Madhyam
6)Pramana;Madhyama
7)Satmya:Sarva rasa
8) Aharasakti:Madhyama
9)Vyayamsakti:Avara
10)Vaya:18 Years

MATERIAL AND METHODS

Table1 -Showing material for Management of primary dysmenorrhoea

Sr.no.	Drug/procedure	Dose	Duration	Time	Anupan
1	Matrabasti of sahachar tail	60ml	7days start from 5th day of menstruation	2consecutive menstrual cycle	
2	Tab.Shankhavati	250 mg	2 BD	1MONTH	lukewarm water

Methods

Type of study: Simple random single case study Assessment criteria(table)

A) Severity of pain(multidimensional scoring pattern)

SYMPTOM	SCORE
Menstruation is not painful and daily activity is unaffected.	0
Menstruation is painful but daily activity is not affected. No analgesic Required.	1
Menstruation is painful and daily activity is affected.Analgesic drug is needed	2
Menstruation is so painful that patient is unable to do even the routine work and has to miss class during menses .has to take anlgesic but without much relief	3

B) Duration of Pain

SYMPTOM	SCORE
No pain during menstruation	0
pain persists for less than 12 hrs.	1
pains persist for 12-24 hrs.	2
pains persist for more than 24 hrs.	3

Days of bleeding

SYMPTOM	SCORE
4-5 days bleeding	0
3 days bleeding	1
2 days bleeding	2
1 day bleeding	3

Quantity of bleeding (assessment by number of pads used)

SYMPTOM	SCORE
6-7 pads /cycle	0
4-5 pads /cycle	1
2-3 pads /cycle	2
Spotting or 1 pad/cycle	3

Associated symptom-

Nausea-

SYMPTOM	SCORE
No Nausea	0
2-3 Times /Day	1
4-5 Times /Day	2
>5 Times /Day	3

Constipation –

SYMPTOM	SCORE
no constipation	0
Frequency of stool once in a day ,but hard stools passed	1
Frequency of stool alternate days and patient has difficulty in defecation	2
patient cannot pass stool without the help of apurgative even after 3-4 days	3

Fatigue-

SYMPTOM	SCORE
No fatigue	0
fatigue induced by having to even single extra work in addition to the daily routine	1
Fatigue by the normal daily routine	2
Severe fatigue even without work	3

Loss of appetite:

SYMPTOM	SCORE
Take a full diet and also has proper appetite at the next meal time	0
Presence of moderate appetite &promote appearance of appetite in next meal time	1
presence of low appetite but delayed appearance of appetite in next meal time	2
persisting low appetite or frequent loss of appetite unable to consume even the minimum required diet	3

The follow up upto 2nd menstrual cycle and assessment done .

DISCUSSION

Primary dysmenorrhoea is defined as the painful menstruation. According to the Ayurveda(cha su 18) if we don't have name ,we can treat the pt after finding tribodhya sangrah. these three means samprapti saghtan As the pain is the main for which patient comes to doctor is due to vitiation of vatdosha(). This codition can be placed in the sukhsadhya category as it is related to adolescent age ().the cycles are mainly ovulatry which causes pain i.e.anthpushpa or bij is not affected .In previous studies dipan pachan drugs gives the results that means the rogmarg is koshta.the bleeding amount variations are not mentioned in primary dys. So the Rajotpatti is not disturbed .The associated symptoms are due to reflexes but we can correlate these to amashay pakvashay i.e. koshthgat vat along with mandagnijanit ajirn lakshan.so the samprapti ghatak are Dosha -vat Dushya-margasth ras,strotas-Pranvah strotas(mahastotas-amashay ,pakvashay,koshta) Agni -Jatharagni Vyaktisthan Yoni

Discussion on drug

For the vitiation of vat the rogmarg as koshta ,dipan pachan&anuloman is the line of treatment,Along with this Basti is the one of the treatment for vitiation of vat. The matrabastiis the type of snehbasti with lowest dose. It gives the result of basti but without the sansarjan kram. The action of matrabasti is may be only on kosthagat and not on shakhamarmasthisandhigat vitiation.The shankhavati is the drug with dipan ,pachan and anuloman properties and best for shul. It is the ajirn , agnimandya rogadhikar drug .Sahchar is vatshamak drug and its preparation in snehkalpana is the drug explaind in vatvyadhi chikitsa for all vat vitiation vicar. So in this study shankhavati as a oral drug and sahachar tail is used by matrabasti form. As the vyaktisthan is Yoni . For samuthan bhed we have to take drug for somelong time so the basti is planned for two consecutive cycles and shankhavati for one month .to avoid recurrence.

RESULTS

The patient is observed after matrabasti and after two followups. The patient has no pain during menstruation and associated symtoms are also absent.

Assessement of all symptoms before and after the treatment- Assessment criteria(table)

symptoms	B.T.	1ST CYCLE	2ND CYCLE	1ST FOLLOWUP	2ND FOLLOWUP	DIFFERANCE	%
severity of pain	3	2	1	1	0	3	100
duration of pain	3	2	1	1	0	3	100
days of bleeding	2	2	1	1	1	1	50
quantity of bleeding	2	2	1	1	1	1	50
nausia	1	1	0	0	0	1	100
constipation	2	1	1	1	0	2	100
fatigue	1	1	1	1	0	1	100
loss of appetite	2	2	2	1	0	2	100

CONCLUSION

Primary dysmenorrhoea is one among the most prevalent disease which need the ayurvedic modality to treat it. By understanding the samprapti saghatan according to basic principles of Ayurveda we can treat it .The nomenclature is not necessary for the treatment but the basic pathology should be find and treat according to it with more accuracy and confidance.

REFERENCES

[1]. Sir NormanJeffcoate,Victor Tindall,Neerja Bhatla, Jeffcoate,s Principles of Gynaecology ,International Edition,5th LONDON,NEWDELHI,2001,581-584
[2]. Ajit Virkud,Modern gynaecology,3rd ,2017,46-47
[3]. Agnivesh,charak Samhita Chakrapanidatta,P.K.SHASTRI ,PART 2,Varanasi chowlhamba Sanskrut sansthan,4th1994,714
[4]. Astanghrdayam of Srimadvagbhata,B.Tripathi,Delhi,Chaukhambha Sanskrit Pratishthan,1st ,2017,316
[5]. Agnivesh,charak Samhita Chakrapanidatta,P.K.SHASTRI ,PART 1,Varanasi chowlhamba Sanskrut sansthan,6th1994,257
[6]. Bhavmishra,Bhavprakash Nighantu, indian materia medica ,c1500-1600 A.D. ,chaukhamba bharati acadamy, varanasi,2015,489
[7]. P.V.Sharma,Dravyagun Vigyan,vol-2, chaukhamba Bharti Academy,Varanasi,5th ,2015,185-186
[8]. B.V.Ghokhale,chikista pradip,Dhanvantari Pratistan,pune,1989,147
[9]. Charak Samhita,Agniveshstreatiserefinedandannotedby Caraka andreductedby Drudhabala,P.V.Sharma ,vol 1,Varanasi,1st ,2014,138
[10]. Charak Samhita,Agniveshstreatiserefinedandannotedby Caraka andreductedby Drudhabala,P.V.Sharma ,vol 2,Varanasi,1st ,2014,140
[11]. Ajit Virkud,Modern gynaecology,3rd ,2017,45-48
[12]. Charak Samhita, Agniveshs treatiserefined and annoted by Caraka andreductedby Drudhabala,P.V.Sharma ,vol 1,Varanasi,1st ,2014,140
[13]. Charak Samhita, Agniveshstreatiserefinedandannotedby Caraka andreductedby Drudhabala,P.V.Sharma ,vol 2,Varanasi,1st ,2014,619
[14]. N.Kodiady,B J Patgiri Varieties in shankh vati-An ayurvedicclassical formulation for GIT disorders,AnnalsofAyurvedicMedicine 2012/3/1/102-108
[15]. K.Karunagoda,K.Shukla,A comparative study of dashamool taila matrabasti and tila taila matrabasti in kashtartava (dysmenorrhea),AYU,JUL-SEP2010,31,3,305-310
[16]. A.Roy,A.Pandya, A comparative study on the effect of dashmool taila uttarbasti and vijayadi vati in the management of kashtartava (primary dysmenorrhea)-a clinical study,journal of research in ayurveda and siddha,2010/31/3/15-28
[17]. Jahan S.Neelam,Efficasy of trivrut and rason oil in uadavarta yonivyapad,Aryavaidyan,2009,22,4,226-229
[18]. Jahan S.,N.Sujata, Role of Uttarbasti with trivrut and lasun oil in the management of primary dysmenorrhoea,AYU,2010,31,2,228-231

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An analysis of Shashti Upakrama by Acharya Shusruta in Vrana management

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Abstract
The oldest element causing suffering for humanity is varana. The Vedas contain the earliest explanation of Vrana. Ayurveda is regarded as the Atharvavedic Upaveda. Numerous Samhitas provide a thorough analysis of Vrana. As a surgeon, Acharya Sushruta has provided detailed explanations of Vrana and how to manage it. He has clarified Dushtavrana and described how Shashti Upakrama is used to manage it. One of the Shashti Upakramas, Lekhana Karma, has clinical value in the management of Dushtavrana. Thus, the function of Lekhana Karma in the administration of Dushtavrana is summed up in this article.

Keywords: Dushtavrana, Lekhana Karma, Shashti Upakrama, Shastrakarma, Vrana

Introduction
The renowned surgeon Acharya Sushruta, who wrote the Sushruta Samhita, separated Ayurveda into eight branches known as Ashtanga Ayurveda, with Shalyatantra being the most prominent. He has placed a high value on Vrana and its administration in his capacity as a warfare surgeon. Acharya Susruta begins his explanation of Vrana knowledge by describing Karna Vyadha Bandha Vidhi, in which the Bala experiences the first Shastrakruta Vrana. He used the term "Vranakovida," which refers to a surgeon with expertise in managing Vrana [1].
This emphasises how crucial it is to understand Vrana since it is a necessary component of all Shastrakarma. Through his explanation of Shashti Upakrama, Acharya Sushruta has shed additional light on Dushtavrana and its administration. These Upakramas fall into three categories: Poorvakarma, Pradhanakarma, and Paschatkarma [2]. All surgical procedures can be categorised under Ashtavidha Shastrakarma, which is regarded as Pradhana Karma. Another Ashtavidha Shastrakarma is Lekhana Karma. Lekhana Karma plays a significant role in the proper Shodhana required for any Dushtavrana to heal more effectively. Therefore, an attempt is made to examine and comprehend Lekhana Karma's function in Dushtavrana management.

Objective of the study
To review how Lekhana Karma functions in Dushtavrana management.

Methodology
The Sushruta Samhita is the source of all references to Dushtavrana and Lekhana Karma, which are then examined along with the significance of Lekhana Karma in promoting wound healing.

Dushtavrana
Vrana gets its name from the fact that it covers the area and that the scar left behind after healing does not go away until the person is still alive [3]. Additionally, it damages or destroys the tissues (Vrana Gatra Vichoornane) [4]. Based on the etiological factors, Vranas are divided into two categories: Agantuja (Sadyovrana) and Nija (Shareeraja/Doshaja). Mithyaahara and Viharasevana vitiate Tridoshas, which results in Nijavranas. After seven days, all agantujavranas transform into Nijavrana [5]. Because of the vitiation of the Doshas, these Agantujavrana may change into Dushtavrana [6].

Table 1: Dushtavrana Lakshana based on Vatadi Dosha [7]

Vata	Pitta	Kapha
Atisamruta (Narrow mouthed) Atikathina (Hard) Avasanna (Depressed) Vedanavan (Severe pain)	Ativivruta (Wide mouthed) Atiushna (Hot) Daha (Burning sensation at the site) Paka (Suppuration) Raga (Redness) Putimamsasirasnayu Pratipurna (Full of putrefied pus, muscles, and vessels and ligament) Puyasrava (Discharging pus) Amanojnadarshana (With ugly sight)	Kandu (Itching) Shopha (Swelling) Pidaka (With boils) Mridu (Soft) Bhairava (Frightful)

Lekhana Karma

Lekhana means to scrap or remove. Lekhana Karma entails scraping away unwanted tissues or debris from the afflicted area [8].

Table 2: Indication for Lekhana Karma in Vrana [9]

Condition	Lekhana Vidhi
Katina vrana (devoid of Mamsa)	Samalekhana (even)
Sthula-vruttaoshta (thick and rolled edges)	Sulikhita (excess)
Deeryamana Punah Punah(which bursts open repeatedly)	Niravasheshalekhana (without leaving remnants)
Katina Utsannamamsa (hard and elevated muscle)	Vartmanam Pramanena Samamlikhet (edges scrapped to the level of the floor)

Shastra Abhave

The application of Kshouma (Atasivastra), Plota (Karpatam), Pichu (Karpasatula), Phena (Samudraphena), Yavashuka (Yavakshara), Saindhava lavana, and Karkashapatra in the absence of Shastra has been explained by Acharya Sushruta [9]. Lekhana Karma also makes use of Dravyas of mineral origin, including Seesa (lead), Kamsya (bell metal), Seema (lead), Srotonjana (collyrium), Vidruma (coral), Kasisa (green vitriol), Krishnaloharajah (iron powder), Tamra (copper), and Shankha (conch shell) [11, 12]. Additionally, according to Uttaratantra, Lekhyarogapratishha Adhyaya, Acharya Dalhana, Lekhana should be performed using Shastra in Vata Kaphavyadhi, Kathina, and Daruna conditions, and Shephalikadi Patras in Pitta-Raktavyadhi and Mriduvartma conditions [13].

Lekhana Shastra Grahan Vidhi

Lekhana should be performed several times, and Karma Shastras should be performed at the intersection of Vrunta (edge) and Vruntaphala (handle) with the hand slightly raised [14].

Lekhana Karma Yogya Vidhi

In ancient Indian surgery, the idea of simulations is a noteworthy pedestal. Acharya Sushruta has described how to become proficient in Lekhana Karma through practice with Saromacharma (Animal hide). The direction of the hair follicles, or Anuloma Gati, is where Lekhana Karma should be performed. Severe pain and bleeding will result if it is performed in Pratiloma Gati, which is the opposite direction of the hair follicles [15].

Some of the Aushadha Kalpanas having Lekhana Karma [16, 17].

Shodhana Kashaya

Kleda (sodden), Durgandha (bad odour), and Picchila (slimy) Vrana. The following Dravyas are utilised: Ankotha (Alangium salvifolium (L.F) WANG), Sumana (Jasminum grandiflorum), Karavira (Nerium indicum), Suvarcala (black salt), Shankhini (Euphorbia dracunculoids), and medications of Aragwadhadigana.

Shodhana Varti

In Anumukha (minute openings), Gambhira (deep), Antahshalyayukta (wounds with a foreign body lodged inside), and Mamsahritavrana (seated in the muscle). Ajagandha (*Cleome gynandra* Linn.), Ajashrungi (Lannea coromandelica), Gavakshi (*Citrullus colocynthis*), Putika (Embelia ribes Burm F), Vidanga (Embelia ribes Burm F), Ela (*Elettaria cardamomum*), Herenu (*Pisum sativum*), Trikatu (*Piper longum* Linn, Zingiber officinale, *Pipernigrum* Linn.), Yavakshara (alkali made from Hordeum vulgare), Lavana (salt), Manashila (red arsenic), Kasisa (green vitriol), Trivrut (*Operculina turpethum* (L)), Danti (Baliospermum montanum), Haritala (orpiment), and Surashtrajamrit are the Dravyas used to prepare Varti.

Shodhana Kalka

Made from the medications listed for Varti preparation, Kalka is applied over Vrana in conditions such as Putimamsavrana (foul-smelling mamsa) and Mahadosha (severely aggravated dosha).

Shodhana Gritha: Gritha processed with Karpasaphala (*Gossypium herbaceum* Linn) is used to treat Vranas with Pitta Dosha, Gambhiravrana (deep sitting), Daha (burning sensation), and Paka (suppuration). Additional medications used to prepare Shodhanagritha include the following: Snuhiksheera (latex of Euphorbia nerifolia), Arka (Calotropis gigantea), Triphala (Terminalea chebula, Emblica officinalis, and Terminalia bellirica), Jatimula (root of Jasminum grandiflorum), Haridradwaya (Curcuma longa), Kasisa (green vitriol), Katurohini (Picrorhiza kurroa), or the medications listed for Varti.

Shodhana Taila

Sarshapa (*Brassica campestris* Linn.)-processed Taila is used in Vranas with Utsannamamsa (hypertrophied granulation tissue), which are Asnigdha (not moist) and Alpasrava (insignificant discharge). Additional medications used to prepare Shodhana Taila include Koshataki (*Luffa acutangula* Linn.), Brihati (*Solanum indicum* Linn.), Mayuraka (*Achyranthes aspera* Linn.), Rajavruksha (*Cassia fistula* Linn.), Nimba (Azadirachta indica), Kantakari (Solanum virginianum), Haritala (orpimemt), and Manashila (red arsenic).

Shodhana Rasakriya

Rasakriya made from Salasaradigana Kashaya is used to treat Vranas that have Thiramamsa (rigidly fixed granulation tissue) and do not get cleaned even after applying Taila. Along with Matulunga Swarasa (*Citrus medica* Linn.) and Madhu (honey), powders of Surashtraja, Kasisa (green

vitriol), Manashila (red arsenic), and Haritala (orpiment) are added to the Kashaya and triturated.

Shodhana Avachurnana

Dust with the fine powders of Shodhana Dravyas described in Varti preparation to cleanse vranas that are vitiated with Medas, Agambhira (not very deep seated), and Durgandha (foul smell). The Lekhana Guna is present in every Rasa with the exception of Madhura Rasa. Samsarga and Sannipataja Conditions for Lekhana use a combination of two or three Rasas, while Amla and Lavana Rasa are used in Vata, Tikta, and Kashaya Rasa in Pitta, and Rakta, Katu, Tikta, and Kashaya Rasa in Kapha [18].

Discussion

Lekhana Karma, according to Acharya Dalhana, is that which performs Pattalikarana, which is to scrape off or remove [19]. Different Shastras and Anushastras are explained according to the Dosha involved. Shastras are recommended for Lekhana Karma since Vata and Kaphaja Vrana will be Daruna and have Gambhira lakshanas, while Pitta-Raktaja Dushtavrana will be Mridu and Raktapradhana, mild Lekhana with Shephalikadipatra and Anushastras are recommended. Samalekhana can be performed in Vataja Vrana, Sulikhita Lekhana in Kaphaja Vrana, and Niravashesha Lekhana in Pittaja Vranas, taking into account the Dosha Pradhanata. When Alpadoshas are present, Kashayadi Saptakalpanas can be used. While Kashayadi Kalpanas performs chemical debridement, Shastra and Anushastras perform mechanical debridement.

Until Vrana achieves Shuddha Avastha, which is the attainment of Lakshanas like Jihwatalabha (colour like the base of the tongue), Mirdu (soft), Snigdha (unctuous), and Shlakshna (smooth), Lekhana Karma, whether by Shastra or Dravya, should be performed [20]. Ropanadravyas are used to improve Ropanakriya after the Vrana achieves Shuddha Avastha.

Conclusion

Shasti Upakrama, which is a highly scientific and tried-and-true method for managing Dushtavrana, has been beautifully explained by Acharya Sushruta. One of the Ashtavidha Shastrakarmas described in the Shashti Upakrama is Lekhana Karma, which signifies Pradhana Karma in the administration of Vrana. It is crucial in changing Dushtavrana into Shuddha Avastha, which promotes faster and more effective wound healing.

References

1. Acharya JT. Vranalepanabandhavidhya Adhyaya. In: Susruta Samhita with Nibandha Sangraha commentary of Dalhana. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c2008. p. 89.
2. Acharya JT. Agropaharaniya Adhyaya. In: Susruta Samhita with Nibandha Sangraha commentary of Dalhana. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c2008. p. 19.
3. Acharya JT. Vranaprashna Adhyaya. In: Susruta Samhita with Nibandha Sangraha commentary of Dalhana. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c2008. p. 107.
4. Acharya JT. Dwivraneeya Chikitsitam. In: Susruta Samhita with Nibandha Sangraha commentary of Dalhana. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c2008. p. 396.
5. Himasagara Chandra Murthy. Shareeravrananidana. In: Madhavanidanam with Madhukosha commentary. 1st ed. Varanasi: Chaukhamba Sanskrit Series; c2009. p. 77.
6. Acharya JT. Vranasravavijnaneeya Adhyaya. In: Susruta Samhita with Nibandha Sangraha commentary of Dalhana. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c2008. p. 108.
7. Acharya JT. Vranasravavijnaneeya Adhyaya. In: Susruta Samhita with Nibandha Sangraha commentary of Dalhana. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c2008. p. 108.
8. Hiemstra G. Internet. 2019. Available from: https://www.wisdomlib.org/definition/lekhana
9. Acharya JT. Dwivraneeya Chikitsitam. In: Susruta Samhita with Nibandha Sangraha commentary of Dalhana. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c2008. p. 400.
10. Acharya JT. Shastravacharaneeya Adhyaya. In: Susruta Samhita with Nibandha Sangraha commentary of Dalhana. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c2008. p. 36.
11. Acharya JT. Kriyakalpa Adhyaya. In: Susruta Samhita with Nibandha Sangraha commentary of Dalhana. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c2008. p. 634.
12. Acharya JT. Annapanavidhya Adhyaya. In: Susruta Samhita with Nibandha Sangraha commentary of Dalhana. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c2008. p. 237.
13. Acharya JT. Lekhyarogapratishedh Aadhyaya. In: Susruta Samhita with Nibandha Sangraha commentary of Dalhana. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c2008. p. 620.
14. Acharya JT. Shastravacharaneeya Adhyaya. In: Susruta Samhita with Nibandha Sangraha commentary of Dalhana. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c2008. p. 39.
15. Acharya JT. Yogyasutreeya Adhyaya. In: Susruta Samhita with Nibandha Sangraha commentary of Dalhana. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c2008. p. 42.
16. Acharya JT. Dwivraneeya Chikitsitam. In: Susruta Samhita with Nibandha Sangraha commentary of Dalhana. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c2008. p. 401-402.
17. Acharya JT. Mishrakadhyaya. In: Susruta Samhita with Nibandha Sangraha commentary of Dalhana. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c2008. p. 161-162.
18. Acharya JT. Kriyakalpa Adhyaya. In: Susruta Samhita with Nibandha Sangraha commentary of Dalhana. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c2008. p. 636.
19. Acharya JT. Dravyarasagunaveeryavipakavijnaneeya Adhyaya. In: Susruta Samhita with Nibandha Sangraha commentary of Dalhana. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c2008. p. 176.
20. Acharya JT. Dwivraneeya Chikitsitam. In: Susruta Samhita with Nibandha Sangraha commentary of Dalhana. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; c2008. p. 397.

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Efficacy Of *Yashtimadhu Ghrita* In The Management Of *Parikartika* (Acute Fissure-In-Ano)

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ABSTRACT:

Parikartika is a common painful condition among anorectal disease which resembles with fissure-in-ano. *Parikartika* is explained as a *vyapad* of *vamana-virechana* and *basti* by *Charaka* and *Sushruta Acharya.* In the present era, due to changing lifestyle such as sedentary work pattern, increased stress, improper dietary and sleep habits, various lifestyle disorders are increasing continuously. The disease *parikartika* is presented with *krtanvat vedna* in *guda pradesha* as the main symptom. Fissure-in-ano is a condition characterised by excruciating pain, bleeding per rectum during and after defecation. The common cause is trauma due to passage of hard stools. In the *Ayurveda Acharya* have explained the use of *madhura, snigdha, sheeta dravyas* internally as well as locally in the form of *picchabasti, madhurkashaya dravyasiddha basti, yashtimadhu tail basti.*

KEYWORDS: *Parikartika*, fissure-in-ano, *yashtimadhu ghrita, krtanvat vedana.*

INTRODUCTION:

The condition fissure-in-ano, commonly encountered in ano rectal practice has similar location, pathology and predominant features of *parikartika* like excruciating pain, constipation, stool streaked with blood etc.(1) Thus it is evident that *parikartika* can be correlated with fissure-in-ano mentioned in modern science. The disease *Parikartika* is presented with *krtanvat vedana* in *guda pradesha* as the main symptom.

Acute and chronic, pain and bleeding are two main symptoms of this condition, pain is sometimes intolerable.(2) Fissure-in-ano occurs most commonly in midline posteriorly. In males, usually occur in the midline posteriorly-90%, and less common anteriorly-10%. In females in midline posteriorly-60% and anteriorly-40%.(3) According to modern treatment of acute fissure-in-ano is analgesic, stool softener and soothing ointment and surgical treatment is anal dilatation, sphincterotomy, fissurectomy are there but there are many complications of these procedures like recurrence, incontinence and pruritis.(4) The factors responsible for Parikartika are found as Basti-Virechana Vyapad (Complication of the Basti and Virechana procedures), Arsha (piles), Atisara, Grahani, etc(5)

AIM & OBJECTIVE:

1. To review the fissure in ano in ayurved classics.
2. To study the effect of *Yashtimadhu ghrita* in the fissure in ano.

CASE REPORT

Present complaints-

A 38 Years old Female patient having burning sensation after defecation, constipation, hard stool, strike wise bleeding per anum since 15 days came to OPD of *Ayurveda* Rugnalaya for diagnosis and management.

CLINICAL FINFINGS:

Shool (pain)

Burning sensation

Bleeding per anum

PHYSICAL EXAMINATION:

The physical examination of the patient revealed temperature of 98.2^{0}F, pulse – 78/min, respiratory rate of 19/min, blood pressure of 120/70 mmHg, and oxygen saturation. *Ashtavidha Pariksha* of patient revealed *Nadi* (pulse) was of *Vata pradhana* (dominant) *pitta*, *Asmyak mal,. pravartana* (hard stool), *Samyak mutra pravartana* (Normal urine), *Sama jivha* (White coated tounge), *Samyak kshudha* (Normal Appetite), *Samyak trishna* (Normal thirst), *Samyak drika* and was of *Madhyam* (Average) *Akriti* (Built). Routine investigtions were done which are within normal limits and are as follows Hb- 11 gm% ; WBC - 5300 /cumm ; RBC - 4800/cumm ; Blood sugar level (fasting) – 96 mg/dl ; Blood sugar level (post prandial) – 130 mg/dl ; HbsAg – Non Reactive; HIV – Non reactive.

LOCAL EXAMINATION:

Site – Anal region

Fissure groove seen

Active bleeding

Tenderness present

Per rectal examination – spasm

Materials

Yashtimadhu Bharad, Goghruta, water.

Methodology

Method of preparation: -

Yashtimadhu Ghrita was prepared by snehapak vidhi according to sushrut sam- hita chikitsa sthan chp 31 Snehopayogik chikitsa adhyay[(6)]. Proportions used were (1:4:16}

1-part Yashtimadhu Bharad; 4 parts =Goghrita; 16 parts = Water

Yashtimadhu kwatha is prepared with the moola of yashtimadhu. 1 part of Yashtimadhu Bharad and 16 parts of water taken in a vessel and boiled together till it reduced to Chaturamsha i.e. ¼ of the quantity. This is subjected to filtration. To this than 4 parts of Goghrita was added to the Yashtimadhu kwath & cooked over mandagni till only ghrita part remains. Afterwards Yashtimadhu ghrita was collected and measured. Then Yashtimadhu ghrita 10gm was filled into aluminium tubes with nozzle from the back side of the tube (open side) after filling the ghrita into tubes crimping was done in crimping machine and tube was sealed and labelled as Yashtimadhu Ghrita.

Table no. 1 Timeline of treatment

Sr.No.	**Oral Medication**	**Dose**	***Anupana***	**Treatment Duration**
1.	Triphala guggule	250mg	Luke warm water	1month
2.	Tb.Kultab	-	Luke warm water	1month
3.	Tb.Zerodol p	-	Plane water	3days

Table no.2 Timeline of treatment

Sr.No.	**Local Applicaton**	**Action**	**Treatment Duration**
1.	*Yashtimadhu ghrita*	For healing	1 month

Advice- sitz bath with haridra churna.

Total treatment duration is 1 month.

Follow Up and Outcomes –

Table 3. Gradation of Symptoms –

Sr.No.	**Symptoms**	**Grade No.0**	**Grade No.1**	**Grade No.2**	**Grade No.3**	**Grade No.4**
1.	*Shoola*	No *shool*	Occasional	mild	moderate	severe
2.	*Raktastrav* (bleeding per anum)	No rakta*strava* (bleeding per anum)	Occasional	mild	moderate	severe
3.	Tenderness	No Tendeerness	Occasional	mild	moderate	severe
4.	Burning sensation after defecation	No burning sensation after defecation	Occasional	mild	moderate	severe

Table no.4 Changes in symptoms before and after treatment –

Sr.No.	Symptoms	Before treatment	After 7days	After 14days	After 21days	After 28days	After treatment
1.	*Shoola*	4	3	3	2	1	0
2.	*Raktastrav* (bleeding per anum)						
3.	Tenderness	4	2	2	1	1	0
4.	Burning sensation after defecation	4	2	2	1	1	0

Fig.1 – Before treatment

Fig.2- During treatment

Fig.3- Healed fissure

DISCUSSION:

Yashtimadhu is the owner of the properties Madhura Rasa, Madhur Vipaka, Sheet Virya, and Vata Pittashamak [(7)]. Additionally, Yashtimadhu has property in Vranaropana and Vrana Shodhana[(8)]. Be Ghrita has a calming effect, forms a thin film layer. over them, and then permits early skin epithelization. The therapeutic, antiulcerogenic, anti- inflammatory, and skin regeneration properties of Yashrimadhu have been demonstrated[[9]]. Sodium Glycyrrhizate has anti-ulcer properties and promoted skin regeneration[(10)]. Asparagine is a type of amino acid that acts as an analgesic (a natural painkiller) and an anti-inflammatory agent. Glycyrrhizine is a saponin that is frequently used as an anti- inflammatory agent. According to certain reports, the Vednashamak effect of Yashtimadhu Ghrit Local application without using also causes a reduction in pain. Along with reducing pain, it also serves an Vatahara, Pitta Shamak, Ropaka, Dahashamak, and Stambhak in Vrana[(11)].

CONCLUSION:

The cost-efficient and successful treatment for fissures in ano is pichu with Yashtimadhu ghrita. The average time it took for Fissure in ano symp- toms to go away was 12 days, which is shorter than the time needed for surgery and post-operative care. The pichu can be given at home by family members or the patient themselves, cutting down on time, money, and treatment resistance. With Yashtimadhu ghrita in an acute fissure in ano, surgery can be avoided.

REFERENCE:

1. Bailys & Loves Short Practice of Surgery 24th edition Chapter 72-page no 1253,1254.
2. Concise Text book Of Surgery 4th. Edition S. Das Chapter no 54 Rectum & Anal canal Treatment of Fissure in ano page no.1084.
3. Concise Text book Of Surgery 4th Edition S. Das Chapter no 54 Rectum and anal canal Treatment of Fissure in Ano-page no 1085.
4. Concise Text book Of Surgery 4th Edition S. Das Chapter no 54 Rectum & Anal Canal-Treatment of Fissure in Ano & complications page no 1086.
5. Sushrut, Dr.Ambikadatta Shastri, SUSHRUTASAMHITA Part 1 edition 14th Chikitsasthan 34 VamanvirechanVyapadsidhi Adhyay, Chaukhamba Sanskrit Sansthan, Varanasi 2002, Shlok 16 page no.151.
6. Sushrut Samhita Chikitsastan- Dr Anantramram Sharma Vol 2- Chikitsastan, chp 31 Snehopayogik chikitsa adhyay. Shlok no 8- Page no 408.
7. Priyavat Sharma, Sushruta Samhita. Sutrasthan 5/42 Choukhamba orientalia inpublishers, Varanasi, 1993: 2:46.
8. Dr. Dwivedi Amarprakash et al., A clinical study to evaluate the antiseptic and bactericidal effect of Yashtimadhu Ghrita in non-infected surgical wounds, IJAAR. 2015.2(3).
9. 6. Jigna Rati lal Patel et al. A comparative clinical study of Yashtimadhu Ghrita and lignocaine-nifedipine ointment in the management of Parikartika (acute fissure-in-ano), De- partment of Shalya Tantea, IPGT & RA, Gujarat Ayurved University. Jamnagar, Gujarat, India, AYU, 2017: 38(1-2):46-51.
10. Dr. Ravindra Bhati. Role of yastimadhu ghrita Pratisarana in management of oral cancer, WJPR, 2020: 9(3) 352-360.
11. Waghmare Dinesh. A Comparative Study of Effect of Yash- timadau Ghrita and Tikladi Ghrita Locally in the Manage- ment of Post Operative Fistulectomy Wound, IJAHM, 2016: 6(5)2359-2365.

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CASE REPORT OPEN ACCESS

AYURVEDIC MANAGEMENT OF DIABETIC WOUND: A CASE STUDY

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ABSTRACT:

Diabetic patients are vulnerable to develop non healing ulcers. Treatment modilities like conservative, good diabetic control, wound toileting seem to be incomplete by looking at prevalence rate of amputation in diabetic patients. This case management of diabetic foot ulcer in 65 years male. Complete wound healing was achieved in 30 to 40 days with unit healing time (UHT) of 5.88 days/cumm. Local cleaning by *Triphala Kwatha* has showed antimicrobial effect which augmented the healing process while *Vranshodhak Taila* application enhanced tissue debridement. Internal *Ayurveda* medication like *Arogyavardhini vati* and *Rakta pachak yog* with *pathya-apathya* (prescribed diet and regimen) pacified vitiated *kapha-vata pradhan Tridosha* and enhanced tissue rejuvenation and repair by their pharmacological properties.

Keywords: Diabetic foot ulcer, *dusht vran*, wound healing

INTRODUCTION

India is having 88 million diabetic population nationwide with 8.9% prevalence rate[1]. Diabetic foot ulcer (DFU) is a devasting complication of lower limb due to involvement of peripheral neurovascular insufficiency and localized infection in presence of Diabetus mellitus. Diabetic foot ulcer is most common complication in newly detected type 2 diabetes[2]. Diabetic foot consist of infection , ulcer and loss of tissues. Diabetic foot ulcer is type of non-healing wound which require local disinfectants, various methods of sterile antiseptic dressing, diabetic correction and correction of peripheral neurovascular ailments and also surgical intervention like debridement of wound and the last option is amputation of foot due which normal functioning get hampered. Diabetic ulcer is considered as a *Madhumehajanya Dushtavrana* in *ayurvedic* clinicians. It`s management is also similar to *Dushta vrana* [3]. Ayurvedic management of diabetic ulcers includes appropriate *panchakarma* therapies, local application of herbal medicines, diabetic care and certain food regimens [4]. There are so many ayurvedic formulations given orally to control blood sugar level and to enhance wound healing. In this case the patient is treated with oral medication and local application of *ayurvedic tail* after wound debridement.

CASE REPORT

Present complaints-

A 65 Years old male patient having diabetes mellitus since 10 yrs. regularly on medication Tab.Glimepiride 4 mg and having ulcer over lateral malleolus of left foot with pain. Also having pus discharge with foul smelling at that site along with difficulty in walking since 1 month came to OPD of *Ayurveda* Rugnalaya for diagnosis and management.

CLINICAL FINDINGS –

Shoola (Pain)

Puyastrav (Pus discharge)

Durgandh (Foul smell)

Kriyakashtata (Limited painful movement of left foot)

Physical Examination

The physical examination of the patient revealed temperature of 98.2^0F, pulse – 78/min, respiratory rate of 19/min, blood pressure of 120/70 mmHg, and oxygen saturation. *Ashtavidha Pariksha* of patient revealed *Nadi* (pulse) was of *Vata pradhana* (dominant) *pitta*, *Samyak mala pravartana* (Normal stool), *Samyak mutra pravartana* (Normal urine), *Sama jivha* (White coated tounge), *Samyak kshudha* (Normal Appetite), *Samyak trishna* (Normal thirst), *Samyak drika* and was of *Madhyam* (Average) *Akriti* (Built). Routine investigtions were done which are within normal limits and are as follows Hb- 12 gm% ; WBC - 8000 /cumm ; RBC - 4800/cumm ; Blood sugar level (fasting) – 96 mg/dl ; Blood sugar level (post prandial) – 143 mg/dl ; HbsAg – Non Reactive; HIV – Non reactive.

Local examination

Site – Left lateral malleolus

Size – 3cm* 2cm* 1cm

Number - 1

Margin – Irregular

Floor – Whitish slough

Base – Soft tissue

Discharge – purulent

Inspection – Round shape

Tenderness - ++

Palpation – Raised local temp.

Table 1 – Intervention

Total treatment duration is 1 month.

Sr.No.	Oral Medication	Dose	*Anupana*	Treatment Duration
1.	*Arogyavardhini vati*	250 mg 2bd	Warm water	1 month
2.	*Sukshma Triphala vati*	250 mg 2bd	Warm water	1 month
3.	*Raktapachak Yog*	500 mg 1bd	Warm water	1 month
4.	*Manspachak Yog*	500 mg 1bd	Warm water	1 month
5.	*Mahamanjisthadi kadha*	20 ml bd	Warm water	1 month
6.	*Panchavalkal kwath dhavan*	For cleaning	-	1 month
7.	*Vran shodhan tail*	For cleaning and as an antiseptic	-	1 month
8.	*Vran ropan tail*	For healthy granulation tissue formation	-	1 month

Follow Up and Outcomes –

Table 2 Gradation of Symptoms –

Sr.No.	Symptoms	Grade No.0	Grade No.1	Grade No.2	Grade No.3	Grade No.4
1.	*Shoola*	No *shool*	Occasional	mild	moderate	severe
2.	*Strava*	No *strava*	Occasional	mild	moderate	severe
3.	*Durgandh*	No *Durgandha*	Occasional	Mild	moderate	severe
4.	*Kriyakashtata*	No *Kriyakashtata*	Occasional	Mild	moderate	severe
5.	Tenderness	No Tendeerness	Occasional	mild	moderate	severe

Table 3 Changes in symptoms before and after treatment –

Sr. No.	Symptoms	Before treatment	After 7days	After 14days	After 21days	After 28days	After treatment
1	*Shool*	4	3	3	2	1	0
2	*Durgandh*	4	3	2	1	1	0
3	*Kriyakashtata*	4	3	2	1	1	0
4	Tenderness	4	2	2	1	1	0

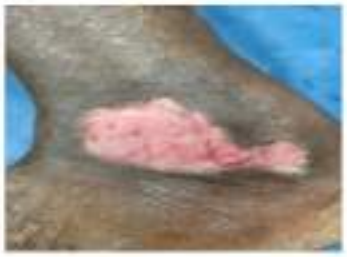

Fig.1: Picture before treatment

Fig.2: Picture during treatment

Fig. 3: Picture after treatment

Fig.4: Picture wound healed completely

RESULTS

Wound was healed completely in 4 weeks after the starting of treatment. Pain during walking was completely reduced and the patient can walk comfortably without pain. Pus discharge from the wound completely stopped in 3 weeks.

DISCUSSIONS

According to *sushruta* the diabetic foot ulcer can be correlated with *madhumehjanya vran* and during it`s description *sushruta* stated that this is *kasht sadhya vran*[5]. According to *sushruta vasa* and *meda* along with other *dosh* and *dushya* lead to formation of *pramehjanya pidika* which is later converted into non healing wound and further wound over lower limb is difficult to heal [6]. For the proper healing of the wound *pathya apthya* are explained to the patient which are described by *sushrut Acharya*[7]. All the medicine which are used in this case are classical medicines having literary references for treating *madhumeh* along with healing of the wound. In this case the medicated oil which is used locally will work by its *shodhan* and *ropan* properties of the drugs are used for preparing medicated oil.

CONCLUSION

This case study has proved the potential of ayurvedic principles of wound management in diabetic foot ulcer. By using principles of ayurvedic wound management according to *shashti upkram* which was explained by *sushrut acharya.* Wounds can be treated successfully without using antibiotics orally as well as intravenously.

REFERENCES

1. Prevalence of Diabetes in India. International Diabetes Federation.www.idf.org/our-network/regions-members/south- east-asia/members/94-india.html. Updated March

2020, Accessed August 1, 2020.

2. Das A, Pendsey S, Abhaynkar M, Malabade R. Management of Diabetic Foot in an Indian Clinical Setup: An Opinion Survey. CUREUS. 2020; 12 (6):e8636. Published 2020
3. Jun 15. DOI:10.7759/CUREUS.8636
4. Maharshi Sushruta, Ambika Datta Shastri, Sushruta Samhita part 1, sutrasthan, chapter no 23, verse no.7, page no.126 Varanasi; Chowkhamba Sanskrit sansthan.; Reprint 2019.
5. Saxena Varsha. Shrivastav Niraj. Management of Diabetic Foot Ulcer in Ayurveda. Intenational Journal for Interdisciplinary and Multidisciplinary Studies. 2015: 2 (7);19-24
6. Maharshi Sushruta Ambika Datta Shastri, Sushruta Samhita part 1, sutrasthan, chapter no 23, verse no.7, page no.126 varanasi; Chowkhamba Sanskrit sansthan; Reprint 2019.
7. Maharshi Sushruta, Ambika Datta Shastri, Sushruta Samhita part 1, nidansthan chapter no6, verse no16, page no329,varanasi;Chowkhamba Sanskrit sansthan, Reprint 2019
8. Maharshi Sushruta, Ambika Datta Shastri , Sushruta Samhita part 1 , sutrasthan, chapter no.19, verse no16 and 32-34, page no.104-106 vara nasi; Chowkhamba Sanskrit sansthan, Reprint 2019.

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IMPORTANCE OF YUKTI (LOGICAL REASONING) IN AYURVEDIC TREATMENT AND RESEARCH

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Abstract

Yukti (logical reasoning) plays a crucial role in Ayurvedic treatment and research, serving as a bridge between classical wisdom and contemporary scientific approaches. Ayurveda, an ancient medical science, emphasizes individualized treatment protocols based on Dosha, Dhatu, and Mala balance. Yukti enables practitioners to analyze patient conditions systematically, ensuring the selection of appropriate therapeutic measures. It aids in the integration of diverse treatment modalities, including Shodhana (purification), Shamana (palliative), and Rasayana (rejuvenation) therapies, by considering multiple factors such as age, Prakriti (body constitution), seasonal variations, and disease prognosis.In Ayurvedic research, Yukti is essential for hypothesis formulation, clinical trials, and validating traditional practices through modern methodologies. Logical reasoning allows scholars to critically assess Ayurvedic principles, making them more adaptable to contemporary healthcare needs. It fosters evidence-based practice by correlating classical texts with clinical observations and scientific studies. Furthermore, Yukti facilitates innovation in Ayurvedic pharmacology, standardization of formulations, and the development of novel treatment approaches.By applying Yukti in diagnosis, treatment planning, and research methodologies, Ayurveda can evolve while preserving its foundational principles. Integrating logical reasoning with traditional knowledge enhances the credibility, efficacy, and global acceptance of Ayurvedic medicine. Thus, Yukti serves as an indispensable tool for both clinicians and researchers, ensuring holistic, effective, and scientifically sound healthcare solutions.

Keywords: Yukti, Ayurveda, Logical Reasoning, Ayurvedic Research, Evidence-Based Practice

Introduction

Ayurveda, the ancient Indian medical science, is a holistic system of healing that relies on the balance of Doshas (biological humors), Dhatus (tissues), and Malas (waste products) for maintaining health. The concept of Yukti (logical reasoning) is extensively described in classical texts and serves as a crucial tool in treatment and research. Yukti is defined as the application of intellect and experience to make informed decisions regarding treatment, diagnosis, and research methodologies in Ayurveda.

Logical reasoning in Ayurveda plays a fundamental role in correlating theoretical concepts with practical applications. It allows practitioners to adapt and personalize treatments based on the patient's Prakriti (constitution), Vikriti (disease state), Kala (seasonal variations), and other influencing factors. Similarly, in Ayurvedic research, Yukti facilitates the validation of ancient principles through modern scientific methodologies, thereby strengthening the credibility of Ayurveda on a global platform.

Yukti in Ayurvedic Diagnosis

Diagnosis in Ayurveda follows a multi-dimensional approach that incorporates Pratyaksha (direct perception), Anumana (inference), and Aptopadesha (authoritative testimony). However, Yukti plays a crucial role in Yukti-pramana, which allows the physician to synthesize information and make a rational decision based on a combination of empirical evidence and theoretical knowledge [1,2].

For example, in the diagnosis of Amlapitta (acid reflux), a physician must consider various factors such as dietary habits, stress levels, and metabolic activities before formulating an appropriate treatment plan. Yukti helps in customizing interventions such as Ahara (diet), Vihara (lifestyle), and Aushadhi (medication) according to the severity and chronicity of the disease [3,4].

Yukti in Ayurvedic Treatment

The effectiveness of Ayurvedic treatments depends largely on logical reasoning. Classical texts describe three primary treatment approaches—Shodhana (purification), Shamana (palliative), and Rasayana (rejuvenation). The selection of these therapies must be based on Yukti, as individual patient factors such as age, Dosha predominance, and the stage of the disease need to be considered [5,6].

1. **Yukti in Panchakarma (Detoxification Therapy)**

Panchakarma therapy involves procedures such as Vamana (therapeutic emesis), Virechana (purgation), Basti (medicated enema), Nasya (nasal administration), and Raktamokshana (bloodletting). The logical reasoning behind choosing a specific Panchakarma therapy depends on the Dosha imbalance. For instance, in cases of Vata-predominant disorders like osteoarthritis (Sandhigata Vata), Basti is preferred, while in Pitta-related disorders such as liver dysfunctions, Virechana is indicated [7,8].

2. **Yukti in Drug Formulation and Pharmacology**

Ayurvedic pharmacology (Dravyaguna) is heavily reliant on logical reasoning. The selection and combination of herbs are based on principles such as Rasa (taste), Virya (potency), Vipaka (post-digestive effect), and Prabhava (specific action). Yukti plays an essential role in deciding which herbs to combine to enhance therapeutic efficacy and reduce potential side effects.

For instance, Triphala (a combination of Amalaki, Haritaki, and Bibhitaki) is widely used for digestive disorders. The reasoning behind this formulation is that it balances all three Doshas while acting as a mild laxative and antioxidant [9,10]. Similarly, the use of Guduchi (Tinospora cordifolia) in immunomodulation is based on its Madhura (sweet) Rasa and Tikta (bitter) properties that enhance Ojas (vital energy) while pacifying excess Pitta [11,12].

Yukti in Ayurvedic Research

With the increasing global acceptance of Ayurveda, the need for evidence-based validation of its principles has become imperative. Yukti is essential for designing clinical trials, standardizing formulations, and integrating Ayurveda with modern medicine.

1. **Role of Yukti in Clinical Research**

Ayurvedic research methodologies incorporate Yukti in multiple aspects, including:

- **Hypothesis Formulation:** Logical reasoning helps in correlating classical Ayurvedic descriptions with modern pathophysiological conditions. For instance, research on Prameha (diabetes) has drawn parallels between Ayurvedic descriptions and modern metabolic syndrome [13,14].
- **Selection of Parameters:** Clinical trials involving Ayurvedic formulations require specific inclusion criteria, dosages, and outcome measures, all of which rely on Yukti to ensure validity and reproducibility [15,16].
- **Combination Therapy:** Modern research supports the use of Yukti-based polyherbal formulations, where a synergistic approach enhances therapeutic efficacy while minimizing adverse effects [17,18].

2. **Standardization and Quality Control**

Standardization of Ayurvedic drugs is a major challenge in contemporary research. Yukti is used to establish protocols for Good Manufacturing Practices (GMP), ensuring that formulations maintain consistency, purity, and potency. Analytical techniques such as High-Performance Liquid Chromatography (HPLC) and Thin-Layer Chromatography (TLC) are employed to validate the pharmacological properties of Ayurvedic medicines [19,20].

Discussion

The role of Yukti in Ayurveda extends beyond theoretical applications and plays a crucial role in modernizing and validating Ayurvedic principles. Logical reasoning ensures that practitioners make informed decisions tailored to individual patient needs. Research methodologies integrating Yukti with clinical trials provide a scientific basis for Ayurvedic treatments. The development of evidence-based Ayurvedic practices through logical reasoning enhances credibility and global acceptance.However, challenges such as standardization, lack of uniform research models, and limited interdisciplinary collaborations need to be addressed. Ayurveda must integrate with modern biomedical research frameworks while preserving its traditional wisdom. Additionally, more robust clinical trials and meta-analyses should be conducted to provide concrete scientific validation. The inclusion of artificial intelligence (AI) and machine learning (ML) in Ayurvedic diagnostics and treatment planning can further enhance the efficacy and reliability of Yukti-driven interventions.Future advancements should focus on interdisciplinary collaborations integrating Ayurveda with modern medical sciences, pharmacogenomics, and personalized medicine. By fostering evidence-based research and innovation, Yukti can serve as a bridge between ancient wisdom and contemporary healthcare, ensuring the sustained growth and recognition of Ayurveda globally.

Conclusion

Yukti (logical reasoning) is the cornerstone of Ayurvedic treatment and research. It enables personalized diagnosis, formulation of effective treatment plans, and validation of traditional knowledge through scientific studies. By integrating logical reasoning with modern research methodologies, Ayurveda can continue to evolve as a holistic and evidence-based system of medicine. Strengthening the application of Yukti in clinical practice and research will further establish Ayurveda as a credible, globally recognized healthcare system.

References

1. Charaka Samhita, Sutra Sthana, Chapter 11.
2. Sushruta Samhita, Nidana Sthana, Chapter 4.
3. Ashtanga Hridaya, Sutra Sthana, Chapter 13.
4. Sharma PV. Panchakarma Therapy. Chaukhambha Publications; 2010.
5. Pandey MM, Rastogi S, Rawat AK. Indian J Exp Biol. 2011;49(3):175-82.
6. Singh N, Yadav SS. Phytomedicine. 2014;21(3):304-10.
7. Sharma H, Chandola HM. J Ayurveda Integr Med. 2012;3(3):123-9.
8. Patwardhan B, Gautam M. Evid Based Complement Alternat Med. 2005;2(4):465-73.
9. Dhiman KS. AYU J. 2012;33(2):151-9.
10. Rajagopal PL. J Res Ayurvedic Sci. 2019;40(2):95-102.

11. Dash B, Sharma RK. Caraka Samhita: Text with English Translation & Critical Exposition. Varanasi: Chaukhambha Sanskrit Series Office; 2012.

12. Singh RH. Exploring issues in the contemporary evaluation of Ayurvedic concepts. *J Ayurveda Integr Med.* 2010;1(2):91-95.

13. Tiwari P. Ayurvedic approaches to disease and health: The role of Tridosha theory. *Ayu.* 2017;38(4):250-256.

14. Rastogi S. Development and potential of Ayurveda: A review. *J Ethnopharmacol.* 2013;150(2):413-423.

15. Gogte VM. Ayurvedic Pharmacology and Therapeutic Uses of Medicinal Plants. Mumbai: Chaukhambha Publications; 2000.

16. Patwardhan K, Bodeker G. Ayurvedic genomics: Establishing a genetic basis for mind-body typologies. *J Altern Complement Med.* 2008;14(5):571-576.

17. Garg A, Chauhan R. Ayurvedic treatment and its correlation with contemporary pharmacology: An evidence-based approach. *Evid Based Complement Alternat Med.* 2018;2018:7867383.

18. Tripathi B. Commentary on Charaka Samhita. Varanasi: Chaukhambha Surbharati Prakashan; 2013.

19. Kumar A, Kuttan G. Immunomodulatory and anticancer activity of medicinal plants used in Ayurveda. *J Ethnopharmacol.* 2011;135(2):240-246.

20. Sharma J, Kaur R. Panchakarma therapies and their role in detoxification: A clinical review. *J Res Ayurveda.* 2019;40(4):210-220.

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Assessing the efficacy of Erandamuladi Niruha Basti in the management polycystic ovarian syndrome in reproductive age women: A pilot study analysis

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Abstract
Polycystic Ovarian Syndrome (PCOS) is a common hormonal disorder that affects women of reproductive age, with an estimated prevalence of 6-10%. First described in 1935 by Stein and Leventhal hence the name "Stein-Leventhal syndrome"-PCOS is typically marked by a mix of symptoms, including elevated levels of androgens (either detected through lab tests or seen in physical signs), irregular or absent ovulation, and the presence of multiple cysts on the ovaries. It's often linked to insulin resistance and obesity. Among women of childbearing age, PCOS is recognized as the leading and most thoroughly researched cause of infertility due to lack of ovulation.

In Ayurvedic literature, several conditions described under different names such as *Artavakshaya*, *Anartava*, *Nashtartava*, *Vandhyayonivyapad*, *Pushpaghni Jataharini*, *Shushkarevati Jataharini*, *Sthoulya*, *Prameha*, *Strotodushti*, and *Santarpanottha Vyadhi* share similarities with the symptoms seen in Polycystic Ovarian Syndrome (PCOS). While not identical, these conditions reflect aspects of PCOS and merit deeper analysis within the framework of Ayurvedic principles

According to Ayurveda, PCOS is considered a condition of *Bahudoshadushyaavastha* a state where multiple doshas and bodily tissues (dushyas) are involved. Because this imbalance gives rise to a wide range of symptoms, treatment focuses on *Shodhana Chikitsa* (bio-purification therapy). This is a key Ayurvedic approach aimed at addressing the root cause of the disease, not just the symptoms, offering a deeper and more lasting form of healing [3]. According to Charaka, *Vata* is the primary factor responsible for the development of all types of *Yoniroga* (gynecological disorders). Therefore, treatment should begin with *Shodhana Chikitsa* (cleansing therapy), with *Basti Karma* (medicated enema therapy) being the most important and effective method of purification.

Basti therapy acts on multiple levels of the body, including *Shakhagata* (tissues), *Koshthagata* (abdominal cavity), *Tiryakgata* (circulatory pathways), and *Aavaranajanya Rogas* (diseases caused by obstruction). It is especially effective in conditions involving *Bahudosha Avastha* (multiple doshic imbalances). One of the key advantages of *Basti* is its rapid action-particularly *Niruha Basti*, which works within minutes-whereas other therapies like *Vamana* (therapeutic emesis) and *Virechana* (purgation) can take several hours. This quick response is due to *Basti* being administered directly into the colon, the primary seat of *Vata*. So, it is known as "उपक्रमाणां सर्वेषांसोग्रणी". Most of the ingredients in *Erandamulaadi Niruha Basti* possess properties such as *Katu*, *Kashaya*, and *Tikta Rasa* (pungent, astringent, and bitter tastes), along with qualities like *Sukshma* (subtle), *Tikshna* (penetrating), *Ushna Virya* (hot potency), and *Katu Vipaka* (pungent post-digestive effect). These herbs also exhibit actions such as *Deepaniya* (enhancing digestive fire), *Pachaniya* (digestive), *Anulomana* (regulating bowel movement), and are effective in pacifying *Kapha* and *Vata*. Additionally, they are known for being *Agnivardhaka* (metabolism boosters), *Artavjanana* (menstrual regulators), *Medohara* (fat-reducing), *Shothahara* (anti-inflammatory), *Pramehaghna* (anti-diabetic), *Kushtaghna* (effective against skin disorders), *Vrishya* (rejuvenative), and *Granthivilayana* (resolving cystic formations). These properties collectively contribute to breaking the *Samprapti* (pathogenesis) of PCOS. Therefore, a focused effort has been made to explore the therapeutic potential of *Shodhana Chikitsa* in the management of PCOS.

Keywords: PCOS, hyperandrogenism, artavkshaya, anartava, nastrartava, vyandyayonivyapad, pushpaghnijataharini, shushkarevatijataharini, sthoulya, prameha, strotodushti, and santarpannothavyadhi

Introduction

In the process of procreation, a woman is considered to hold three times more responsibility, as she not only contributes to conception but also carries the child and plays a crucial role in nurturing. This immense role demands a healthy mind, body, and especially a well-functioning reproductive system.

Due to the intricate structure and complex functions of the female reproductive system, women are often prone to a variety of menstrual and fertility-related disorders. Among these, Polycystic Ovarian Syndrome (PCOS) stands out as a major and increasingly common concern. It typically presents with symptoms such as irregular menstruation, oligomenorrhea, amenorrhea, infertility, obesity, hirsutism, and acne vulgaris. PCOS is recognized as a prevalent endocrine disorder, affecting approximately 6-10% of women in their reproductive years [1]. It was first described by Stein and Leventhal in 1935 and later came to be known as Stein-Leventhal Syndrome [2]. PCOS is characterized by a combination of hyperandrogenism-either evident through clinical signs or confirmed biochemically-chronic anovulation, and the presence of polycystic ovaries. It is commonly associated with insulin resistance and obesity. Among women of reproductive age, it is the most well-known and extensively studied cause of anovulatory infertility.

In today's era of globalization, there has been a significant shift toward a more sedentary lifestyle, marked by reduced physical activity, increased stress, consumption of high-calorie foods, and irregular or unhealthy dietary habits.

Ayurveda with the main objective of ***स्वस्थस्य स्वास्थ्य रक्षणं आतुरस्य विकार प्रशमनं ।*** has to evolve as a main stream of medicine in combating such emerging health problems like PCOS without any adverse effect by competing with allied branches of evidence-based medicines.

According to the *Charaka Samhita*, all medical knowledge found elsewhere is already encompassed within Ayurveda, and whatever is not found in Ayurveda is unlikely to be found anywhere else.

This verse highlights that Ayurveda approaches disease through an understanding of the *Doshas* and *Dushyas* involved in its manifestation, rather than relying solely on specific nomenclature as seen in other medical systems. While modern terms for emerging diseases like PCOS may not be explicitly mentioned in classical Ayurvedic texts, their features are often described under various contexts. It is therefore essential to analyze these conditions based on their symptoms and underlying pathology. Ultimately, it is the clinical *Yukti*-the insightful reasoning-of the physician that allows for an accurate correlation of modern disorders like PCOS within the Ayurvedic framework and leads to an effective diagnosis and treatment plan.

Several conditions described in Ayurvedic classics-such as *Artavakshaya*, *Anartava*, *Nashtartava*, *Vandhyayonivyapad*, *Pushpaghni Jataharini*, *Shushkarevati Jataharini*, *Sthoulya*, *Prameha*, *Strotodushti*, and *Santarpanottha Vyadhi*-can, to some extent, be correlated with the symptoms of PCOS. However, a detailed analysis within the Ayurvedic framework is essential to accurately understand and interpret these similarities.

According to Ayurveda, PCOS is understood as a condition of *Bahudosha Dushya Avastha*-a state where multiple doshas and bodily tissues are vitiated. In such complex presentations, where multiple symptoms are evident, treatment focuses on *Shodhana Chikitsa* (bio-purification therapy), which is central to Ayurveda's approach in addressing disease at its root for long-lasting relief. As per *Charaka Samhita*, *Vata* is considered the primary dosha involved in the manifestation of all *Yonirogas* (gynecological disorders) [3]. Therefore, treatment should begin with balancing *Vata* through *Shodhana Chikitsa*, with *Basti Karma* (medicated enema) recognized as the most effective and essential form of purification in such cases. *Basti* therapy exerts its action across multiple bodily systems, including *Shakhagata* (tissues), *Koshthagata* (gastrointestinal tract), *Tiryakgata* (circulatory pathways), and *Aavarana Janya Rogas* (obstructive disorders). It is particularly effective in conditions involving *Bahudosha Avastha* (multiple doshic imbalances). One of its notable advantages is its rapid action-*Niruha Basti*, for example, begins to work within minutes, unlike *Vamana* and *Virechana*, which typically take several hours. This quick response is due to the direct administration of *Basti* into the colon, the primary seat of *Vata*. Hence, it is regarded as "***उपक्रमाणां सर्वेषां श्रेष्ठतमः***" (the foremost among all therapeutic procedures).

The formulation *Erandamoolaadi Niruha Basti* contains drugs that are predominantly *Katu*, *Kashaya*, and *Tikta Rasatmaka* (pungent, astringent, and bitter in taste), with qualities such as *Sukshma* (subtle), *Tikshna* (sharp), *Ushna Virya* (hot potency), and *Katu Vipaka* (pungent post-digestive effect). These herbs also exhibit actions like *Deepaniya* (appetite stimulant), *Pachaniya* (digestive), *Anulomana* (carminative), and are known to balance *Kapha* and *Vata*. Additionally, they possess *Agnivardhaka* (metabolic enhancing), *Artavjanana* (menstrual regulatory), *Medohara* (anti-obesity), *Shothahara* (anti-inflammatory), *Pramehaghna* (anti-diabetic), *Kushtaghna* (effective against skin disorders), *Vrushya* (rejuvenative), and *Granthivilayana* (cyst-resolving) properties.

These multifaceted actions support the *Samprapti Vighatana* (disruption of pathogenesis) of PCOS, making *Shodhana Chikitsa* a promising therapeutic approach. Therefore, a focused effort has been made to study the efficacy of *Shodhana Chikitsa*, particularly *Basti*, in the management of PCOS.

Aim and Objectives

- To evaluate the efficacy of Erandamuladi Niruha Basti in promoting follicular growth and ovulation in women with PCOS.
- To assess the therapeutic effect of Erandamuladi Niruha Basti on key clinical manifestations of PCOS, including:
  - Irregular menstruation
  - Hirsutism
  - Acne
  - Obesity (as measured by BMI)
  - Hormonal imbalances (through hormonal assays)

Sample size Estimation

- Sample Size-6 patients having signs and symptoms of PCOS were selected for the study. After analyzing the vyadhi and Rugna Avastha. Treatment was given as follows:

1. Deepan Pachan Anulomana-Panchakola Churna 2gm BD with Ghrut for 5 to 7 days.
2. Then Given Shodhana Chikitsa-Erandmuladi Niruha Basti for Consecutive 8 days.(In the pattern of Yoga Basti).

Materials and Methods

Materials

- *Panchakolachurna*
- *ErandamuladiNiruha Basti.*
- *Madhutailik Basti*

Panchakola Churna [5]

पिप्पलीचव्यविश्वाहपिप्पलीमूलचित्रकैः |
पंचकोलमिती ख्यातं रूच्यं पाचनदीपनम् ||
आनाहप्लीहगुल्मघ्नम् शूल श्लेष्मोदरपहम् ||
(भा. भै. र.तृ.३८७९-अथ पकारादिचूर्णप्रकरणम्)

Sr. No.	Drug and UPYUKT ANG [10]	Latin name and family	Rasa	Guna	Virya	Vipaka	Karma
1	Pippali (phala)	*Piper longum* (*Piperaceae*)	Katu	Laghu Snigdha	Ushna	Madhura	Vata-kaphahar, deepana, vrsya, rasayana
2	Pippalimula (mula)	*Piper longum* (*Piperaceae*)	Katu	Laghu, ruksha	Ushna	Katu	Kapha-vatahar, bhedana, deepana, Pachana
3	Chavya (mula)	*Piper chaba* (*Piperaceae*)	Katu	Laghu, ruksha	Ushna	Katu	Kapha-vatahar, Deepana, Pachana
4	Chitrak (chaal)	*Plumbago zeylanica* (*Plumbaginaceae*)	Katu	Laghu, ruksa, tikshna	Ushna	Katu	Vata-kaphahar, deepan, pachana, grahi
5	Nagar (kanda)	*Zingiber officinalis* (*Zingiberaceae*)	Katu	Guru, rukshatikshna	Ushna	Katu	Kapha-vatahar, laghudeepan, Hridya

Erandadimula Niruha Basti [6]

एरण्डमूलं त्रिपलं पलाशा ह्स्वानि मूलानि च यानि पञ्च| ३८| रास्नाश्वगन्धातिबलागुडूची पुनर्नवारग्वधदेवदारु|

भागाः पलांशा मदनाष्टयुक्ता जलद्विकंसे क्वथितेऽष्टशेषे | ३९ | पेष्याः शताह्वा हपुषा प्रियङ्गुः सपिप्पलीकं मधुकं बला च | रसाञ्जनं वत्सकबीजमुस्तं भागाक्षमात्रं लवणांशयुक्तम्|४०|

समाक्षिकस्तैलयुतः समूत्रो बस्तिर्नृणां दीपनलेखनीयः। जङ्घोरुपादत्रिकपृष्ठशूलं कफावृतिं मारुतनिग्रहं च ४१ | विण्मूत्रवातग्रहणं सशूलमाध्मानतामश्मरिशर्करे च | आनाहमर्शोग्रहणीप्रदोषानेरण्डबस्तिः शमयेत् प्रयुक्तः |४२ | (च. सि. ३/३८-४०)

Kwatha Drugs

Sr. No.	Drug	Latin name and family	Rasa	Guna	Virya	Vipaka	Karma
1	*Eranda Mula*	*Ricinus communis (Euphorbiaceae)*	*Madhura, Katu, Kashaya*	*Snigdha, tikshna, sukshma*	*Ushna*	*Madhura*	*Vata-kaphahar, Rechana, Root-vrushya, vatahara*
2	*Palash(Shati) Kapur Kachri*	*Hedychium Spicatum Haimet (Zingerberaceae)*	*Katu, Tikta, Kashaya*	*Laghu, tikshna*	*Ushna*	*Katu*	*Kapha-vatahar, grahi, krimighna, deepana, vrushya, shothhara,sugandhi*
3	*Shaliparni*	*Desmodiumgangeticum (Leguminosae)*	*Madhura, Tikta*	*Guru, snigdha*	*Ushna*	*Madhura*	*Shothaghna, mutrajanana, balya, rasyana, sarvadoshahara, vishaghna, angamardaprashamana, premehaghna*
4	*Prushniparni*	*Urariapicta* (*leguminosae*)	*Madhura, Tikta*	*Snigdha, laghu*	*Ushna*	*Madhura*	*Tidoshaghna, deepaniya, vrushya, vatahara, shothahara, jeevanunashak, sangrahi*
5	*Brihati*	*Solanum indicum* (*solanaceae*)	*Katu, Tikta*	*Laghu, rukshatikshna*	*Ushna*	*Katu*	*Deepan, pachan, vataghana, kaphaghana, shothahara, grahi, hrudya, angamardaprashaman, shukrarechaka, mutral*
6	*Kantakari*	*Solanum xanthocarpum (Solanaceae)*	*Katu, tikta*	*Laghu, ruksha, tikshna*	*Ushna*	*Katu*	*Mutral, kaphanissaraka, jwarahara Beeja-vedanasthapaka, ashmarighna*
7	*Gokshura*	*Tribulus terrestris* (*Zygophyllaceae*)	*Madhura*	*Guru, snigdha*	*Sheeta*	*Madhura*	*Shothahara, vata-pittahara, mutral, balya, vrushya, vedanasthapaka, bastirog, napunsakta, viryakshinta, mutrakriccha, vandhayatava, ashmarinashak*
8	*Rasnamula*	*Alpinia officinarum (Zingiberaceae)*	*Tikta*	*Guru*	*Ushna*	*Katu*	*Kapha-vatahara, vayasthapana*
9	*Ashwagandha*	*Withaniasomnifera* (*Solanaceae*)	*Katu, tikta, Kashaya*	*Snigdha, laghu*	*Ushna*	*Katu*	*Vata-kaphahara, balya, rasayana, shukral, vajikarana*
10	*Atibala*	*Abutilon indicum* (*Malvaceae*)	*Madhura*	*Laghu, snigdha, pichil*	*Sheeta*	*Madhura*	*Vata-pittahra, balya, bruhana, vrushya, vatavyadhinashak, raktapittaghna, rasyana, pramehaghna*
11	*Guduchi*	*Tinospora cordifolia* (*Menispermiaceae*)	*Tikta, Kashaya, Katu*	*Guru, snigdha*	*Ushna*	*Madhura*	*Tridoshashamak, medhya, rasayana, deepaniya, medohara, kandughna, jwarahara, dahaprashamana, pramehaghna, jantughna*
12	*Punarnava*	*Boerhaviadiffusa* (*Nyctaginacea*)	*Madhura, tikta, Kashaya*	*Laghu, ruksha*	*Ushna*	*Katu*	*Kapha-vatahara, shothahara, deepana, pandu, raktapitta, udararoganashak*
13	*Aragwadha*	*Cassia fistula (Caesalpinioideae)*	*Madhura, tikta*	*Mridu, guru, snigdha*	*Sheeta*	*Madhura*	*Kapha-pittahara, sransana, anti-inflammatory, anti-bacterial, krumighana, kapha-medohara, gulma-tridoshjit, twaka dosha nashaka, dadru, pama, kushthaghna*
14	*Devdaru*	*Cedrus deodara (Pinaceae)*	*Tikta, katu, Kashaya*	*Ruksha, laghu*	*Ushna*	*Katu*	*Kapha-vatahara, deepana, Kasahara, anti-inflammatory, anti-cancer activity*
15	*Madanphala*	*Randiadumetorum (Rubiaceae)*	*Madhra, tikta*	*Laghu, ruksha*	*Ushna*	*Katu*	*Kapha-vatahara, chardana, lekhana, asthapanopaga, anuvasanopaga, vamaka*

Sr. No.	Drug	Latin name and family	Rasa	Guna	Virya	Vipaka	Karma
1	*Tiltaila*	*Sesamum indicum (Pedaliacea)*	*Madhura*	*Guru, snigdha*	*Ushna*	*Madhura*	*Balya, keshya, grahi, mutral, vranaropaka, aartavajanan, vajikarana*
2	*Madhu*	Honey	*Madhura, Kashaya (anurasa)*	*Guru, ruksha, sheeta, mridu, sukshma,pichila*			*Yogavahi, sandhana, varnya, vranashodhaka, srotoshudhikara, tridoshaghna, lekhana, mehanashaka*
3	*Saindhava*	*Sodiichloridum (Rock salt)*	*Lavana*	*Laghu, snigdha, sukshma, srotogami*	*Sheeta*		*Agni deepaka, pachaka, ruchikaraka, tidoshaghna, Netra roganashaka*
4	*Gomutra*		*Kashaya, tikta*	*Tikshna, ushna, laghu, kshara*	*Ushna*		*Agnideepaka, kapha-vatanashaka, gulmabastiroganashaka*

Kalka Drugs

Sr. no	Drug	Latin name and family	Rasa	Guna	Virya	Vipaka	Karma
1	*Saunfbeeja*	*Foeniculum vulgare (Umbelliferae)*	*Madhura, Katu, Tikta*	*Laghu, ruksha*	*Sheeta*	*Madhura*	*Kapha-vatahara, yonishoolahara, vatanulomaka, dahaprashamana, mutral, virajniya, sugandhi, deepana, pachana*
2	*Hapusha*	*Juniperus communis (Cupressaceae)*	*Katu, tikta*	*Guru*	*Ushna*	*Katu*	*Sugandhi, mutrajanana, vatanulomka, adhmanahara, pachaka, aartavajanana, vrushya, raktaskandaka, upsarganashaka*
3	*Pippalimula*	*Piper longum (Piperacea)*	*Katu*	*Laghu, ruksha*	*Ushna*	*Katu*	*Kapha-vataghna, agnideepaka, pachaka, malabhedana*
4	*Yashtimadhu*	*Glycyrrhiza glabra(Leguminosae))*	*Madhura*	*Guru, snigdha*	*Sheeta*	*Madhura*	*Tridoshahara, balya, chardana, vrushya, rasayana,kaphashamaka, netrin, mutrajanana, stanyavardhaka, shothahara, vranaropaka*
5	*Vatsakabeeja*	*Holarrhenaantidysenterica (Apocynaceae)*	*Tikta, Kashaya*	*Laghu, Ruksha*	*Sheeta*	*Katu*	*Deepana, sangrahi, krimighna, vatanulomana, vrushya, balya, raktasangrahaka*
6	*Priyangu*	*Callicarapa Macrophylla (Verbanecea)*	*Tikta, Madhur*	*Guru, Ruksha*	*Sheeta*	*Katu*	*Kapha Pittahara, Pramehagna, Mutravijaniya, Dahaprashamana, Rakta*
7	*Nagarmotha*	*Cyprus scariosus (Cyperaceae)*	*Tikta, katu, kashaya*	*Laghu, Ruksha*	*Sheeta*	*Katu*	*Deepan, pachana, avatanulomaka, grahi, swedajanana, kaphaghna, medhya, trishnanigrahana, stanyajanana, stanyashodhana, kandughna, mutrajanana, uttejaka, jantunashaka, garbhashayaalpasankochaka, dugdhashodhaka*
8	*Atibala*	*Abutilon indicum (Malvaceae)*	*Madhura*	*Laghu, Snigdha*	*Sheeta*	*Madhura*	*Vata-Pitta, Shamak, rasayana, mutrajanana, mridurechaka, pramehaghna*
9	*Rasanjana*	*Extractum berberis*	*Katu, tikta*	*Laghu, ruksha*	*Ushna*	*Katu*	*Netra sambandhivikaranashaka, rasayana, chedaka, shothaghna, raktashodhaka, shleshmaghna, vranaropaka, yakrutpleehavriddhi, bahyaarsha, vishamajwaranashaka*

Standard of preparation

Three stages of Panchakarma

Purva Karma	Pradhana Karma	Paschata Karma
a) Dipanapachana	a) Niruhabasti	Sansarjana Krama
b) Snehana	b) Anuvasanabasti	
c) Swedana		

Administration of basti

- Asthapanabastià→Sustains life, dosha, dhatu and mala
- Niruhabastià→Capable of eliminating the vitiated doshas from the body.

1. Purvakarma

a) Preparation of the basti (Dravya)-Ingredients

1. Saindhava
2. Madhu
3. Medicated taila
4. Kwatha decocted from herbs
5. Avapadravyaseg-Gomu

Specific order of mixing the ingredients-

माक्षिकं लवणं स्नेहं कल्कं क्वाथं इथि क्रमात्।

आवपेत निरुहाणाम् ह्योष्यम् संयोजनं विधिः ॥ (अ.हृ. सू. १९/४५)७

Procedure for Preparing Kwatha Basti:

1. *Saindhava Lavana* (rock salt) was taken in a round-bottom vessel.
2. Honey was added to the salt and mixed thoroughly through trituration.
3. Medicated *Taila* (oil) was then added, and mixing was continued while carefully monitoring the emulsion.
4. The herbal powder (*Churna Dravyas*) or *Kalka* (herbal paste) was added next.
5. Once these ingredients were well emulsified, the *Kwatha* (herbal decoction) was gradually added while continuing to mix.
6. The combined mixture (*Kwatha Basti*) was then gently heated to a lukewarm temperature by placing the container in a hot water bath.
7. At the final stage, *Avapadravya-Gomutra* (cow's urine)-was added.
8. The entire mixture was churned first in a clockwise direction, followed by alternating in-and-out movements to ensure proper blending. *Erandamuladi Niruha Basti* was given to patients

Sr. No	Topic	Trial Group
1	Drug	*Erandamuladi Basti*
2	Dose	960 ml (Yoga Basti) for consecutive 8 days
3	*Kala*	*Apana kala*
4	Duration of therapy	3 to 4 months
5	Route of administration	Rectal
6	Follow up	3 (30^{th}, 60^{th}, 90^{th} day)

Observation Criteria

A) Subjective criteria

1. Irregular menses (*Yathaakaalamprapashyati*) [8]

Grade	Symptoms	Score
I.	28 days	0
II.	28-45 days	1
III.	45-60 days	2
IV.	> 60 days	3

2. Hirsutism (*Atiloma*) [9]

Assessment of Hirsutism with Modified Ferriman & Galley Visual Scoring System

MFG Score	Grade	Score
< 8	Normal	0
8-15	Mild	1
>15	Moderate	2
>15 (with Sr. Testosterone < 200 ng/dl)	Severe	3

3. Acne (*Mukhadushika*) [10]

Grade	Symptoms	Score
I.	Comedones, occasional papules (mild)	0
II.	Papules, comedones, few pustules (moderate)	1
III.	Predominant pustules, nodules, abscess (severe)	2
IV.	Mainly cyst, abscess wide spread scarring (very severe)	3

Objective criteria

1. Obesity (*Sthula*) [11] - Assessment of variable before & after treatment

Grade	BMI (kg/m^2)	Score
I.	BMI <18.4	0
II.	BMI 18.5-24.9	1
III.	BMI 25-29.9	2
IV.	BMI >30	3

2. Hormonal Estimation (Before and after treatment)

A) For variable Sr. Insulin (F)

Group A		Group B	
Before Treatment	After Treatment	Before Treatment	After Treatment

B) For variable BSL (F)

Group A		Group B	
Before Treatment	After Treatment	Before Treatment	After Treatment

C) For variable Sr. Testosterone

Group A		Group B	
Before Treatment	After Treatment	Before Treatment	After Treatment

3. USG (Before and after treatment)

A) For PCOS pattern (Present or Absent)

Group A				Group B			
Rt. Ovary		Lt. Ovary		Rt. Ovary		Lt. Ovary	
Before Treatment	After Treatment	Before Treatment	After Treatment	Before Treatment	After Treatment	Before Treatment	After Treatment

B) Ovarian volume

Grade	Ovarian volume (ml)	Score
I	≤ 7 ml	0
II	8-10 ml	1
III	11-13 ml	2
IV	>14 ml	3

C) Follicular growth (*Vruthapushpam*) [12]

Grade	Symptoms	Score
I.	18-20 mm (Ruptured)	0
II.	18-20 mm (unruptured)	1
III.	14-18 mm (unruptured)	2
IV.	10-14 mm (unruptured)	3

Observational Table

Subjective Criteria

Observation	Before	During Treatment			After Treatment
	Base line-1st Day	30th Day	60th Day	90th Day	
1. Menstrual Cycle					
2. Hirsutism					
3.Acne					

Statistical Analysis

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The median of MC_BT equals 0.	One-Sample Wilcoxon Signed Rank Test	.023	Reject the null hypothesis.
2	The median of MC_AT equals 0.	One-Sample Wilcoxon Signed Rank Test	1.000	Retain the null hypothesis.
3	The median of H_BT equals 0.	One-Sample Wilcoxon Signed Rank Test	.014	Reject the null hypothesis.
4	The median of H_AT equals 0.	One-Sample Wilcoxon Signed Rank Test	1.000	Retain the null hypothesis.
5	The median of A_BT equals 0.	One-Sample Wilcoxon Signed Rank Test	.014	Reject the null hypothesis.
6	The median of A_AT equals 0.	One-Sample Wilcoxon Signed Rank Test	.317	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Analysis of the hypothesis test summary table

The table presents the results of a One-Sample Chi-Square Test applied to three conditions: MC (Menstrual Cycle), Hirsutism, and Acne before treatment (BT) and after treatment (AT). The significance level is 0.05, meaning any p-value (Sig.) below this threshold leads to rejecting the null hypothesis.

Key observations from the table

1. MC (Menstrual Cycle)-BT and AT

1. P-Value = 0.392 for both BT and AT.
2. Since 0.392 > 0.05, we retain the null hypothesis.
3. This indicates that MC categories occur with equal probabilities before and after treatment, implying no significant change.

2. Hirsutism-BT and AT

- P-Value=0.044 for both BT and AT.
- Since 0.044 < 0.05, we reject the null hypothesis.
- This suggests that Hirsutism categories do not occur with equal probabilities, meaning there is a significant variation in this condition.

3. Acne-BT and AT

1. P-Value = 0.112 for both BT and AT.
2. Since 0.112 > 0.05, we retain the null hypothesis.
3. This implies that Acne categories occur with equal probabilities, showing no significant variation.

Interpretation of Results

- MC and Acne show no significant differences in their distributions before and after treatment.
- Hirsutism is the only condition with a significant change, meaning its distribution has likely shifted due to an external factor (e.g. treatment effects or other influences).
- The treatment may have had an effect on Hirsutism, but not on MC or Acne, or the sample size might not be large enough to detect changes in the latter two conditions

Table 1: Paired Sample t-test interpretation

Parameter	Mean (BT)	Mean (AT)	T-Stat	P-Value (Two-Tailed)	Interpretation
BSL (Blood Sugar Level)	84.83	67.5	5.469	0.00278	Significant reduction (p<0.05)
Sr. Insulin (Serum Insulin)	13.54	8.37	1.469	0.2017	No significant change (p>0.05)
LH (Luteinizing Hormone)	14.26	14.24	0.011	0.992	No significant change (p>0.05)
FSH (Follicle-Stimulating Hormone)	7.97	6.91	0.884	0.417	No significant change (p>0.05)
Testosterone	0.727	0.612	1.554	0.181	No significant change (p>0.05)
Rt. Ovary Volume	10.33	7.33	2.477	0.056	Marginal reduction (p≈0.05)
Lt. Ovary Volume	13.17	10.83	2.214	0.078	Marginal reduction (p>0.05)

Table 2: Chi-square test interpretation

Variable	Test Used	P-Value	Decision	Interpretation
MC_BT	Chi-Square	0.392	Retain Null	Occurs with equal probability
MC_AT	Chi-Square	0.392	Retain Null	Occurs with equal probability
H_BT	Chi-Square	0.044	Reject Null	Does not occur with equal probability
H_AT	Chi-Square	0.044	Reject Null	Does not occur with equal probability
ACNE_BT	Chi-Square	0.112	Retain Null	Occurs with equal probability
ACNE_AT	Chi-Square	0.112	Retain Null	Occurs with equal probability

Key Findings

- BSL significantly decreased (p<0.05), indicating a strong effect of the intervention.
- Other biochemical parameters showed no significant change (p>0.05).
- H_BT and H_AT showed significant differences in categorical occurrence (p<0.05).
- Ovary volumes showed a decreasing trend but were not statistically significant.

Statistical Analysis and Interpretation: The statistical analysis of the data obtained in the study. A paired sample t-test was conducted to compare pre-treatment (BT) and Post-Treatment (AT) values of biochemical parameters and ovarian volume. Additionally, a chi-square test was performed to analyze categorical variables related to menstrual cycles and acne occurrence.

Paired Sample t-test analysis

A paired sample t-test was conducted to determine whether there was a statistically significant difference between the mean values before (BT) and after (AT) treatment. The results are summarized in Table 3.

Table 3: Paired Sample t-test results

Parameter	Mean (BT)	Mean (AT)	T-Stat	P-Value (two-tailed)	Interpretation
BSL (Blood Sugar Level)	84.83	67.5	5.469	0.00278	Significant reduction (p<0.05)
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Rt. Ovary Volume	10.33	7.33	2.477	0.056	Marginal reduction (P≈0.05)
Lt. Ovary Volume	13.17	10.83	2.214	0.078	Marginal reduction (p>0.05)

Interpretation of paired sample t-test

The results indicate that

- Blood sugar levels (BSL) showed a significant reduction (P=0.00278), indicating a strong effect of the treatment.
- Serum insulin, LH, FSH, and testosterone did not show statistically significant changes (p>0.05).
- Right and left ovary volumes demonstrated a decreasing Trend, however, the changes were not statistically significant (p>0.05).

Chi-Square Test Analysis

A chi-square test was conducted to examine whether the categorical variables followed an equal probability distribution. The results are summarized in Table 4.

Table 4: Chi-Square Test Results

Variable	Test Used	p-value	Decision	Interpretation
Menstrual Cycle BT	Chi-Square	0.392	Retain Null	Occurs with equal probability
Menstrual Cycle AT	Chi-Square	0.392	Retain Null	Occurs with equal probability
Hirsutism BT	Chi-Square	0.044	Reject Null	Does not occur with equal probability
Hirsutism AT	Chi-Square	0.044	Reject Null	Does not occur with equal probability
ACNE BT	Chi-Square	0.112	Retain Null	Occurs with equal probability
ACNE AT	Chi-Square	0.112	Retain Null	Occurs with equal probability

X.5 Interpretation of chi-square test

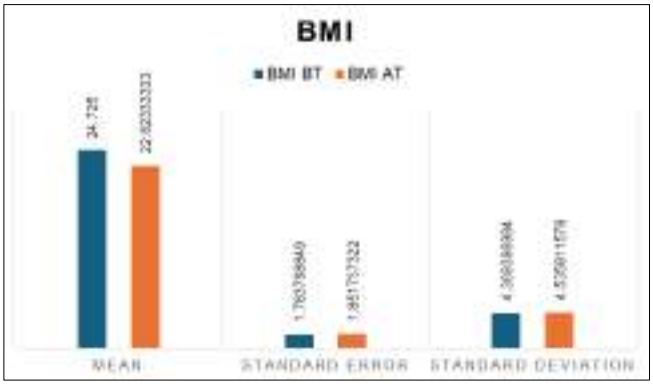
- Menstrual cycle categories (MC_BT and MC_AT) followed an equal probability distribution (p>0.05).
- Hormonal changes in H_BT and H_AT showed significant differences (P=0.044), indicating unequal occurrence.
- Acne occurrences before (ACNE_BT) and after (ACNE_AT) treatment followed an equal probability distribution (p>0.05).

Conclusion

The statistical analysis reveals that the intervention had a significant effect on Blood Sugar Levels (BSL), while other biochemical parameters, including serum insulin, LH, FSH, testosterone, and ovary volumes, did not show significant changes. The chi-square test demonstrated that hormonal category distributions changed significantly after treatment. These findings suggest that while metabolic parameters improved significantly, further investigation is required to assess hormonal and ovarian volume changes over an extended period.

Tabular and Graphical Presentation

BMI		
	BT	AT
Mean	24.725	22.82333
Standard Error	1.783799	1.851737
Standard Deviation	4.369397	4.535812



1. BMI (Body Mass Index)

- **BT (Before Treatment):** 24.73±4.37
- **AT (After Treatment):** 22.82±4.54
- **Change:** ↓ 1.9 units (~7.7% decrease)
- **Interpretation:** A decrease in BMI suggests weight loss, which is beneficial in managing conditions like PCOS, insulin resistance, and metabolic disorders.

BSL		
	BT	AT
Mean	84.83333	67.5
Standard Error	1.579381	2.813657
Standard Deviation	3.868678	6.892024

2. Blood Sugar Levels (BSL)

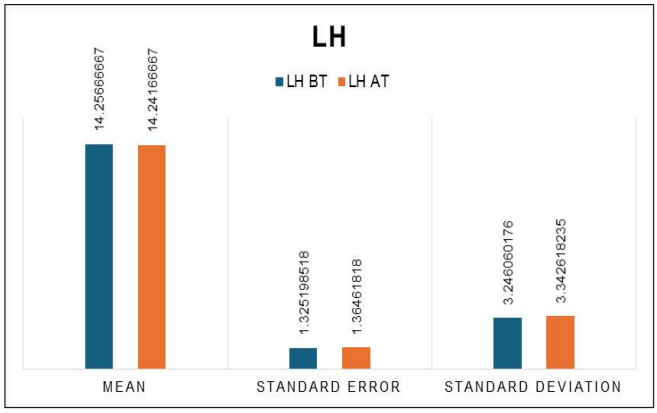
- **BT:** 84.83±3.87
- **AT:** 67.5±6.89
- **Change:** ↓ 17.3 mg/dL (~20.4% decrease)
- **Interpretation:** A significant drop in blood sugar suggests improved glucose metabolism and better insulin function. This may indicate reduced insulin resistance, which is common in metabolic syndromes like PCOS and diabetes.

Sr. Insulin		
	BT	AT
Mean	13.54333	8.368333
Standard Error	3.99521	2.564832
Standard Deviation	9.786226	6.282529

3. Serum Insulin

- **BT:** 13.54±9.79
- **AT:** 8.37±6.28
- **Change:** ↓ 5.17 units (~38.2% decrease)
- **Interpretation:** Lower insulin levels suggest improved insulin sensitivity. High insulin levels are often associated with PCOS and metabolic disorders, so this is a positive outcome.

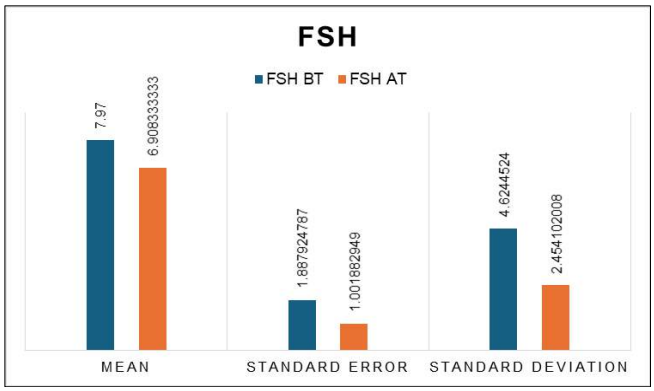
LH		
	BT	AT
Mean	14.25667	14.24167
Standard Error	1.325199	1.364618
Standard Deviation	3.24606	3.342618



4. Luteinizing Hormone (LH)

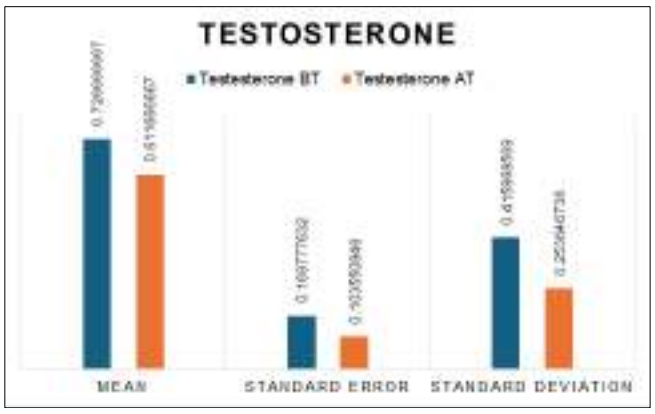
- **BT:** 14.26±3.25
- **AT:** 14.24±3.34
- **Change:** No significant change
- **Interpretation:** LH remained stable. In PCOS, LH is often elevated, so if the initial level was high, maintaining stability rather than further elevation is beneficial.

FSH		
	BT	**AT**
Mean	7.97	6.908333
Standard Error	1.887925	1.001883
Standard Deviation	4.624452	2.454102



5. Follicle-Stimulating Hormone (FSH)

- **BT:** 7.97±4.62
- **AT:** 6.91±2.45
- **Change:** ↓ 1.06 units (~13.3% decrease)
- **Interpretation:** A mild reduction in FSH might indicate improved ovarian function. If the LH: FSH ratio normalizes, it can enhance ovulation and menstrual regularity.

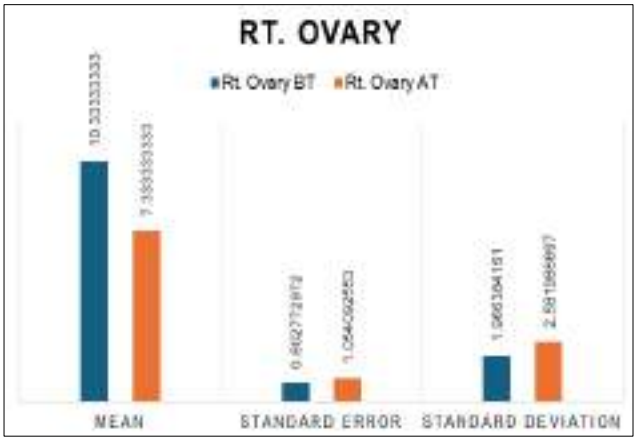


Testosterone		
	BT	**AT**
Mean	0.726667	0.611667
Standard Error	0.169778	0.103551
Standard Deviation	0.415869	0.253647

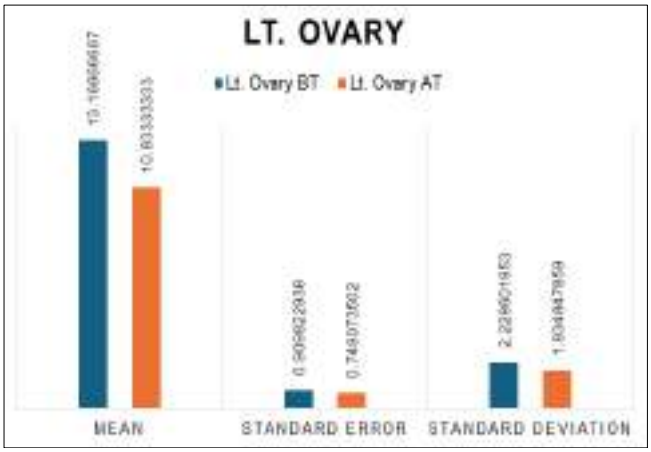
6. Testosterone Levels

- **BT:** 0.73±0.42
- **AT:** 0.61±0.25
- **Change:** ↓ 0.12 (~16.4% decrease)
- **Interpretation:** Reduced testosterone levels suggest decreased androgen excess, which is crucial for managing PCOS-related symptoms like acne, hirsutism, and irregular cycles.

Rt. Ovary		
	BT	**AT**
Mean	10.33333	7.333333
Standard Error	0.802773	1.054093
Standard Deviation	1.966384	2.581989



Lt. Ovary		
	BT	**AT**
Mean	13.16667	10.83333
Standard Error	0.909823	0.749074
Standard Deviation	2.228602	1.834848



7. Ovarian Size

Right Ovary:

- **BT:** 10.33±1.97
- **AT:** 7.33±2.58
- **Change:** ↓ 3.0 mm (~29% reduction)

Left Ovary

- **BT:** 13.17±2.23

- **AT:** 10.83±1.83
- **Change:** ↓ 2.34 mm (~17.8% reduction)
- **Interpretation:** A decrease in ovarian size suggests reduction in ovarian volume and possible cyst resolution, which is a positive sign in conditions like PCOS.

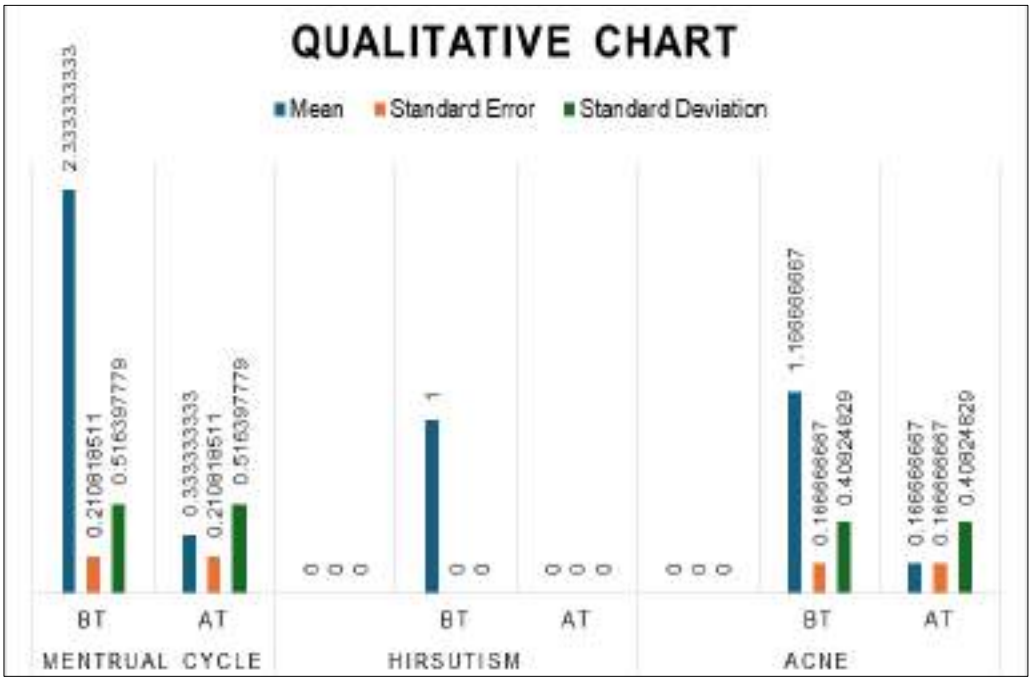
Mentrual Cycle	Mentrual Cycle	
	BT	**AT**
Mean	2.333333	0.333333
Standard Error	0.210819	0.210819
Standard Deviation	0.516398	0.516398

Hirsutism		
	BT	**AT**
Mean	1	0
Standard Error	0	0
Standard Deviation	0	0

Acne		
	BT	**AT**
Mean	1.166667	0.166667
Standard Error	0.166667	0.166667
Standard Deviation	0.408248	0.408248

8. Menstrual Cycle Regularity

- **BT:** 2.33±0.52
- **AT:** 0.33±0.52
- **Change:** Significant improvement
- **Interpretation:** The menstrual cycle became more regular, indicating improved ovarian function and hormonal balance.



9. Hirsutism (Excess Hair Growth)

- **BT:** 1.0
- **AT:** 0.0
- **Change:** Complete resolution
- **Interpretation:** The absence of hirsutism after treatment suggests a significant improvement in androgen-related symptoms.

10. Acne

- **BT:** 1.17 ± 0.41
- **AT:** 0.17 ± 0.41
- **Change:** ↓ 1.0 (~85.7% decrease)
- **Interpretation:** A significant reduction in acne suggests an improvement in hormonal balance, particularly in androgen levels.

Statistical Conclusion

- **Metabolic improvements:** Decreased BMI, lower blood sugar, and reduced insulin levels suggest better metabolic health.
- **Hormonal balance:** Lower testosterone and stable LH: FSH ratio indicate better endocrine function.
- **Ovarian function:** Reduced ovarian size and improved menstrual cycles show better reproductive health.
- **Clinical symptoms:** Hirsutism and acne significantly improved, reflecting better androgen regulation.

Discussion

A. role of tridosha in ovulation and menstruation

1. Vata Dosha

Primarily, *Apana Vayu*-a subtype of *Vata*-plays a crucial role in the reproductive processes. It governs:

- The movement and rupture of ovarian follicles
- The release of the ovum
- Its transport toward the fallopian tube (*fimbriae*)
- The excretion of *Mala* (waste), *Mutra* (urine), *Artava* (menstrual blood), and the expulsion of the fetus (*Garbhanishkramana*)

Thus, *Vata*, particularly in its balanced and *Anulomana* (downward) flow, is vital for the proper functioning of ovulation and menstruation.

2. Pitta Dosha

***Pitta* is associated with transformation and regulation. In the context of the menstrual cycle, it is responsible for:**

- Hormonal functions and their regulation
- Coordination of different phases of the ovarian and menstrual cycles

It drives the internal biochemical processes that ensure timely ovulation and cyclical shedding of the endometrium.

3. Kapha Dosha

***Kapha* is linked to structure, stability, and nourishment. It supports:**

- The development and maintenance of reproductive tissues.
- The growth and maturation of ovarian follicles during the initial phase of the cycle

Kapha ensures that the reproductive system is well-nourished and capable of sustaining reproductive health.

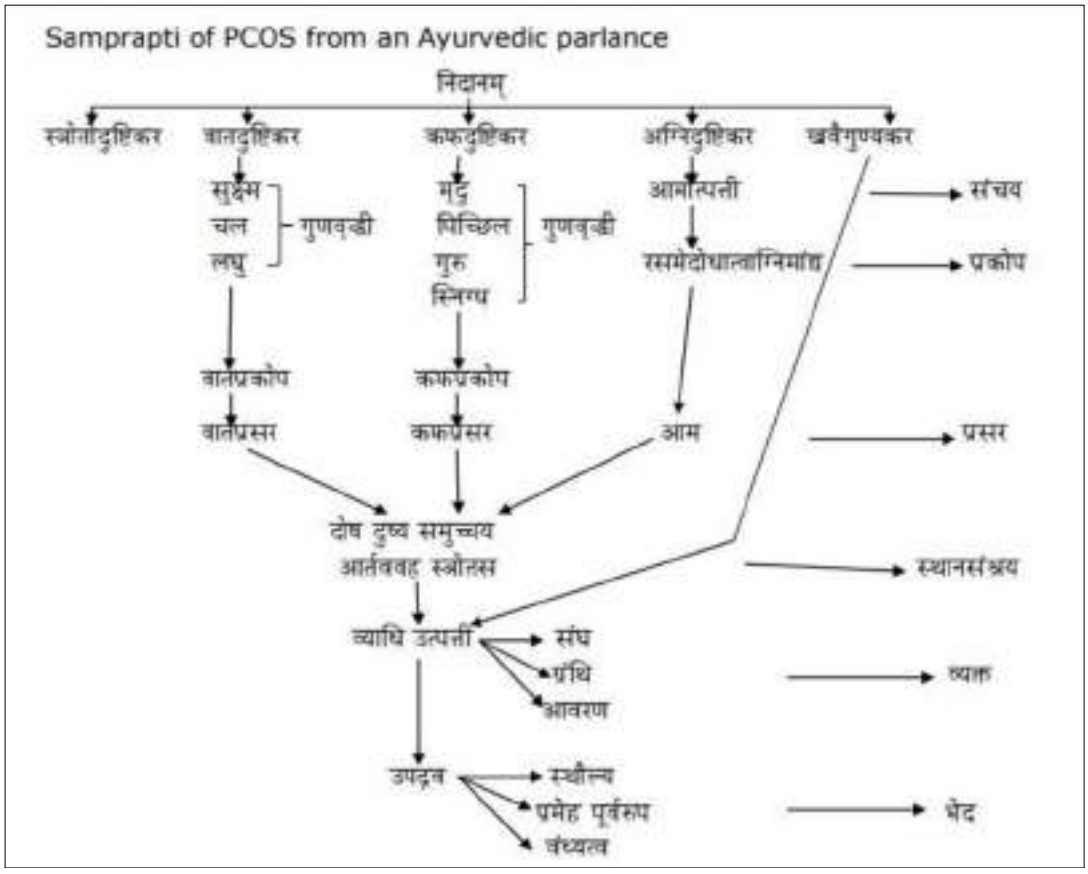


Fig 1: Samprapti of PCOS, According to Ayurvedic Prespective

***Samprapti Ghataka* (Pathological Factors Involved in PCOS)**

- **Dosha Involved:** Kapha and Vata are the predominant doshas contributing to the pathology.
  - Kapha causes srotorodha (channel obstruction), granthi (cystic formations), and metabolic sluggishness.
  - Vata-especially Apana Vayu-gets vitiated and loses its Anulomana function, disrupting the normal process of ovulation and menstruation.
- **Dushyas (Affected Tissues)**
  - Rasa (plasma/lymph)
  - Rakta (blood)
  - Mamsa (muscle)
  - Meda (adipose tissue)
  - Asthi (bone)
- **Strotas (Affected Channels)**
  - Rasavaha (plasma-carrying)
  - Raktavaha (blood-carrying)
  - Mamsavaha (muscle-carrying)
  - Medovaha (fat-carrying)
  - Asthivaha (bone tissue)
- Artavavaha (reproductive system)
- **Rogamarga (Path of Disease)**
- Abhyantara (internal pathway), affecting the internal systems and metabolism.
- **Adhisthana (Site of Manifestation)**
- Garbhashaya (uterus)
- Phalakasha (region of ovaries)
- **Vyaktasthana (Site of Symptom Manifestation)**
- Sarvasharira (whole body), due to systemic involvement like obesity, hirsutism, and hormonal imbalance.
- **Udbhavasthana (Origin Site)**

- Amapakvashaya / Koshta (gastrointestinal tract), indicating a root cause in metabolic and digestive imbalances.
- **Dushti Prakara (Type of Vitiation)**
- Sanga (obstruction)
- Granthi (cyst formation)
- **Agni (Digestive Fire)**
- Impaired Jatharagni (digestive fire) and Dhatwagni (tissue-level metabolism), especially Rasagni and Medodhatvagni, leading to improper tissue formation and accumulation.
    - o

Lakshanas of PCOS in Ayurvedic Perspective

PCOS, as interpreted in Ayurveda, manifests through multiple signs and symptoms rooted in Strotodushti (channel obstruction), Santarpanottha Nidana (disorders caused by over-nutrition), and Beeja Dushti (genetic or germ cell abnormalities). The following are key clinical features with their Ayurvedic interpretations and modern parallels:

1. *Prameha Purvarupa* (Premonitory Symptoms of Prameha)

- **Involvement:** Kapha-Meda Dushti
- **Modern Correlate:** Hyperinsulinemia
- **Explanation:** The vitiation of Kapha and Meda leads to impaired glucose metabolism and insulin resistance, setting a pre-diabetic foundation commonly observed in PCOS.

2. *Srotasam Lepa* / Avarana of Artavavaha Srotas

- **Doshas Involved:** Kapha and Vata
- **Manifestations:** Irregular menstruation, Oligomenorrhea, Amenorrhea
- **Explanation:** Due to the sticky and obstructive nature of Kapha, combined with the erratic flow of Vata, there is a blockage in the Artavavaha Srotas (reproductive channels), leading to disrupted menstrual patterns.

3. *Akala Khalitya* (Premature Hair Loss/Baldness)

- **Cause:** Elevated Androgens
- **Explanation:** This reflects hormonal imbalance, particularly increased androgens, resulting in male-pattern baldness, which aligns with Vata-Pitta Dushti.

4. *Neelika (Acanthosis Nigricans)*

- **Ayurvedic View:** Raktavaha Strotodushti and improper Dhatu Parinama (tissue transformation)
- **Manifestation:** Darkening and thickening of the skin around the neck, groin, underarms, and folds
- **Explanation:** Indicative of Rasa, Rakta, and Medo Dhatu vitiation-this is a hallmark of insulin resistance in PCOS.

5. *Atyartava* (Heavy Menstrual Bleeding following Amenorrhea)

- **Cause:** Unopposed Estrogen → Endometrial Hyperplasia
- **Description:** Due to chronic anovulation, there is no progesterone withdrawal, leading to thickened endometrial lining. When menses occur, it may result in heavy, prolonged bleeding-a classic presentation of an Anovulatory Cycle.

6. *Kesha-Loma-Smashru Dushti* (Abnormal Hair Growth)

- **Cause:** Beeja Dosha (Genetic/Heredity Factor)
- **Manifestation:** Hirsutism (excess facial and body hair)
- **Explanation:** An imbalance in hereditary factors (*Pitruja Bhava*) leads to abnormal development and distribution of hair follicles, a prominent feature in PCOS.

7. Androgen Excess & Hormonal Imbalance

- **Pathogenesis**
    - o Excess insulin stimulates the ovaries to produce more androgens.
    - o This leads to decreased Sex Hormone Binding Globulin (SHBG)
    - o Increase in Free Testosterone
    - o Result: Stimulates hair follicles, causing hirsutism and acne

Actions of Ayurvedic Drugs in PCOS Management

Ayurvedic formulations used in the management of PCOS work on multiple levels to restore hormonal balance, enhance metabolism, and promote reproductive health. Below is a breakdown of their pharmacological actions as understood through Ayurvedic principles?

1. Deepana-Pachana (Digestive & Metabolic Enhancers)

- **Drugs:** *Panchakola* group, Chavya, Chitraka, Pippali, Pippalimula, Shunthi
- **Properties:** *Katu Rasa*, *Laghu*, *Ruksha Guna*, *Ushna Virya*, *Katu Vipaka*
- **Action:** These drugs stimulate *Agni* (digestive fire), reduce *Agnimandya*, and eliminate *Ama* (toxins), thereby correcting the root pathology of metabolic sluggishness seen in PCOS.

2. Vatanulomana (Regulation of Apana Vayu)

- **Drugs:** Aragvadha, Chavya
- **Action:** These herbs regulate *Apana Vayu*, which governs menstruation (*Rajapravartan*). Useful in cases of *Oligomenorrhea*, *Amenorrhea*, and irregular cycles by promoting timely and healthy menstrual flow.

3. Medohara (Anti-obesity Action)

- **Drugs:** Eranda, Kantakari, Rasna, Atibala, Aragvadha, Guduchi
- **Action:** These are fat-metabolizing herbs that help reduce excess *Meda Dhatu* (adipose tissue), address obesity and act on *Granthi* (cystic formations), thereby aiding in the reduction of ovarian cysts.

4. Pramehaghna (Anti-Diabetic/Anti-Hyperinsulinemic)

- **Drugs:** Haritaki, Guduchi, Gokshura, Devadaru, Pippali, Shaliparni, Atiparni, Priyangu
- **Action:** These drugs improve insulin sensitivity and reduce *Kapha-Meda Dushti* contributing to hyperinsulinemia, which is a key underlying factor in PCOS.

5. Shothahara (Anti-inflammatory/Anti-edema)

- **Drugs:** Rasna, Punarnava, Gokshura, Shati, Krishnaparni, Shatapushpa, Hapusha, Rasanjana
- **Action:** These herbs reduce inflammation, remove *Ama*, and help in reducing extracellular fluid retention, lowering BMI and body weight.

6. Kushthaghna (Skin Disorder Relievers)

- **Drugs:** Guduchi, Pippali

- **Properties:** *Katu*, *Tikta Rasa*, *Ushna Virya*, and *Raktapittaghna*
- **Action:** These work against skin conditions like *Acanthosis Nigricans* by purifying the blood and balancing *Pitta* and *Kapha*.

7. Vrushya (Reproductive Tonics)
- **Drugs:** Bala, Atibala, Rasna, Gokshura, Pippali, Hapusha
- **Action:** These aphrodisiac herbs support and rejuvenate *Artava Dhatu* (female reproductive tissue), enhancing ovulation and addressing *Hypomenorrhea* or *Oligomenorrhea*.

8. Rasayana (Rejuvenative Herbs)
- **Drugs:** Guduchi, Pippali, Ashwagandha, Yashtimadhu, Gokshura, Indrayava
- **Action:** These herbs restore cellular function and harmony between *Sharira* (body), *Manas* (mind), and *Atma* (soul), promoting overall well-being and alleviating chronic symptoms of PCOS.

9. Lekhana (Scraping/Reducing Agents)
- **Drugs:** Madanaphala, Madha, Gomutra, Aragvadha
- **Action:** These substances help in reducing excessive tissue accumulation (*Meda*) and regulate the menstrual cycle by promoting the reduction of ovarian volume and cystic formations.

Action of Basti (Therapeutic Enema)

The substances administered through Basti travel up to the small intestine, where they are absorbed through the intestinal walls. From there, they enter systemic circulation, allowing their therapeutic effects to reach the entire body

Overall Conclusion

Polycystic Ovarian Syndrome (PCOS) is a complex and multifactorial disorder, often presenting with a spectrum of clinical features such as irregular menstruation, anovulation, hirsutism, acne, obesity, insulin resistance, and infertility. Although PCOS as a oncological entity is not explicitly described in the classical Ayurvedic texts, its pathogenesis and symptoms closely correlate with various Ayurvedic concepts such as Strotorodha (obstruction of bodily channels), Agnimandya (digestive and metabolic imbalance), Kapha-Vata dushti, Granthi formation, and Beejadosha (genetic or congenital defects).

From an Ayurvedic standpoint, the disease can be understood as being predominantly Kapha and Vata-dominant, leading to Avarana (obstruction) of Artavavaha Srotas, resulting in disrupted follicular maturation, ovulation, and menstrual cycles. Involvement of Dushyas like Rasa, Rakta, Mamsa, Meda, and Asthi, and Strotas such as Rasavaha, Raktavaha, Mamsavaha, Medovaha, Asthivaha, and Artavavaha indicate the systemic nature of the disorder. Furthermore, impaired Jatharagni and Dhatvagni, especially Rasagni and Medodhatvagni, lead to improper tissue transformation and accumulation, contributing to symptoms like obesity, amenorrhea, and hirsutism.

The Erandamuladi Niruha Basti, a classical Ayurvedic formulation, offers a comprehensive and effective approach for the management of PCOS. Basti is considered the best therapy for Vata Dosha, which plays a central role in the physiology of menstruation and ovulation. This therapy works not just at the site of administration (Pakvashaya), but due to the systemic absorption of its ingredients via the gut wall, it exerts a whole-body therapeutic effect.

The ingredients in erandamuladi basti have specific pharmacodynamic properties:
- Deepana and Pachana herbs (e.g., Chitraka, Pippali, Shunthi) enhance digestive fire and reduce Ama.
- Vatanulomana herbs (e.g., Aragvadha, Chavya) help restore the downward flow of Apana Vayu, essential for menstrual regulation.
- Medohara and Lekhana dravyas (e.g., Eranda, Kantakari, Madanaphala, Gomutra) assist in reducing excess adipose tissue, targeting the obesity and cystic structures commonly associated with PCOS.
- Pramehaghna herbs (e.g., Haritaki, Guduchi, Gokshura) regulate blood sugar levels and reduce hyperinsulinemia, addressing one of the core metabolic dysfunctions of PCOS.
- Shothahara and Kushthaghna herbs reduce inflammation and treat skin manifestations like Acanthosis Nigricans.
- Vrushya and Rasayana herbs rejuvenate the reproductive system, enhance the quality of Artava (menstrual fluid), and restore hormonal balance.

Collectively, these herbs act synergistically to correct the underlying Samprapti (pathogenesis) of PCOS, addressing both the Hetu (causative factors) and the Lakshanas (symptoms). The inclusion of drugs with Lekhana and Aartavajanana properties helps in resolving ovarian cysts and establishing a regular ovulatory cycle, a key therapeutic goal in PCOS.

Additionally, Basti therapy proves superior to other Shodhana therapies like Vamana and Virechana in terms of action time and specificity of effect, especially because it directly addresses the main site of Vata (Pakvashaya) and hence is hailed in classical texts as "Upakramaanaam Sarvesham Agrani" the foremost among all therapeutic procedures.

In conclusion, Erandamuladi Niruha Basti exemplifies a targeted, holistic, and natural approach in the Ayurvedic management of PCOS. It not only addresses the symptomatic concerns of the disorder-such as irregular menses, Hirsutism, acne, obesity, and insulin resistance-but also corrects the fundamental imbalances of Doshas, Dhatus and Agni. This makes it a potent therapeutic intervention that aligns with both the classical principles of Ayurveda and the modern understanding of PCOS pathophysiology. Given its multidimensional action and holistic benefits, Basti Chikitsa holds promising potential as both a standalone and complementary treatment modality for PCOS.

References

1. Prevalence of PCOS in Indian adolescents, Nidhi R, *et al*., J Pediatr Adolesc Gynecol. 2011, PMID-21600812 (PUBMED)
2. Dutta DC. Textbook of gynecology, 7th Edition New Delhi, Jaypee Brothers medical publisher (p) Ltd. Reprint, 2016, p. 440.
3. Astanga Hrdayam of Srimadvagbhata, Edited with Nirmala Hindi Commentary Along with Special Deliberation etc. By Dr. Brahmanand Tripathi, Prakashak Chaukhamba Sanskrit Pratishthan, Delhi, Astang Hridya Sutrasthan, Adhyay 8/22, Page No. 237.
4. Charak Samhita of Agnivesa, elaborated by Charaka and redacted by Drdhabala, edited by Acharya Vidyadhar Shukla and Prof. Ravi Dutt Tripathi, Chaukhamba

sanskrit pratisthan, reprinted-2013, Charka Sidhi sthan adhaya 1/40-41.
5. Sangruhit: shri Nagindas Chaganlaal Shaha Rasavaidyen, Bharat Bhaishaj Ratnakar, trutiyya bhaga, atha pakaradi churnaprakaranam, Shlok No 3879, Page No 288.
6. Charak Samhita of Agnivesa, elaborated by Charaka and redacted by Drdhabala, edited by Acharya Vidyadhar Shukla and Prof. Ravi Dutt Tripathi, Chaukhamba sanskrit pratisthan, reprinted-2013, Charka Siddhi sthan adhaya 3/38-40, Page No 904-905
7. Astanga Hrdayam of Srimadvagbhata, Edited with Nirmala Hindi Commentary Along with Special Deliberation etc. By Dr. Brahmanand Tripathi, Prakashak Chaukhamba Sanskrit Pratishthan, Delhi, Astang Hridya Sutrasthan, Adhyay 19/45, Page No 237
8. IOSR Journal of Pharmacy, Dr. Bhagyashree Khot, May 2013, ISSN 2250-3013, Page No 21-25.
9. Journal of clinical endocrinology, Ferriman D. & Gallway JD, clinical assessment of body hair growth in women.
10. Acne Red book posted by Amrizalz, Suchmud.
11. BMI-Global data base WHO
12. Bedside obstetrics & gynecology, Richa Saxena, 2nd edition Jaypee Brothers, Page No 326, 1021, 1022.

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Role of ayurvedic medicines in the management of Pandu Roga: A Case study

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Abstract
In Ayurvedic classical texts, the description of *Pandu* is available in three forms i.e, Pandu as a disease, Pandu as a complication, and Pandu as a sign of certain diseases. Panduroga is a condition where Pitta pradhan tridoshas affect the Dhatus causing deterioration of *Varna* and *Bala*, leading to *Twak Vaivarnya* or *Panduta*. It is characterised by changes in the skin colour to white (*Shweta*), yellowish (*Peeta*), greenish (*Harita*) etc. which is one of the "*Varnopalakshita Roga*" i.e a disease characterised by the change in the colour. The clinical condition of Pandu roga in Ayurveda resembles the anemia describe in modern medical science due to resemblance in the clinical signs & symptoms. Anemia is a condition presenting with depletion of Haemoglobin concentration below normal values or hematocrit or RBC in the blood.
Materials and Methods: Two medicine *Darvyadi loha* and *Drakshadi avaleha* were selected to treat patient of pandu roga.
Case Report: A 34-year-old female patient came with complaints of *Aruchi* (loss of appetite), *Panduta* (pallor), *Dourbalya* (weakness), *Hrid spandanam* (palpitation), *Pindikodvestan* (leg cramps) and Haemoglobin level of 8.5 gm/dl visited to OPD of CSMSS Ayurved Rugnalaya. She was relieved from the symptoms and a raise of Hb level upto 11.4 gm/dl after the treatment.She was treated for 2 months with two follow ups of 1 month ach.
Discussion: Pandu roga can be effectively managed by Ayurvedic haematinic drugs which are palatable, economically feasible. In this study the follow ups showed gradual improvement in the condition.
Conclusion: Ayurvedic medicines have great potential in treating deficiency conditions as established in the study.

Keywords: Pandu, Varnopalakshita roga, Anemia, Darvyadi loha, Drakshadi avaleha

Introduction
"Pandutwena Upalakshito Roga Pandu Roga" — this classical Ayurvedic definition of Pandu Roga highlights the hallmark feature of Panduta (pallor), predominantly observed in the skin. This condition arises due to the quantitative and qualitative depletion (kshaya) of Rakta Dhatu. In modern medical science, a comparable condition is Anaemia, which also presents with pallor as a key symptom. This pallor typically results from reduced blood flow or a decreased number of red blood cells (RBCs) in circulation. Thus, there exists a conceptual parallel between Pandu Roga in Ayurveda and Anaemia in modern medicine, particularly in terms of clinical presentation and underlying hematological deficiency.
The changing lifestyle of human being by means of Ahara and Vihara (diet and lifestyle) plays an important role in the manifestation of Pandu. Irregular/faulty Pitta Prakopaka dietary habits and lifestyle like Amla, Lavana, Katu Rasa Atisevana, Kshara, Ushna, Tisksna, Ruksha Ahara Atisevana, impairs the digestion, leading to Mandagni. Pitta Dosha further gets aggravated. Aggravation of Pitta causes vitiation of Rasa Dhatu- Gauravata and Shaithilyata in Dhatu, and Bala, Varna, Sneha of Twak gets affected.
Ayurvedic medicines along with Pathya ahara vihara is effective in prevention and cure of Pandu roga. In this study such an effort was made with Ayurvedic medicines- Darvyadi loha and Drakshadi avaleha.

Case Presentation
History of present illness
A 34 year old female patient came with Complaints of Aruchi (loss of appetite). Panduta (pallor). Dourbalya (weakness), Hrid spandanam (palpitation), Pindikodvestan (leg cramps) and Haemoglobin level of 8.5 gm/dl visited to OPD of CSMSS Ayurved Rugnalaya.

Patient was from a low economic background. She was managed as a case of Pandu Roga with Ayurvedic medications—Darvyadi Loha and Drakshadi Avaleha, administered over a period of two months. Follow-up evaluations were conducted on the 30th and 60th days from the start of treatment. Her hemoglobin levels showed progressive improvement, rising to 9.6 g/dL at the first follow-up and 11.4 g/dL at the second, indicating a positive response to the Ayurvedic intervention.

Past history: No significant history found.

Family history: No history of severe or blood related diseases found.

Menstrual history: Regular, scanty lasts for 2 to 3 days.

General examination

Pulse- 84 bpm, Ht - 156 cm

RR- 22/min, Wt - 52 kg

BP - 110/70 mm Hg

Temp - 98.4 F

Ashtavidh Pariksha

Nadi	Manduk gati, 84bpm
Mutra	Ishat Peeta
Mala	Baddha, Shushka
Jihwa	Ishat sama
Shabda	Deena
Sparsha	Sheeta Sparsha
Druk	Akshikuta shotha, Shwetabh
Akriti	Madhyam

Treatment Plan

Sr. No.	Name of Medicine	Dose with Anupana	Time of Administration
1	Darvyadi Loha	2 tabs(250mg) twice daily with lukewarm water	After meal
2	Drakshadi avaleha	10 gram twice daily with lukewarm water	After meal

Assessment criteria
Aruchi (Loss of appetite)

Symptom	Condition	Score
Very good appetite	None	0
Irregular appetite	Mild	1
Frequent episodes of poor appetite	Moderate	2
Persistent poor appetite	Severe	3

Panduta (Pallor)

Signs	Condition	Score
No pallor	None	0
Conjunctiva slightly pale	Mild	1
Pale conjunctiva, nails and tongue	Moderate	2
Pallor present in conjunctiva, nails, tongues skin, palms and soles	Severe	3

Dourbalya (Weakness)

Symptom	Condition	Score
No weakness	None	0
Weakness not affecting daily activities	Mild	1
Weakness affecting daily activities	Moderate	2
Activities reduced due to weakness	Severe	3

Hrid Spandanam (Palpitation)

Symptom	Condition	Score
No palpitation on activity	None	0
Occasional palpitation in normal activity	Mild	1
Persistent palpitation during normal activity	Moderate	2
Palpitation even during rest	Severe	3

Pindikodvestana (Leg cramps)

Symptom	Condition	Score
No cramps	None	0
Occasional leg cramps at night	Mild	1
Leg cramps present during exertion and at night	Moderate	2
Cramps present throughout the day	Severe	3

Content of Drugs given during the treatment
Darvyadi Loha: 1.Darvi (Berberis aristata) 2. Haritaki (Terminalia chebula Retz.) 3. Vibhitaki (Terminalia bellerica Roxb.) 4. Amalaki (Emblica officinalis Gaertn.) 5. Pippali (Piper longum Linn.) 6. Maricha (Piper nigrum Linn.) 7. Shunti (Zingiber officinalis) 8. Vidanga (Embelia ribes Burm.) 9. Loha Bhasma (Incinerated iron).

Drakshadi Avaleha: 1. Draksha (Vitis vinifera) 2. Amalaki (Emblica officinalis) 3. Pippali (Piper longum) 4.Yastimadhu (Glycyrrhiza glabra) 5.Shunthi (Zingiber officinale) 6.Vamsalochana (Bambusa arundinacea) 7.Sharkara (Saccharum officinarum) 8.Madhu (Honey).

Observation and Results

Sr. No	Date	Signs and symptoms	Results
1	Enrollment day	Weakness, Anorexia, palpitations, Leg cramps, pallor	8.5gm/dl 3.92 million/cumm
2	Follow up 1	Mild relief in symptoms	9.6gm/dl 4.24 million/cumm
3	Follow up 2	Complete relief in symptoms	11.4 gm/dl 4.84 million/cumm

Discussion
Pandu Roga aims primarily at correcting the Agni vikriti and improving Rakta dhatu. Among these, Darvyadi Loha is a potent herbo-mineral preparation indicated in Pandu owing to its Lohabhasma content, which acts directly on Rasa and Rakta dhatus. It enhances Jatharagni and Dhatwagni, thereby promoting Rakta poshana and aiding in iron supplementation. Its constituents like Darvi (Berberis aristata) and Amalaki are Agni deepana and Raktavardhaka, making it highly effective in anemic conditions rooted in hepatic sluggishness and poor absorption. Drakshadi Avaleha, on the other hand, is a nourishing formulation that targetsRasadhatu and Raktadhatu, working as both Ojovardhaka and Raktavardhaka. Draksha (grapes) being rich in natural antioxidants and iron, contributes to improving hemoglobin levels. The Avaleha is also rich in snigdha and madhura dravyas, which help

alleviate Pandu caused by Pitta vriddhi and Rasa kshaya. It also supports Agni indirectly by balancing Tridosha, especially Pitta and Vata, and helps in improving appetite and general vitality. Thus, the synergistic use of Darvyadi Loha and Drakshadi Avaleha supports digestion, enhances nutrient assimilation, improves hemoglobin synthesis, and rejuvenates Rasa and Rakta dhatus, making them useful In the management of Pandu Roga.

Conclusion

Darvyadi Loha and Drakshadi Avaleha work together to correct poor digestion, improve iron absorption, and nourish the blood and body tissues. Darvyadi Loha mainly strengthens digestion and boosts blood formation through its iron content, while Drakshadi Avaleha supports overall nourishment, enhances immunity, and balances the body's energies. Together, they offer a effective approach to managing Pandu Roga (anemia) by improving both the cause and symptoms of the condition.

References

1. Agnivesha, Charaka, Dridhabala, Kashinatha Shastri, Pandeya G. Charaka Samhita, Vidhyotini Hindi commentary, Chikitsa Sthana, 16/12. 6th ed. Varanasi: Chaukhamba Sanskrit Sansthan; 2000. p. 416.
2. Agnivesha, Charaka, Dridhabala. Charaka Samhita elaborated with Ayurveda Dipika commentary by Cakrapanidatta. Edited by Trikamji Acharya YT. Reprint ed. Varanasi: Chaukhamba Surabharati Prakashan; 2014. Chikitsa Sthana, 16/18. p. 527.
3. Gautam L. A clinical study to evaluate the efficacy of Drakshadi Avaleha in the management of Pandu Roga. Int J Sci Res. 2023;12(8):2208- 2211.
4. Satpute AD. Rasendra Sara Sangraha of Sri Gopal Krishna. 1st ed. Varanasi: Chaukhamba Krishnadas Academy; 2003. p. 419.
5. Tripathi B. Ashtanghridayam, Chikitsa Sthana 16/29- 31. Reprint ed. Varanasi: Chaukhamba Sanskrit Prakashan; 2017. p. 765.
6. Monika, Kumar A, Milan R, Kumar J. A literary review on Pandu Roga. J Ayurveda Integr Med Sci. 2024;7:131-137. Available from: http://dx.doi.org/10.21760/jaims.9.7.18
7. Bhat S, Desai AS. Effectiveness of multimodal Ayurvedic treatment in Vataja Pandu w.s.r. nutritional deficiency anemia - a case report. Int J Ayurveda Pharma Res. 2022;10(1):32- 39. Available from: https://doi.org/10.47070/ijapr.v10i1.161

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A review article on Amvat

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Abstract
Amavata is disease of Rasavaha strotasa it is generally compared with Rheumatoid Arthritis. Amavata is the outcome of Agnidushti, Amotpatti and Sandhivikruti. The therapy which normalize Agni, Metabolizes Ama, and Regulates Vata and maintain healthy Sandhi and Sandhistha Shleshma will be the supreme one for this disease. Many peoples in society are unaware about disease and its complications which is responsible for lifelong joint deformities. Many herbal as well as Ayurvedic preparations are mentioned in the classics which are very effective remedy in Amavata.

Keywords: Amavata, Ama, rheumatoid arthritis, agni-dushti, Amotpatti, Sandhivikruti

Introduction
Rheumatoid arthritis is a chronic, systemic inflammatory polyarthritis that primarily affects small diarthrodial joints of hands and feet in symmetrical pattern [1]. The etiology is unknown. But genetic and environmental factor plays important role in pathogenesis of disease. Pathological changes mediated by autoantibodies, produces synovitis which is caused by secretion of cytokines, predominantly CD 4+ T cells, this will further leads to cartilage damage and bone erosions that badly disturbs joint integrity. Bilateral, peripheral symmetrical joint involvement with early morning stiffness is the characteristic feature of RA. Prevalence of Rheumatoid arthritis is approximately 0.8% worldwide and 0.5-0.75% in India [2]. Amavata and rheumatoid arthritis share the same pathopysiology and symptoms, hence the condition can be effectively managed by using Amavata line of treatment. Agnimandya is the cause for all disease. Amavata is the one such disease, where Agnidusti plays vital role in the Samprapti of the Vyadhi. Due to Nidanasevanai.e., Viruddhahara mainly Samyoga viruddh aand Viruddhacheshta, who have Mandagni and do not indulge in physical activity, indulging in physical exercise immediately after eating oily foods, Amaand Vata get aggravated simultaneously and get lodged in Trika sandhi and make the body stiff. When the Ama is generated due Jataragni mandya, it will produce symptoms like pain and heaviness of the body, anorexia fever, indigestion etc. In later stage, due Dhatwagni mandya, the Ama will causes painful swelling in joints of hands, legs, ankle, sacrum, knees and thighs [3]. And later it will lead to contraction of the body. Contemporary medicine includes NSAIDs, steroids, and disease modifying anti-rheumatic drugs (DMARDs) for long term uses and have severe side effects. Langhana, Swedana, Deepana, Virechana, Snehana and Basti is the line of treatment mentioned for Amavata by Acharya Chakradatt [4]. Vaitarana basti is the specific Basti mentioned by Acharya Chakradatt. In the present study, Chikithsa sutra of Amavata which have been mentioned by Acharyas are applied to prove the efficacy of Ayurveda treatment in the management of rheumatoid arthritis.

Aims and Objectives
1. To understand Amavata in detail in comparison with Rheumatoid Arthritis.
2. To understand The Pathophysiology & Symptomatology of Amavata.
3. To be aware of its deformity & complications.
4. To have knowledge for diagnostic criteria of Amavata according to Ayurveda as well as
5. Modern perspective.
6. To understand treatment and its efficacy in Amavata.

Materials and Methods
As this study is a review type of study, we have collected information from the available Ayurvedic samhitas and few elementary text books to get comprehensive knowledge about the disease Amavata as well its line of management.

Nirukti

Amavata consists of two different words Ama and Vata which are the two predominant pathological factors acting in the disease process. Both these words carry important meaning from point of understanding of the Vyadhi "Amavata" [5].

Vyutpatti of Ama

- ▪Ama (stree) – Aa + Am + Karmanimaatra = Paakarahitam means being undigested.
- ▪Ama –"Aamyateishatpachyate Iti" - means subjected to incomplete digestion.
- ▪"Aamdhatu + Nich" Pratyaya constitutes the word Ama.

Lakshanas of Ama

Srotorodha Balabrahmsha Gourava Anilamudata |
Alaya Apakti Nishtiva Malasanga Aruchi Klama||MA. NI

The symptomatology of Saamadosha is described in Ayurveda as a guideline to decide the Saama and Niramavastha.

Samavata Lakshana Vayu

Saamo Vibhandagnisaadstambaantrakujanai|
Vedanashophanistodai kramashoangani peedayan||
Vicharetdyugpaccapi Gruhanati Kupito Bhrusham|
Snehadyaivruddimaayaati Suryameghodaye Nishi|| MA. NI

Niramavata Lakshana

Niramo Vishado Rooksho Nirvibhandoalpavedanaha|
Vipareetagunai Shanti Snigdhairyaati Visheshataha|| MA. NI

Ama and Agni

Charaka have classified Agni as 13 types among which Jatharagni occupies the central position and control the other Agnis. Then five types of Bhutagni havebeen enumerated as Parthiva, Aapya, Taijasa, Vayavya and Nabhasa bhutagnis. Seven types of Dhatvagni namelyRasa, Rakta, Mamsa, Meda, Asthi, Majja and Shukra dhatwagni. Food consumed is first digested by the Jatharagni in Koshta. Simultaneously it is acted upon by Bhutagni & Dhatvagni to nourish Rasadi Dhatuas, Indriya and manas. Concept of Ama and contemporary science Ama can be defined as intermediary product of metabolism of carbohydrates, fats and proteins. Improper metabolism of carbohydrates produces lactic acid, which is accumulated in muscle causing pain and is also common in Rheuma like condition. Lactic acid which accumulates in joints results in Gout. Ama and free radicalsFree radicals are unstable and react quickly with other compounds attempting to capture the needed electron to gain stability. Generally, free radicals attack the nearest stable molecule stealing its electron. The molecule becomes a free radical itself and thus begins a chain reaction. Once the process is started, it can cascade, finally resulting in the destruction of a living cell. Site of formulation of Ama Agni is prevailing in every cell of the body. Dhatvagnimandya in cells leads to formation of Ama. So, it can be formed in any part of body, same as pre- production of free radicals' cells take place in any cell of the body.

Nidanapanchaka

The etiopathogenesis of disease can be studied with the knowledge of Panchanidanas: Nidana, Purvarupa, Rupa, Upashaya and Samprapti [6].

Nidana

The term Nidana relates both to the etiology as well as diagnosis of disease. Etiology helps in ascertaining the causative factors of a disease whereas diagnosis help in determination of the nature of disease based on the causative factors, premonitory symptoms, actual signs, exploratory therapy and pathogenesis. In the present context, the term Nidana refers to the causative factors of the disease Amavata. According to Charaka, a single etiological factor may produce a single disease or many factors together may produce a single disease and vice-versa. Amavata is mostly a disease having a multi-factorial etiology. Acharya Madhava have given specific etiological factors responsible for the causation of the disease Amavata as:

Viruddha Ahara Chestasya Mandagne Nischalasya cha|
Snigdham Bhuktvate hi Annam Vyayamakurvastata|| MA. NI

Explanation of various Etiological Factors Viruddha Ahara. The dietetic articles which are unwholesome for the normal Doshas and Dhatus of the body and tend to disagree with normalcy of the system are known as Viruddha. This Viruddha Ahara is considered to be most common etiological factor for most of the diseases and also is most important factor responsible for causation of Amavata.

Poorvaroopa

Poorvaroopa indicates the stage of Dosha Dushya Sammurchana [7]. Prakupita Dosha which is in Prasaravastha, circulating all through the body, when encounters an obstruction in the path in the form of Khavaigunya, gets lodged in that place. This Avastha termed as Sthana - Samshrashaya, brings into being the disease entity and the first symptoms of the disease in the form of Poorvaroopa are exhibited. Laghutrayees though have dealt with the disease Amavata, they do not mention Poorvaroopas specifically. In the context of Vatavyadhi, Acharya Charaka clearly points out Avyakta

Lakshanas as the Poorvaroopa of Vatavyadhi and also, Vagbhatacharya mentions that some of the Poorvaroopa may continue as Samanya Lakshana of the disease. Ama acts as the predisposing factor along with Prakupita Vata, in the onset of the disease Amavata. Ama and Prakupita Vata Dosha when undergoes Dosha Dushya Sammurchana i.e., in Rasa and Sandhi specifically, results in the disease Amavata. As the Poorvaroopas of the disease are not directly indicated, the Samanya Lakshanas of Amavata like Angamarda, Aruchi, Trishna, Alasya, Gourava, Jwara Apakti and Anga Shunata [8]. in a mild manner can be considered as Poorvaroopa.

Roopa

Roopa of a disease appears at the stage of Vyaktavastha of Shat Kriyakala. When the disease gets fully manifested after the stage of Sthana Samshraya followed by continues Nidana Sevana, the symptoms which surface are termed as Roopa.

Samprapti

Indulgence in incompatible foods and habits, lack of physical activity, or doing exercise after taking fatty foods and those who have poor digestive capacity even normally also; produce Ama (improperly digested food) in the body. This Ama, associating itself with Vata, moves quickly to the different seats of Kapha in the body filling them and the Dhamanis (blood vessels) with waxy material. Thus, the bad end product of digestion associated with Vata, Pitta, and Kapha assuming different colours, blocks the tissue pores and passages with thick waxy material. It produces weakness and heaviness of the heart, which becomes the seat of the disease. It also affects simultaneously the joints of the body such as those of waist, neck, shoulder, etc. This dreadful disease known as Amavata producing stiffness of the body. The unwholesomeness of the drugs and diets is because of their

mutually contradictory qualities and specific actions. Acharya Charaka has described eighteen types of Viruddha Ahara. Upashaya and Anupashaya The Lakshanas which indicate the kind of Oushadha, Anna and Viharas antagonistic to the disease and what are agreeable to the patient's system are termed as Upashaya. Anupashaya is just opposite of Upashaya. Any Oushadha, Ahara and Vihara either by being antagonistic to the Hetu, Vyadhi or Hetu-Vyadhi or by being similar to the Hetu, Vyadhi or Hetu-Vyadhi produces Sukhanubandha or Dukhanubandha respectively and will be called as Upashaya or Anupashaya respectively. Similar types of Lakshanas are found in many diseases. For example, some Lakshanas of Amavata such as Sandhi Shotha, Sandhi Shoola etc. are found in other diseases like Sandhi Vata, Vatarakta etc. In such conditions, it is difficult to diagnose the disease and to adopt proper line of treatment. Upashaya and Anupashaya provide diagnostic aid for diseases in the form of therapeutic tests in such cases, which are otherwise difficult to diagnose.

Samprapti Ghataka

Dosha - Vata pradhan tridosha
Dooshya - Rasadi dhatu; Asthigata snayu; Sira
Agni - Jatharagni; Rasadhatwagni
Ama - Jatharagnijanya & Rasadhatwagnijanya
Srotas - Rasavaha, Asthivaha
Udbhava Sthana- Amashaya
Adhishthan - Asthisandhi
Rogamarga – Madhyama

Upashaya

Ama is an important factor in the production of Amavata. Hence the Dravyas which are antagonistic to the nature of Ama are considered as Upashaya of Amavata such as Dravyas having Katu, Rooksha and Ushna. Dravyas can be in the form of Ahara or Vihara or Aushadha.

Anupashaya

As Anupashaya is just opposite to Upashaya, the causative and aggravating factors of Amavata are to be considered as Anupashaya. The Dravyas which are Guru, Sheeta and Madhura cause the aggravation of symptoms of Amavata. Hence these factors are Anupashaya of Amavata. Cakradatta has given the Varjya Ahara in Amavata Rogi which is also to be considered under Anupashaya. Dadhi, Matsya, Guda, Kshira, Masha, Pishtakadi Guru and Abhishyandakara Aharas which are to be avoided by Amavata Rogi. Bhavamishra while describing the condition of Samavayu stated that Sama Vayu gets increased by the use of Sneha Dravyas, during cloudy season, early morning and at night. The principle is applicable to Amavata also.

Clinical features of Amavata in Comparison with Rheumatoid Arthritis

1. Hasta sandhi shotha & shoola – Inflammation & severe pain in metacarpo-phalangeal joints & proximal inter phalangeal joints are affected most severely in Rheumatoid Arthritis.
2. Paad sandhi shotha & shoola – The feet are often involved especially the metatarso phalangeal joints & subtalar joints are affected.
3. Jaanu gulfa sandhi shotha – R.A. involves first smaller joints of hands & feet and then symmetrically affects the joints of wrist, elbow, ankle & knee.
4. Angagourav – Feeling of heaviness in the body.
5. Stabdhata – In R.A. stiffness of joints, particularly observed in morning hours.
6. Jaadhya – Due to deformity limited movements in the joints, weakness in grip or triggering of fingers occurs in R.A.
7. Angavaikalya – Deformity in joints.
8. Sankocha – Contractures.
9. Vikunchana – This can be compared to volar subluxation, ulnar deviation which occurs at metatarsophalangeal joints and bilateral flexion contractures of the elbow are observed in R.A.
10. Angamarda – Body ache, myalgia occurs in R.A.
11. Other joints are involved in Chronic Rheumatoid Arthritis

Joint Deformity in R. A.

1. Swan neck deformity in interphalangeal joint.
2. Boutonniere (Deformity in R.A. with flexion at proximal interphalangeal joint & hyperextension at distal interphalangeal joint).
3. Z deformity in the thumb.
4. Volar subluxation and ulnar deviation occurs at metacarpophalangeal joint.
5. Bilateral flexion contractures of the elbow.
6. Synovitis at the wrist may cause carpel tunnel syndrome. Diagnosis of R.A. The diagnosis of R.A. is essentially clinical since there is no specific laboratory test to diagnose it. The occurrence of symmetrical peripheral inflammatory polyarthritis along with early morning stiffness should suggest the possibility of R.A.

American Rheumatism Association (A.R.A.) Criteria for Diagnosis

1. Morning stiffness (>one hour)
2. Arthritis three or more joints area
3. Arthritis of hand joints
4. Symmetrical arthritis
5. Rheumatoid nodules
6. Presence of Rheumatoid factor
7. Radiological changes (hand & wrist) [9].

Treatment

The original treatment pyramid for RA is now considered to be obsolete and has evolved into a new strategy that focuses on several goals:

1. Early aggressive therapy to prevent joint damage and disability.
2. Frequent modification of therapy with utilization of combination therapy where appropriate.
3. Individualization of therapy in an attempt to maximizes response and minimizes side effects.
4. Achieving, whenever possible remission of clinical disease activity.

Several developments during the past two decades have changed the therapeutic landscape in RA.

They include;

1. The emergence of methotrexate as the disease-modifying anti rheumatic drug (DMARD)5 of first choice for the treatment of early RA.
2. The development of novel highly efficacious biologicals that can be used alone or in combination with methotrexate.
3. The proven superiority of combination DMARD regimens over methotrexate alone.

The medications used for the treatment of RA may be divided into broad categories: nonsteroidal anti-inflammatory drugs (NSAI Ds); glucocorticoid, such as prednisone and methylprednisolone; conventional DMARDs; and biologic DMARDs [10].

Chikitsa of Amavata [9].

Treatment principles of Amavata was first described by Chakradatta, which are langhana, Swedana, drugs having Katu, Tikta Rasa and Deepana action, virechana, snehapana and Auvasana as well as ksharabasti. Whereas Yogaratnakara have added Ruksh upanaha i.e. without Sneha, to these therapeutic measures. These are as follows.

1. **Langhana:** 1st line of treatment in Amavata is Langhana which helps in digestion of Ama. Here Langhana means not complete fasting but, intake of light food. The duration of Langhana varies from person to person depending upon individual capacity.
2. **Swedana:** Usually in Amavata Ruksha sweda is recommended i.e. Sudation without oil/fat. It's done locally on affected joints. For the procedure of Ruksha sweda Valuka (sand) is used without prior use of Snehana.
3. **Katu, Tikta & Pachak Aahar & Aushadhi:** The drug which possess Katu (pungent), Tikta (bitter) and which act as deepana, pachana are recommended in Amavata. These drugs, by virtue of their qualities does Aapachana, hence may help in relieving shotha & shoola.
4. **Virechana:** For virechana karma Eranda taila and Haritaki can be used. Virechana can be given without any preoperative procedure in Amavata. Eranda acts as srotoshodhaka, shothahara, shoolahara and Haritaki acts as vatanulomana.
5. **Basti chikitsa:** Chakrautta recommends ksharabasti and anuvasanabasti in Amavata.

Following tailas are used in anuvasana and niruha basti –
asarani taila/Akalkmidam tailam (Bh. R. 29/208)
Eranda taila is used as base in preparation of these tailas (Bh.R.29/20), (C.D.25/6)

Commonly prescribed medicine in Amavata

Medicine for digesting Ama
1. Rasnadi kwath
2. Dashmula kwath
3. Guduchyadi churna
4. Dhanya nagar kwath
5. Eranda taila

Upashamana (Palliative treatment)
1. Ajmodadi churna
2. Simhanad guggul
3. Amavatari rasa

Pathya
a) Anna varga- Purana shali, raktashali, shastikashali, yava (barley),chanaka (chickpea), kulatha (horsegram),
b) Jalavarga- Shrutasheetajala (luke warm water), panchkolashrutjala, shunthi siddha jala,
c) Madhya varga- Purana sidhu(old wine)
d) Mutra varga- Gomutra (cow's urine)
e) Kanda varga-shunthi, lasuna, ardraka,
f) Ksheervarga-Takra
g) Shakavarga- patol, karvellak (bitter gourd), varthaka (brinjal),nimbapatra,shigru
h) Mamsavarga- Jangalamamsa

Apathya

Aahaaraadi Rupa Apathya {Apathya in the form of Diet, Vegitables, Grains etc.}:-
- Dadhi – Curds
- Matsya - Fish
- Guda - Jaggery / Molasses
- Ksheera - Milk
- Masha - Black Grams
- Upadika
- Pishtakam - Flour Product
- Guru Aahara - Foods which are heavy to digest

Discussion

The disease Amavata is difficult to cure because of its chronicity, complication and morbidity. The description about Amavata seems to be not found in vedic and samhita period. After medieval period it started dominating and nowadays it is very common dreadful disease. Chakrapani introduced the effective drugs and treatment first time for the Amavata. Amavata is a disease caused due to two pathological factors *viz*. Ama and Vata. Due to Agnimandya (low digestive fire), unripe, uncooked, immature and undigested material is formed which is nothing but Ama. Drugs like Vatsanabha [11]. and Ahiphena [12]. relieve pain by inducing sleep and relaxing muscles. Drugs like Guduchi, Nagara, Rasna, Musta, Pippali and chitraka help in improving Agni thus helps in digestion of Ama. Guggulu due to its property of bhagnasandhankara prevents the erosion of bone, osteoporosis and deformity of joints [13]. It also reduces the inflammation of synovial membrane, connective tissue and ligaments of affected joints due to its shothhara property. Drugs like Nirgundi and Shatapushpa act as pain reliever. Some drugs simply by their virtue of Prabhava act as Amavataghna. Amavata is a debilitating disease in view of its chronicity and complication. Presently NSAIDS and Corticosteroids are the mainstay of treatment in this condition. However they have severe adverse effect and have limitations for long term therapy. So to overcome these challenge there is need to adopt Ayurvedic system of Medicine which are easily available and cost effective.

Conclusion

In spite of the description of the multiple drug therapy in different classics of Ayurveda potential and durable results are not found due to non-removal of the basic cause. Hence Special emphasis should be put into by the correct application of chikitsa sutra described in our classics for a holistic approach with diet, life style intervention and continuous use of drugs to have a good control of the disease and to achieve improvement in quality of life. As Amavata is one of the common debilitating disease by virtue of its chronicity and implication and ama and vata have the properties on opposite pole of each other so these things come in across while treating it, because any measure adopted will principally oppose one another. So a very careful approach can only benefit the patient. In this paper an attempt has been made to substantiate these principles scientifically.

References

1. Munjal YP, editor. API Textbook of Medicine. 9th ed. Mumbai: The Association for Physicians of India; c2012. p. 1829.

2. Madhavakara. Madhava Nidanam of Madhukosha Commentary. Edited by P. Himasagara Chandra Murthy. Purvardha part 1, chapter 25th, verse 1, 5, 6, 7. Varanasi: Chaukhambha Sanskrit Series; c2016. p. 272-273.
3. Chakrapanidatta. Chakradatta. Translated/Edited by J. Bajpeyee. Amavatadhikara, Verse 1. 3rd ed [Place missing].: Shri Laxmi Venkateshwar steam press; p. 131.
4. Madhavakara. Madhavnidana, Madhukosh Teeka, commented by Vijay Rakshit and Shri Kanthadutta. chapter 25/1-5, Amavata Nidana.: [Publisher missing].; c2009. p. 508-509.
5. Vagbhata. Astang Hridaya, Sutra sthana chapter 13/25. Vidhyotini Hindi commentary by Kaviraj Atrideva Gupta revised by Vaidhya Yadunandana Upadhyaya. Varanasi: Chaukhambha Sanskrit Series; c2012. p. 132.
6. Sushruta. Sushruta Samhita, Uttara Sthana 1/25. Nibandhasangraha Commentary of Shri Dalhanacharya. Reprint ed. Varanasi: Chaukhambha Orientalia; c2010. p. 14.
7. Golwalla AF, Golwalla SA, editors. Golwalla's medicine for students, a reference book for the family physician. 21st ed. Mumbai: The National Depot; c2009.
8. Kasper DL, Hauser SL, Jameson JL, Fauci AS, Longo DL, Loscalzo J, editors. Harrison's Principles of Internal Medicine. Vol 2. 19th ed. New York, NY: McGraw Hill Education; c2015.
9. Sheokand A, *et al*. Vatsanabh from Visha to Amrita. Int J Ayurvedic Herbal Med. 2012;2(3):423-426.
10. Encyclopedia Britannica. Opium. Encyclopedia Britannica website [cited 2025 May 6]. Available from: http://www.britannica.com/science/opium.
11. Department of Indian Systems of Medicine and Homeopathy, Ministry of Health and Family Welfare, Government of India. The Ayurvedic Pharmacopoeia of India (Formulations). 1st ed. New Delhi, India: Department of Indian Systems of Medicine and Homeopathy, Ministry of Health and Family Welfare, Government of India; c2007.

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Conceptual study of Margag Dhatu with special reference to Vitamin D, Vitamin B12, and Serum Calcium as Margag Dhatu of Asthi

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Abstract
In Ayurvedic physiology, *Agni* holds central importance in the transformation of ingested food into nourishing components for the body. This transformation process involves converting heterogeneous substances (*Vijatiya Dravyas*) into homogeneous ones (*Sajatiya Dravyas*), aligning them with the body's structural and functional demands. There are thirteen types of Agni-Jatharagni is primarily responsible for digestion; Bhutagni processes elemental substances; and Dhatvagni governs the metabolism of bodily tissues. Among these, *Asthidhatvagni* plays a crucial role in bone tissue metabolism. In modern biomedical science, nutrients such as Vitamin D, Vitamin B12, and Calcium are indispensable for bone health and development. This article aims to conceptually relate these nutrients with the Ayurvedic concept of *Margag Asthi Dhatu*, providing a bridge between classical Ayurvedic thought and contemporary biomedical understanding.

Keywords: Agni, Jatharagni, Bhutagni, Dhatvagni

Introduction
The Ayurvedic framework comprises three fundamental entities-*Dosha*, *Dhatu*, and *Mala*-that sustain life and physiological balance. Of these, *Dhatus* represent the structural tissues, categorized into seven types: *Rasa* (plasma), *Rakta* (blood), *Mamsa* (muscle), *Meda* (fat), *Asthi* (bone), *Majja* (marrow), and *Shukra* (reproductive tissue). These tissues perform distinct yet interconnected functions such as nourishment, support, lubrication, and progeny generation.
Under healthy conditions (*Samya Avastha*), these Dhatus maintain harmony with the Doshas and Malas. However, due to various internal or external influences, this balance can be disturbed, leading to disease (*Vikriti*). Disease is often the result of vitiated Doshas disturbing the equilibrium of Dhatus, thus initiating a pathological state.
Traditionally, Ayurvedic diagnostics focus on *Sthayi Dhatu*, the fixed or static form of tissue. However, Dhatus also exist in a circulating or dynamic form called *Margaga Dhatu*, which is less explored in classical texts but crucial in understanding disease processes. Evaluating Margaga Dhatu could provide deeper insights into the root causes of disorders, especially when paired with modern diagnostic tools like biochemical and pathological assessments.

Aims and Objectives
Aim
To explore the concept of Margaga Dhatu and its correlation with modern scientific understanding.

Objectives
- To conduct a theoretical analysis of Margaga Dhatu and its clinical significance.
- To interpret the concept through the lens of contemporary biomedical science.

Materials and Methods
- Classical Ayurvedic texts are referenced for information on Margaga Dhatu.
- Scientific literature, online databases, and relevant research journals were studied to gather modern interpretations.
- A comparative and critical analysis was conducted to draw correlations between the two systems.

Understanding Dhatu and Dhatvagni

The term Dhatu is derived from the Sanskrit root "Dha," which implies support and nourishment. Dhatus serve as the fundamental structural components of the human body, each nourished by the essence (Rasa) of food that has been digested and metabolized through the action of Agni

There are seven Dhatvagnis, each located in its corresponding tissue. These are:

- *Rasagni* in Rasa Dhatu
- *Raktagni* in Rakta Dhatu
- *Mamsagni* in Mamsa Dhatu
- *Medogni* in Meda Dhatu
- *Asthyagni* in Asthi Dhatu
- *Majjagni* in Majja Dhatu
- *Shukragni* in Shukra Dhatu

Each of these Agnis metabolizes the nutrient-rich essence of food (*Anna Rasa*) to sustain the corresponding Dhatu. This metabolic process produces two outcomes: the *Prasada* (pure essence that nourishes the next Dhatu) and *Kitta* (waste byproduct).

Asthi Dhatu is particularly sensitive to the function of *Asthyagni*. Disruption in this metabolic fire can lead to bone disorders. The Ayurvedic concept of *Asthikshaya*-reduced bone tissue-bears a strong resemblance to conditions like osteoporosis in modern medicine, where bones become porous and fragile. Other associated manifestations include brittle nails, coarse hair, and dental issues-all considered waste products of Asthi Dhatu.

Role of Modern Nutritional Elements in Asthi Dhatu

Vitamin D, Vitamin B12, and Calcium are pivotal in bone formation and maintenance. Deficiency in these nutrients mirrors the Ayurvedic concept of Asthikshaya. For example:

- Calcium is a major structural component of bones and teeth. Insufficient serum calcium can cause brittle bones and weakened nails, reflecting impaired Asthi Dhatu.
- Vitamin D enhances calcium absorption and regulates bone mineralization. Its deficiency can lead to rickets or osteomalacia-conditions similar to Asthi Kshaya.
- Vitamin B12 is essential for red blood cell formation and neurological health. Emerging studies also link it to bone density, indirectly influencing Asthi Dhatu metabolism.

Interpretation of Margaga Dhatus in Modern Terms

Although the classical texts primarily refer to *Sthanastha Dhatus* (localized tissues), understanding *Margaga Dhatus* (circulating elements) can bridge traditional knowledge with modern diagnostics. Each Margaga Dhatu can be associated with specific biochemical markers:

1. **Margaga Rasa Dhatu:** Responsible for primary nourishment. Modern equivalent-blood glucose and serum albumin. These ensure energy supply and systemic nutrition.
2. **Margaga Rakta Dhatu:** Linked to oxygen transport and vitality. Modern correlation-hemoglobin (Hb), red blood cell count (RBCs). Bile pigments (bilirubin and biliverdin), byproducts of RBC breakdown, are Rakta Malas in Ayurveda.
3. **Margaga Mamsa Dhatu:** Associated with structural integrity. Serum proteins (like albumin and globulin) reflect muscle tissue health and correlate with Mamsa Dhatu.
4. **Margaga Meda Dhatu:** Reflected in serum lipid levels. Dyslipidemia correlates with Meda Dushti, contributing to metabolic syndromes like obesity and diabetes.
5. **Margaga Asthi Dhatu:** Primarily associated with serum calcium and Vitamin D levels. Their deficiencies manifest in bone fragility and related symptoms.
6. **Margaga Majja Dhatu:** Connected to neurological functioning. Serum phosphorus, especially in the form of phosphate salts, plays a key role in nerve conduction and brain health.
7. **Margaga Shukra Dhatu:** Related to reproductive potential and cellular vitality. Serum potassium, important for cellular function, aligns with Shukra Dhatu's attributes.

Pathological Implications and Dosha Involvement

Dosha imbalances have direct effects on bone health:

- **Vata vitiation** reduces Asthi Dhatu, predisposing one to osteoporosis and fractures.
- **Pitta aggravation** may lead to inflammatory bone diseases like osteomyelitis.
- **Kapha vitiation** is linked to excessive bone density or tumors.

External factors such as immobilization, poor nutrition, hormonal imbalance, or genetic predisposition further influence Asthi Dhatu. Bone tumors or deformities could result from complex dosha interactions, particularly in *Sannipatik* conditions where all three Doshas are involved.

Discussion

Although classical Ayurvedic texts provide limited discourse on *Margaga Dhatu*, modern diagnostic tools allow us to interpret these subtle concepts in a measurable way. Each Dhatu's circulating component (Margaga form) corresponds to a specific set of laboratory parameters in modern medicine. This interpretation not only validates Ayurvedic principles but also enhances clinical applicability.

For example:

- Serum calcium can serve as a marker for Margaga Asthi Dhatu.
- Vitamin B12 and D levels provide insight into both structural and functional aspects of Asthi metabolism.
- Pathological symptoms like brittle nails, coarse hair, and weakened teeth-traditionally linked with Asthi Dhatu-can be traced to deficiencies in these nutrients.

Conclusion

The assessment of *Margaga Dhatu* is not extensively detailed in Ayurvedic classics, yet its clinical relevance is undeniable. Understanding the dynamic, circulating aspects of Dhatus can enrich diagnostic accuracy and therapeutic outcomes. The concept of *Dushya*-encompassing both Dhatu and Mala-implies that not just static structures, but also their metabolic byproducts and functional correlates, are vital in disease processes.

By drawing parallels between Margaga Dhatus and modern biochemical markers, a deeper, integrative approach to diagnosis and treatment emerges. This harmonized model enables a more holistic view of health, encompassing both the ancient wisdom of Ayurveda and the precision of modern medical science. In diseases involving bone tissue, a thorough evaluation of Margaga Dhatu, such as serum calcium and vitamin levels, offers valuable diagnostic and prognostic insights. Hence, further research and cross-disciplinary

studies in this area hold immense potential for advancing integrative healthcare.

References

1. Garde GK. Sartha Vagbhata, Sutrasthan. Chapter 11, verse 1. Varanasi: Chaukhamba Surbharati Prakashan; c2016. p. 51.
2. Garde GK. Sartha Vagbhata, Sutrasthan. Chapter 1, verse 13. Varanasi: Chaukhamba Surbharati Prakashan; c2016. p. 4.
3. Garde GK. Sartha Vagbhata, Sutasthan. Chapter 11, verse 4. Varanasi: Chaukhamba Surbharati Prakashan; c2016. p. 52.
4. Kushwaha CS. The Charak Samhita, Vimansthana. Chapter 5, verse 3. Varanasi: Chaukhamba Orientalia; c2016. p. 629.
5. Bhava AA. Review of literature. Scientific Understanding of Ashraya Ashrayi Bhava with Special Refernce to 'Asthi Marutayoho Naivam'. 2018, 5.

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Conceptual study of Majjadhatu Mulasthan Vikruti in Pakshaghata with special reference to gait

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Abstract
Ayurveda, the holistic science, suggests the unique principles of Tridosha, Dhatu, and Mala for maintaining a healthy body. Dhatu nourishes the body, supplies nutrients to other vital tissues through Strotasa, supports the body, and keeps the body healthy. During the formation of Asthi Dhatu, Vata creates spaces in bones. These spaces are occupied by the nourishing tissue known as Medas, which is referred to as Majja or bone marrow. Majja Dhatu nourishes the body, strengthens the body, fills bones, and nourishes or helps in the production of Shukra Dhatu. Due to *Pragyaparadha*, *Asatmyendriyarth Samyoga*, and *Parinama*, the balance of *Doshas*, *Dhatus*, and *Malas* is disrupted, leading to an imbalance in the body's homeostasis. Asthipuranam is done by Majja Dhatu. That's why Majja Kshaya takes place due to the disturbed equilibrium of Tridosha, then Asthi Dhatu is most affected. Pakshaghata is a *Vata Nanatmaja* disorder categorized as *Krichasadhya* (difficult to cure). It presents with symptoms such as *Ruja* (pain), *Vakstambha* (stiffness of speech), and is classified as a type of cerebrovascular disease. In Pakshaghat, mainly gait is affected in the long term, and sandhi is closely related to the majja dhatu.

Keywords: Majjadhatu, sandhi, pakshaghat

Introduction
Pakshaghata is included under the Akarmanyata Pradhana Vata Vyadhi because its cardinal feature is Chesta nivrutti. Pakshaghata is a Vata dominant disease & due to Vata symptoms like Paksha hanana, Ardhakaya vichetana/Sharirardha Achetana, Anyatra paksha vimoksha, Sandhi Bandhana Vimoksha, Ruja, Vaksthambha, Hasta Pada Sankocha, Toda, *Shoola* (pain) and *Kampa* (tremors) are commonly observed, but when *Pitta Dosha* is involved, symptoms such as *Daha* (burning sensation), *Santapa* (fever or heat), and *Murcha* (fainting) may also appear. Similarly, with the involvement of *Kapha Dosha*, signs like *Shaithilya* (loss of tone), *Shotha* (swelling), and *Guruta* (heaviness) may be present. *Basti* is administered in the *Pakvashaya* (large intestine) and exerts a systemic effect throughout the body. Additionally, there is a significant connection between *Sandhi* (joints) and *Majja Dhatu* (bone marrow tissue).

Derivation of Majja
The term *Majja* is derived from the root 'Majjatoti Majja', formed by the combination *Majj* + *Ach* + *TAP*. *Majja* can be interpreted from various perspectives, as it is believed to pervade throughout the entire body.

Etymology of Majja word
Majja Dhatu is regarded as the essence (*Sara*) of *Asthi* (bone), similar to how the core or essence resides within a tree. According to Vachaspatyam and Shabda Kalpadruma, Majja is the unctuous part found inside Asthi (bone).

Synonyms of Majja Dhatu
Asthi Sara, bone marrow, and Some other similar words can help to understand the meaning of Majja Word. Majja Ras = Sukra Majjajah = Majjaya Jayate Iti = Bhumij Gugguluh. In Raj Nighantu Majjasaram, (Majjayam Saro Yasya) Jatiphalam.

Majjavaha Srotasa Mulsthan-

"मज्जावाह स्रोतांसि अस्थीनि मूषं सन्धयक्ष"। च. वि. ५/८

Majjavaha Dushti Hetu-

उपशब्दस्याधिक्यदातिभिघातात् प्रपीडनात्।
मज्जावाहिनि दुष्टानि विश्रवान्ति च सेवनात्॥२॥ च. वि. ५/१८

Majjavaha Dushti Lakshana-

रूक पण्डूर भ्रमो मूर्च्छा दृश्यन्ते तमस्स्था।
असंसृ स्तूलमूलानि पर्वाणां च दर्शनम्॥ च. सु. २८/२७

Pakshaghata Lakshana-

तदाडयनपरस्य सन्धिच्छेदनाद विमोक्षणात्।
हन्ति पक्ष तमाग्रृणि पक्षाघातो भिषग्वर॥ सु. नि. ४/६९
गृहणीवर्ष तनोव्यूह सिराः सायुर्धोषश्चा॥३६॥
पक्षमार्गन्तं हन्ति सन्धिबन्धान् विमोक्षणम्। अ. ह. नि. १५/३८-३९

Majja means which is in bony cavity [1]. *Majja* is one of the four types of *Sneha* (oleaginous substances) alongside *Ghrita* (ghee), *Taila* (oil), and *Vasa* (muscle fat) that contribute to bodily strength. *Mastulunga* is also considered a form of *Majja Dhatu*, [2] characterized by an appearance similar to unclarified (*Avilina*) *Ghrita* (ghee). Chakrapani also described "Mastishkam Sirahstho Majja" [3]. There is a dominance of the *Jala Mahabhuta* (water element) [4]. Majja Dhatu performs physical strength, especially of the bones, and is useful for oleation. It is heavy and unctuous [5]. The special function of Majja is Purana (filling of Bones).

Updhatu (Secondary Tissue) of Majja According to Sharngadhar, Kesha is the Updhatu of Majja Dhatu [6], but according to others, Kesha is the Updhatu of Asthi. The differing views on considering *Kesha* (hair) as an *Upadhatu* (by product) of different *Dhatus* may stem from the fact that *Kesha* is an intermediate byproduct between *Asthi* and *Majja Dhatu*. Mala (Waste) of MajjaDhatu Mala (Waste) of Majja Dhatu are Sneha (oily substance) excreted through the eyes and skin [7]. *Majja Pradoshaj Vikaras* include symptoms such as joint pain, vertigo, and syncope (fainting).

Kriyasharir of Majja Dhatu

1. The function of *Snehanam Karma* (oleation therapy) is best fulfilled by *Majja Dhatu*, making it the most effective for oleation. Therefore, specific indications are outlined for the use of *Majjapana* (ingestion of bone marrow). It oleates and nourishes body organs.
2. **Balakrita:** Majja Dhatu serves as a primary source of strength in the body, particularly for the bones. It fills the porous spaces within bones with fatty tissue, thereby reinforcing their strength and stability.
3. **Shukra Poshana:** One of the key functions of Majja Dhatu is to nourish *Shukra Dhatu*. During the metabolic process of Majja, *Poshaka Shukra* (the nourishing essence of Shukra Dhatu) is produced.
4. **Asthi Poorana:** Bones develop pores due to the influence of *Akasha* and *Vayu Mahabhutas*. Majja Dhatu fills these spaces with fatty substances, enhancing bone strength. Without this, the dry nature (*Ruksha Guna*) of bones can aggravate *Vata Dosha*, leading to bone fragility (*Asthi Bhangurta*).

Majja Vriddhi lakshana (Symptoms of increased majja dhatu)

- Anga gourava - feeling of heaviness of the body.
- *Netra Gaurava* - A sensation of heaviness in the eyes.
- *Parwa Stoulya* - Clubbing of the fingers.

Majja Kshaya Lakshana (Symptoms of decreased majja dhatu)

- Asthi sousheerya (osteoporosis)
- Bhrama (vertigo)
- Timira darshana (blurring of vision)

Majja Dushti Lakshana

Pain in the Joint, vertigo, dizziness, syncope, etc., are the Majja Pradoshaj Vikara.

In the context of Pakshaghata (hemiplegia) in Ayurvedic texts, Sandhi Vikruti refers to a disturbance or impairment of the joints (Sandhis). This impairment is often associated with Vata dosha aggravation and can lead to loss of function, pain, and stiffness in one side of the body, characteristic of Pakshaghata.

- **Pakshaghata and Vata Dosha**

Pakshaghata, or hemiplegia, is considered a Vataja Nanatmaja Vyadhi (a disorder arising from aggravated Vata dosha) in Ayurveda.

- **Sandhi Vikruti in Pakshaghata**

In the context of Pakshaghata, Sandhi Vikruti specifically refers to the impairment or disturbance of the joints, which can manifest as pain, stiffness, and ultimately, loss of function in the affected side of the body.

- **Vata's role**

Vata dosha is believed to be responsible for movement and sensation in the body. When Vata becomes aggravated or disturbed, it can lead to various disorders, including Pakshaghata.

Sandhi Bandhana moksha

Ayurvedic texts describe a concept called "Sandhi Bandhana Moksha," which means the loosening or release of the joint's bonds, causing pain and dysfunction in the affected joint. This is seen as a consequence of Vata's disturbance.

Other symptoms

Along with Sandhi Vikruti, Pakshaghata can also be associated with other symptoms like:

Loss of strength and movement in one side of the body
Loss of sensation
Slurred speech
Difficulty in performing daily activities
Disorientation

Samprapti ghataka in pakshaghata

- Dosha - Vata Pradhanatha - Prana, Vyana, Udana.
- *Dushya* - *Dhatu* - *Rakta*, *Mamsa*; *Upadhatu* - *Sira*, *Snayu*, *Kandara*
- Agni - Jatharagni & Dhatwagni
- Ama - Jatharagni mandya janya & Dhatwagnimandya janya
- Srotas - Raktavaha, Vatavaha
- Sroto dushti - Sanga, Vimarga gamana (Asruk srava janya)
- Udbhava sthana - Pakwashaya

- Adhishtana - Shiras (Mastishka)
- Vyakta sthana - Shareerardha (dakshina or vama)
- Sanchara sthana - Rasayani, vatavaha nadi (sanjyavaha, cheshtavaha nadi)
- Rogamarga - Madhyama
- Vyadhi swabhava - Ashukari (Asrk srava) Chirakari (Margavarana)
- Sadhya - Asadhyata - Yapya/ Krchrasadhya

Discussion

Dhatu Nirmana is an ongoing, continuous process in the body. The nourishment to all Dhatus is supplied through Ahara Rasa and the preceding Dhatu of that particular Dhatu. Proper nourishment of *Majja Dhatu* requires the presence of the *Majja Poshaka Amsa* in the *Ahara Rasa* (digestive essence). Another way of its nourishment is from Asthi Dhatu (preceding Dhatu). This signifies the importance of Asthi Dhatvagni. An imbalance in *Asthi Dhatvagni* disrupts the proper formation of *Sthayi Asthi Dhatu* from *Poshaka Asthi Dhatu*, leading to improper *Majja* formation. *Meda Dhatu*, which is located between the bones in the formation of *Asthi Dhatu*, is considered a part of *Majja Dhatu*. Therefore, *Meda Dhatu* also plays a crucial role in nourishing *Majja Dhatu*. The Ashrayaashrayi relationship of Vata Dosha and Asthi Dhatu forms a fundamental base to understand any pathological condition related to Majja Dhatu. The management of AsthiMajja-related diseases is distinct due to this relationship. Majja is the primary nourishing tissue (Apya Pradhan Dhatu). When Vata is vitiated, it leads to a reduction in Majja, resulting in the depletion (Kshaya) of this tissue. Vata Prakopa and the depletion of all tissues (Dhatu Kshaya) are natural occurrences during aging (Jarawastha) in both men and women. Additionally, Vata Prakopa can occur through two processes: either due to over-nourishment (Santarpan Janya) or under-nourishment (Aptarpan Janya).

Hemiparetic gait, often seen after a stroke or other neurological conditions, is marked by an uneven walking pattern caused by weakness or paralysis on one side of the body. This often includes features like reduced knee flexion during swing, increased stance time on the non-affected side, and decreased step length on the affected side. The gait may also involve circumduction (a circular movement of the affected leg to avoid ground contact) and a tendency for the foot to land flat.

Key characteristics of hemi paretic gait

- **Asymmetry:** One side of the body will be more involved in the gait cycle than the other.
- **Weakness:** Muscle weakness in the affected limb leads to difficulty with normal gait mechanics.
- **Reduced knee flexion:** A limitation in knee bending during the swing phase of the gait cycle, making it more difficult to lift the foot off the ground.
- **Increased stance time:** The non-affected leg will bear more weight and spend more time in the stance phase.
- **Decreased step length:** The affected leg will take shorter steps.
- **Circumduction:** The affected leg may swing outward in a circular motion to avoid the foot catching on the ground.
- **Flat foot landing:** The foot may land flat instead of rolling from heel to toe.
- **Loss of arm swing:** The arm on the affected side may not swing rhythmically with the leg.
- **Spasticity:** Increased muscle tone, especially in the lower extremities, can further contribute to abnormal gait.
- **Changes in joint excursion:** Deviations in joint movement patterns, especially at the hip, knee, and ankle, can be observed.
- **Compensatory strategies:** Individuals may develop compensatory mechanisms to maintain balance and stability, such as leaning to the unaffected side or using assistive devices.

Causes of hemiparetic gait

- **Stroke:** The most common cause of hemiparesis and hemiparetic gait.
- Other neurological conditions, such as cerebral palsy, traumatic brain injury, and spinal cord injury, can also lead to hemiparesis.

Impact of hemiparetic gait

- **Difficulty with walking:** Hemiparetic gait makes it challenging to walk safely and efficiently.
- **Increased risk of falls:** The instability and unevenness in the gait can heighten the likelihood of falling.
- **Reduced mobility:** Individuals may experience a limited range of motion and difficulty performing activities of daily living.
- **Pain and fatigue:** The effort required to walk with hemiparetic gait can be tiring and lead to pain.
- **Psychosocial impact:** The changes in gait and mobility can impact self-esteem, social interaction, and overall quality of life.

Conclusion

Majjadhatu Mulasthan Vikruti in Pakshaghata highlights the joint involvement in this condition, where Vata's aggravation leads to joint pain, stiffness, and ultimately, loss of function in the affected side of the body. Ayurvedic treatments aim to address the underlying imbalance of Vata dosha and its impact on the joints and other body functions. This study demonstrates the significant relationship between Majjadhatu, Sandhi Vikruti, and gait abnormalities in Pakshaghata. By understanding the Ayurvedic perspective on gait abnormalities, it becomes clear that Majjadhatu vikruti and Sandhi Vikruti play a crucial role in the development of gait disturbances.

Key findings

1. Majjadhatu vikruti contributes to gait abnormalities: The study shows that Majjadhatu vikruti is a significant contributor to gait abnormalities in Pakshaghata.
2. Sandhi Vikruti impacts gait: Sandhi Vikruti is found to be a major factor in gait disturbances, highlighting the importance of joint health in Pakshaghata.
3. Ayurvedic interventions show promise: The study suggests that Ayurvedic interventions targeting Majjadhatu and Sandhi Vikruti may improve gait abnormalities in Pakshaghata.

References

1. Shabdakalpadruma
2. Vagbhata. *Ashtanga Hrudaya*. With Ayurveda Rasayana Sanskrit commentary by Hemadri and Vidyotini Hindi commentary by Kaviraja Atrideva Gupta, edited by Vaidya Yadunandana Upadhyaya. Reprint ed. Varanasi:

Choukhambha Prakashan; 2010. Uttar Sthana, Chapter 23, verse 30.
3. Agnivesa. *Caraka Samhita*. Revised by Caraka and Dradhabala with Ayurvedadipika commentary by Cakrapanidatta. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; 2011. Siddhi Sthana, Chapter 9, verse 23.
4. Susruta. *Susruta Samhita*. With Nibandhasamgraha commentary by Dalhana and Nyayacandrika by Gayadasa. Edited by Vaidya Yadavji Trikamji Acharya. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; 2012. Sutra Sthana, Chapter 15, verse 10.
5. Agnivesa. *Caraka Samhita*. Revised by Caraka and Dradhabala with Ayurvedadipika commentary by Cakrapanidatta. Reprint ed. Varanasi: Chaukhamba Surbharati Prakashan; 2011. Sutra Sthana, Chapter 13, verse 17.
6. Sharangadhara. *Sharangadhara Samhita*. With Hindi commentary Jiwanprada by Dr. Shailaja Srivastava. 4th ed. Varanasi: Chaukhamba Orientalia; 2005. Poorva Khanda, Chapter 5, verses 16-17.
7. Agnivesa. *Caraka Samhita*. Revised by Caraka and Dradhabala with Ayurvedadipika commentary by Cakrapanidatta. Reprint ed. Varanasi: Chaukhamba, 2011.

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Management of allergic rhinitis with *Nasya* and *Shaman Aushadhi*: A case report

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Abstract
Allergic rhinitis is a common disorder, which is usually characterized by spasmodic attacks of severe sneezing and rhinorrhoea. It is a reaction to certain Allergens. Allergic rhinitis isn't life threatening, but it can seriously affect your quality of life. Constant sneezing, congestion, itchy eyes and fatigue can make it hard to focus, sleep well or enjoy daily activities. Modern Medicine offers treatments that can manage the symptoms of allergic rhinitis, they often don't provide a permanent or fully satisfactory cure for everyone. Most treatments like antihistamines, corticosteroid nasal sprays and decongestants are aimed at controlling symptoms rather than addressing the root cause. There is need to search satisfactory treatment in other medical system. So here we present case of allergic rhinitis successfully treated with Ayurveda.
An 36 yrs old female patient came to the OPD of *Kayachikitsa* at our Hospital in December 2024. Symptoms were sneezing for up to 1 hr. in the morning and when comes in contact with dust, then 40-50 sneezing per day, watery discharge from the nose, heaviness in the head region sometimes headache, weakness, Left nostril was partially blocked along with bilateral nasal itching.
The patient's clinical findings and symptoms were suggestive of Allergic Rhinitis, which is of perennial type. According to Ayurveda diagnosis was done as *Vata-Kaphaj Pratishyay*. The patient experienced a reduction in all the symptoms after 18 days. The primary complaint of sneezing was significantly reduced after completing the treatment. Ayurvedic therapeutic interventions other than *Nasya* (~Nasal oleation), and *Sasaidhav Snehan Swedan* on chest region modalities showed encouraging results in managing Allergic Rhinitis in a short duration of time.

Keywords: *Vata-Kaphaj Pratishyay*, Allergic rhinitis, Syrup Immunocin, *Sitopaladi Churna*, eosinophil count

1. Introduction
Allergic rhinitis is a common inflammation condition of the nasal passages caused by an allergic reaction to allergens like 1) Inhalants like Dust, pollens, animal odour, feathers, moulds, house dust and mites. 2) Ingest ants: Food like eggs, fish, milk, citrus fruits and cocoa. 3) Contact ants like cosmetics and powders 4) Irritants like fumes and smokes [1]. There are two types of Allergic Rhinitis 1) Seasonal: Hay fever due to pollen grains occurs at the time of pollination. 2) Parennial: affects the patient throughout the year. Symptoms of Allergic Rhinitis is Irritation in the nose, Paroxysmal sneezing, Rhinorrhea, nasal obstruction, anosmia, headache. [2] While not life threatening, allergic rhinitis can significantly impact quality of life by disrupting sleep, productivity and overall well being
The prevalence of allergic rhinitis based on physician diagnosis is approximately 15%; however, the prevalence is estimated to be as 30% based on patients with nasal symptoms. AR is known to peak in the second to fourth decades of life and then gradually decline. The incidence of AR in pediatric population is also quite high, making it one of the most common chronic pediatric disorders. According to data from the international study for asthma and allergies in childhood, 14.6% in the 13-14 yr. age group and 8.5% in the 6-7 yr. age group display symptoms of rhinoconjuctivitis linked to allergic rhinitis. Seasonal allergic rhinitis seems to be more common in the pediatric age group, whereas chronic rhinitis is more prevalent in adults [3].
Avoiding the allergens is ideal but is not always practical. Desensitization also done in this. Specific desensitization is performed by specific vaccines or inhalants. Non-specific stock vaccines may be useful in some cases. Symptomatic treatment for Allergic rhinitis is Antihistamines like cetirizine, levocetrizine and steroids may be used in minute doses locally as an aerosol spray or drops. Vitamin C and Calcium are often recommended but are doubtful value. For local treatment hydrocortisone injections, zinc ionization, autohaemo injections [4].

These studies highlights the substantial burden of allergic rhinitis across various demographics in India, understanding the need for effective public health strategies and interventions.

Ayurveda, the ancient Indian system of medicine, is highly effective in managing and treating chronic disorders through its holistic and individualized approach. Chronic disorders are long standing illnesses that often result from lifestyle imbalances, poor digestion and accumulated toxins in the body. *Ayurveda* addresses these condtions by focusing on restoring balance in the body, eliminating toxins and improving overall health and wellbeing. Allergic rhinitis, is described in Ayurveda under conditioned similar to "*Vata-Kaphaja Pratishyaya*". According to Ayurvedic principles, allergic rhinitis is caused by an imbalanace of the *Doshas*, primarily *Vata* and *Kapha* along with the influence of *Ama* (toxins).

Table 1: Similarities between allergic rhinitis and *Vata-Kaphaj Pratishyay* [5]

Sr. No.	Allergic Rhinitis	*Vata* predominant Pratishyay	*Kapha* predominant Pratishyay
1	Nasal Obstruction	Stuffed and Obstructed nose	Difficulty in breathing
2	Paroxysmal sneezing	Repeated sneezing	-
3	Post Nasal drip	Cold clear nasal fluid nasal discharge	Sticky nasal discharge
4	Itching in nose and may involves eye, palate or pharynx	-	Itchy sensation in oral cavity
5	Chronic cough	-	Cough
6	Loss of smell	Anosmia	-

Ayurvedic Approach to allergic Rhinitis is *Shodhana* (cleansing Therapies) in which *Nasya Karma* (Administration of medicated oils through the nasal route to clear nasal passages and balance *Doshas*), *Vamana* (Emesis Therapy), *Virechana* (Purgation Therapy) are included. *Shamana* therapy and Dietary Recommendations like Avoid Kapha aggravating foods, Include warm, light and easily digestable foods and Use spices like ginger, black pepper, cinnamon to enhance digestion. Lifestyle modifications like avoid exposure to allergens and dust, perform regular steam inhalation with medicated herbs, practice *Yoga* and *Pranayama* to strengthen respiratory health. *Rasayana* (Immunomodulation) Therapy in which *Guduchi, Ashagandha* and *Chyavanprasha* are used to boost immunity and prevent recurrence.

Case Report

1.1 Case Report

An 36 yrs old female patient came to the OPD of *Kayachikitsa* at our Hospital in December 2024.The patient had mild nasal septum towards the left side and suffered from symptoms of allergic rhinitis for 1 year periodically 2-3 times a months lasting for 6-7 days. Symptoms occurred when she comes in contact with dust. Patient took Allopathic treatment for 6 months including Oral Antihistaminic (Levocetrizine 5 mg with Montelukast 10 mg),Antihistaminic nasal spray and sometimes steroid nasal sprays. The patient had taken antibiotic treatment also but symptoms reappears soon after she stop the medication. The details of patient's history and the complaints at the time of visit are as follows:

- Sneezing for up to 1 hr. in the morning and when comes in contact with dust, then 40-50 sneezing per day
- Watery discharge from the nose
- Heaviness in the head region sometimes headache
- Weakness.
- Left nostril was partially blocked along with bilateral nasal itching.

1.2 Diet History

Intake of curd and pickles daily

- Day sleeping
- Drinking cold water in morning and at night.

1.3 Drug History

- No history of any previous major illness and medication
- Menstrual history reveals 5 days cycle every 28 days.

1.4 Family History

- The patient's mother is a known case of asthma.

2. Findings

2.1 General Examination

Pulse-78/min and Blood pressure was 120/70 mmhg. She was not having any addiction like alcohol, smoking or tobacco chewing etc. Due to Allergic Rhinitis her quality of life was affected due to continuous sneezing.

2.2 Local Examination

The patient had a mild deviated nasal septum to the left side. In both nostrils there was mild inferior turbinate hypertrophy. *Nasal* mucosa has mild edematous. Clear watery nasal discharge was seen in both nostrils.

2.3 Systemic Examination

In General examination Patient was conscious and oriented about the date, time and place. Her respiratory and cardiovascular system examinations were normal. Respiratory rate was 20/min.

Asthavidha Parikshan (eightfold examination) was done and the findings were; *Nadi* (pulse) *Vatapradhan* and *Kaphanubandhi, Mutra* (urination) and *Mala* (bowel habits) were normal, *Jivha* (tongue) coated, *Shabda*(speech) was normal, *Drik* (vision) was normal and *Akriti* (built) was medium.

Dashavidha Parikshan (tenfold examination) revealed *Dushya* (any tissue of the body that gets vitiated) was *Rasa* and *Rakta Dhatu, Desha* (habitat) *Sadharan, Bala* (strength), *Madhyam, Kala* (time) *Sheet Rutu, Agni* (digestive fire), *Mandya, Prakriti* (Body constitution), *Vata Pitta, Vaya* (Age), *Tarunya, Satva* (psychic condition) *Madhyam, Satmya* (homologation) *Sheet Jala* (cold water), *Ahara* (diet) Salty and sour food items.

2.4 Investigations

To confirm Allergic rhinitis, the patient was advised to do CBC and Absolute eosinophil count because this test can help by identifying elevated eosinophil counts.in this Hb, RBCs, WBCs, Platelets, Eosinophills. So the medical history given by the patient and pathological investigations reports the diagnosis for the patient was allergic rhinitis with mild DNS.

2.5 Diagnostic Challenges
Diagnosing allergic rhinitis can sometimes be challenging due to overlapping symptoms with other conditions like viral infections, non-allergic rhinitis, asthma or sinusitis. Detailed personal medical history with pathological investigation reports helps to confirm the diagnosis.

2.6 Therapeutic Interventions
Written informed consent was taken from the patient before the start of medications. The treatment included *Sthanik Snehan Swedan* with *Koshna Tiltail* mixed with Saindhav on chest region and upper back region, *Nasya* with *Anutaila*, Syrup Immunocin 10 ml BD with *Koshna Jala*, *Sanshamani Vati* 2 tablets BD with *Koshna Jala*.

3. Discussion
AR is a condition in which nasal mucosa associated with type-1 hypersensitivity reaction which involves periodic attacks of sneezing and watery discharge from the nose. It is an immunmediated condition triggered by allergens. These allergens are substances that cause an exaggerated immune response, leading to inflammation of nasal mucosa. Due to subclinical bronchospasm, the patient may experience tightness in the chest. Industrialization and urbanization have significantly influenced the prevalence and severity of allergic rhinitis. Both processes alter environmental conditions, living patterns and exposure to allergens, leading to an increase in allergic diseases worldwide. Predisposing factors for allergic rhinitis are Genetic, environmental and lifestyle factors that increase an individual's susceptibility. The dusty environment, crowding, use of air conditioners, dusty carpets, curtains, bookshelves and occupational hazards play a significant role in precipitating allergic responses in residential or workplace conditions [6]. The second to fourth decade of life is having the highest prevalence of allergic rhinitis which subsides gradually in the later stage of life [7].
Allergic rhinitis significantly affects the quality of life by interfering with daily activities, physical health, emotional well-being and social interactions. Although not life threatening, AR can cause considerable discomfort and impair functioning if left unmanaged. Treatment for AR include 1) Avoidance of allergens, 2) treatment with drugs, 3) Immuno-therapy is the choice of treatment if drugs fail to control the disease. Drugs for treating allergic rhinitis include Antihistaminic, Sympathomimetic drugs, oral and topical corticosteroids and leukotrienes receptor antagonists. Allergic rhinitis is a chronic condition and its symptoms can recur after stopping medication, especially if the underlying allergens exposure and immune sensitivity are not addressed.
A case of female patient, who suffered from AR is reported here. Allergic Rhinitis is primarily associated with the vitiation of the *Vata-Kapha Doshas* in this case. *Nasya* with *Anutaila* and *Sasaindhav Snehan Swedan* at chest and back region was given for 15 days. *Sitopaladi Churna* 3gms QID with Madhu for 25 days and Syrup Immunocin 5ml TDS with lukewarm water as *Anupana* was administered for 25 days.

Table 2: Content of Immunocin Syrup

		Botanical Name	***Rasa***	***Vipaka***	***Veerya***	**Action**
Ashwagandha	135mg	Withania Somnifera	*Madhura, Titkta, Kashay*	*Madhura*	*Ushna*	*Tridoshghna*
Tulsi	135mg	Ocimum Sanctum	*Katutikta*	*Katu*	*Ushna*	*Kaphaghna and Vataghna*
Neem	135mg					
Haridra	65mg	Curcuma Longa	*Tikta*	*Katu*	*Ushna*	*Kaphaghna*
Guduchi	65mg	Tinospora Cordifolia	*Tikta, Katu, Kashay*	*Madhura*	*Ushna*	*Tridoshaghna*
Punarnava	55mg	Boerhvia diffusa	*Tikta*	*Katu*	*Ushna*	*Kaphavataghna,*
Pippali	10mg	Pipar longum	*Katu*	*Madhura*	*Anushna*	*Kaphaghna, Vatashamaka, Sigdha*

3.1 Action of Immunocin syrup
Immunocin is herbal medicine that boosts immunity. It improves Antibiotic therapy by boosting the immune system's defences. It promotes phagocytosis and aids in the recovery of infections that are recurring or chronic.

3.2 Action of *Sitopaladi Churna* [9]
Sitopaladi Churna is an *Ayurvedic* Formulation Mentioned by *Acharya Charaka* in *Rajyakshma Chikitsa Adhyaya*. It is used in the management of *Kasa* (cough), *Shwas* (Asthma). It shows anti-inflammatory and expectorant properties which helps in managing respiratory problems. It is usually used to treat respiratory problems like Bronchitis, Allergic rhinitis, viral infection and Pneumonia. It also helps in digestion (*Alpagni*) by increase appetite. According to Ayurveda, It has Kapha balancing properties which help to expel excessive sputum from lungs.

Table 3: Contents of *Sitopaladi Churna*

	Botanical Name	***Rasa***	***Vipaka***	***Veerya***	**Action**
Sita	Sugar	*Madhura*	-	*Sheeta*	*Vatpittashamak*
Vanshalochana	*Bambusa arundinacea*	*Madhura*	*Madhura*	*Sheeta*	*Kaphapittashamak*
Pippali	*Piper longum*	*Katu*	*Madhura*	*Ushna*	*Kaphashamak*
Ela	*Elettaria cardamomum*	*Madhura, Katu*	*Madhura*	*Sheeta*	*Kaphapittashamak*
Tvacha	*Cinnamomum zaylanicum*	*Katu, Tikta, Madhura*	*Katu*	*Ushna*	*Vatpittashamak*

Table 4: Effect on hematological parameters.

Parameter	**Before Treatment**	**After Treatment**
Haemoglobin (g/dL)	12.11	12
RBCs ($10^3/\mu L$)	3.74	4.00
WBCs ($10^3/\mu L$)	11.64	6.55
Eosinophils (%)	8.00	4.1
Absolute Eosinophil Count	706	240
Platelets ($10^3/\mu L$)	353	335

Table 5: Follow up time line

Duration	Treatment Plan	*Aushadhi Sevan Kaal*	Symptoms observed on follow up
10 days	*Nasya* with *Anutaila* and *Sasaindhav Snehan Swedan* at chest and back region. *Sitopaladi Churna* 3gms QID and Immunocin Syrup 5ml BD	Morning Morning and Evening after meal with leukwarm water	Sneezing (40-50), nasal obstruction, nasal itchy sensation, rhinorrhea, heaviness in head, and loss of concentration on work
Next 5days	Continue all medication	Same	Sneezing (30-40/day), nasal obstruction, rhinorrhea, nasal itchy sensation, improvement in the concentration of work due to reduced sneezing
Next 3 days	Continue all medication	Same	Sneezing (15-20), mild nasal obstruction,
Next 10 days	*Nasya* with *Anutaila* and *Sasaindhav Snehan Swedan* at chest and back region.		The number of sneezing was reduced to 2–4 per day and improvement in all symptoms noted
Next 10 days	Observation only	–	No increase in symptoms
Next 7 days	Observation only	–	Patient stable with no any major symptom

4. Conclusion

In this case study of allergic rhinitis, the patient exhibited classic symptoms such as sneezing, nasal congestion, runny nose and itchy eyes which were triggered by allergens like pollen, dust etc. Through a detailed history, physical examination and diagnostic tests, the diagnosis of allergic rhinitis was confirmed.

The treatment plan included allergen avoidance strategies, *Nasya* and *Shamana Chikitsa* with Immunocin syrup and *Sitopaladi Churna*. Patient education on lifestyle modifications and emvironmental control measures played a crucial role in symptoms management and improving quality of life.

5. References

1. Bhargava KB, Bhargava SK, Shah TM. Book of E.N.T. Diseases. Tenth, Ed. Usha Publications, 2014, p. 152.
2. Bhargava KB, Bhargava SK, Shah TM. Book of E.N.T. Diseases. Tenth ed. Usha Publications, 2014, p. 153.
3. Akhouri S, House SA. Allergic Rhinitis. Natl Libr Med, 2023 Jul 16. Available from: https://www.ncbi.nlm.nih.gov
4. Bhargava KB, Bhargava SK, Shah TM. Book of E.N.T. Diseases. Tenth ed. Usha Publications, 2014, p. 154.
5. Sharma R, Bhat P. Management of allergic rhinitis with Rajanyadi Churna and Guduchi Kwatha: A case report. J Ayurveda Integr Med. 2023 Jul 19;14(4):100740. DOI: 10.1016/j.jaim.2023.100740.
6. Sharma R, Bhat P. Management of allergic rhinitis with Rajanyadi Churna and Guduchi Kwatha: A case report. J Ayurveda Integr Med. 2023 Jul 19;14(4):100740. DOI: 10.1016/j.jaim.2023.100740.
7. Sharma R, Bhat P. Management of allergic rhinitis with Rajanyadi Churna and Guduchi Kwatha: A case report. J Ayurveda Integr. Med. 2023 Jul 19;14(4):100740. DOI: 10.1016/j.jaim.2023.100740.
8. Acharya YT. Commentary: Ayurveda Deepika of Chakrapani on Charaka Samhita of Charaka. Sutrasthana. Varanasi: Chaukhamba Orientalia, Chapter 5, verses 56-62.
9. Acharya YT. Commentary: Ayurveda Deepika of Chakrapani on Charaka Samhita of Charaka. Chikitsasthan. Varanasi: Chaukhamba Orientalia, Chapter 8, verses 103-104.

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Ayurvedic Insights into PCOD Management: A Case Study

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ABSTRACT

Polycystic Ovarian Disease (PCOD) is a common endocrine disorder found in women of reproductive age, characterized by hormonal imbalances, ovarian dysfunction, and metabolic issues. Symptoms include irregular menstrual cycles, elevated androgen levels, insulin resistance, and the presence of ovarian cysts, all of which can significantly affect fertility and overall health. Traditional treatment methods often concentrate on managing symptoms through hormonal therapies and insulin-sensitizing medications, which may lead to side effects. Ayurveda presents a holistic approach to PCOD management, focusing on personalized treatment based on Dosha imbalances, detoxification, dietary changes, and lifestyle modifications. This case study examines the effectiveness of Ayurvedic treatment in a 28-year-old woman diagnosed with PCOD who experienced menstrual irregularities, acne, excessive hair growth, and weight gain. Over a three-month period, she followed a treatment plan that included herbal remedies like Shatavari, Ashwagandha, and Kanchanar Guggulu, along with dietary changes and yoga therapy. The results showed marked improvements in menstrual regularity, a reduction in symptoms related to hyperandrogenism, weight loss, and improved metabolic function. Follow-up ultrasound results revealed a reduction in ovarian cysts, indicating a positive response to the treatment. This study underscores the potential of Ayurveda as a safe and effective alternative or complementary method for managing PCOD. Larger-scale research is needed to develop standardized Ayurvedic protocols for wider clinical use.

Keywords: PCOD, Herbal Medicine, Hormonal Balance, Lifestyle Modification, Menstrual Health

INTRODUCTION

In the realm of women's health, Polycystic Ovarian Disease (PCOD) emerges as a complex endocrine disorder that predominantly affects those of reproductive age, with a global prevalence estimated at 5-10%. This condition is marked by a range of challenges, including ovarian dysfunction, elevated levels of androgens, and various metabolic irregularities. These factors frequently culminate in a spectrum of clinical symptoms, such as irregular menstrual cycles, anovulation, excessive hair growth, acne, weight gain, and insulin resistance. [1] Despite extensive research, the precise causes of PCOD remain largely undefined. However, it is widely accepted that a combination of genetic factors, lifestyle choices, and environmental influences play significant roles. Moreover, PCOD doesn't just pose immediate challenges; it also elevates the risk of conditions such as metabolic syndrome, type 2 diabetes, cardiovascular issues, and infertility. Therefore, the importance of early diagnosis and effective management of this disorder cannot be overstated. [2]

In the realm of PCOD management, the traditional approach has typically relied on hormonal contraceptives, insulin sensitizers, and medications that counteract androgens. While these treatments may provide some relief, they frequently come with a host of side effects and fail to tackle the underlying issues at play.[3] This gap in treatment has sparked a growing curiosity in alternative therapies, with Ayurveda emerging as a prominent option. Ayurveda presents a comprehensive method for rejuvenating hormonal balance and enhancing metabolic function, utilizing a blend of herbal remedies, Panchakarma therapies, dietary changes, and lifestyle adjustments. [4]

In Ayurveda, Polycystic Ovary Disease (PCOD) is intricately linked to conditions referred to as 'Yoni Vyapad' (gynecological disorders) and 'Artava Dushti' (menstrual irregularities). The condition is believed to arise from an imbalance in the Tridosha, with particular emphasis on increased Kapha and Vata dosha, which results in blockages in the Shrotas (body channels), metabolic issues, and compromised reproductive health. The Ayurvedic treatment for

PCOD emphasizes detoxification (Shodhana), the regulation of metabolism (Agni Deepana), and the enhancement of reproductive health through rejuvenation therapies (Rasayana). [5]

This case study seeks to examine the effectiveness of Ayurvedic practices in managing PCOD, emphasizing a holistic treatment strategy that includes herbal remedies, dietary changes, yoga, and lifestyle adjustments. It underscores the possible advantages of Ayurveda in addressing PCOD, extending beyond mere symptom management to promote enduring health enhancements.

Aim & Objectives

- To evaluate the effectiveness of Ayurvedic management in a patient diagnosed with PCOD.
- To assess the impact of herbal medications, dietary modifications, and lifestyle interventions on hormonal balance and symptomatic relief.
- To explore the holistic approach of Ayurveda in managing PCOD as a sustainable alternative or complementary therapy.

METHODS

Case Presentation

A 28-year-old woman sought medical attention reporting infrequent menstrual periods (oligomenorrhea), along with weight gain, acne, and excessive hair growth (hirsutism) over the last three years. She had experienced irregular menstrual cycles since the onset of menstruation, which had become progressively worse. She also noted symptoms of fatigue, abdominal bloating, and mood fluctuations. Her Body Mass Index (BMI) was measured at 29 kg/m^2, categorizing her as overweight. Laboratory tests indicated elevated levels of serum testosterone, an increased ratio of luteinizing hormone (LH) to follicle-stimulating hormone (FSH), and mild insulin resistance. An ultrasound examination confirmed the presence of multiple ovarian cysts, supporting a diagnosis of Polycystic Ovary Disorder (PCOD).

Menstrual History

Age of menarche: 13 years
Initial menstrual cycles: Regular for the first 2 years
Cycle pattern: Irregular cycles for the past 5 years, ranging between 45 to 60 days
Duration of flow: 3–5 days, scanty flow
Associated symptoms: Dysmenorrhea (mild to moderate), bloating, mood swings, and fatigue

Clinical Examination & Diagnosis

A 28-year-old female patient presented with the following complaints:
Irregular menstrual cycles (cycles ranging from 45 to 60 days)
Acne and mild hirsutism
Weight gain (BMI: 27.5 kg/m^2)
Fatigue and mood swings
Mild insulin resistance symptoms
Upon clinical examination, the patient exhibited signs of hyperandrogenism, including increased facial hair and oily skin. Abdominal palpation did not reveal any significant tenderness, and systemic examination findings were within normal limits.

Dasavidha Pariksha

Prakriti: Kapha-Vata predominant
Vikriti: Kapha-Vata aggravation
Sara: Madhyama (Moderate quality of Dhatus)
Samhanana (Body Build): Madhyama (Moderate body build)
Pramana: Normal BMI with slight excess weight
Satmya (Adaptability): Mixed Satmya (tolerates various foods but prone to weight gain)
Satva: Madhyama (Moderate mental resilience)
Ahara Shakti: Mandagni (Low digestion power)
Vyayama Shakti (Exercise Tolerance): Alpa (Low endurance and physical activity)
Vaya (Age): 28 years

General Examination

General Appearance: Well-nourished, moderately overweight
Vital Signs:
Blood Pressure: 118/76 mmHg

Pulse Rate: 76 bpm, regular
Respiratory Rate: 16 breaths per minute
Temperature: 98.6°F

USG Report
An ultrasound of the pelvis revealed:
Bilateral enlarged ovaries with multiple small follicles arranged in a peripheral pattern
Increased ovarian volume consistent with polycystic ovarian morphology
Endometrial thickness within the normal range.
Based on the Rotterdam criteria, the patient was diagnosed with PCOD due to menstrual irregularities, polycystic ovarian morphology on USG, and mild clinical hyperandrogenism.

Investigations
Hormonal Profile:
LH: Elevated
FSH: Normal
LH/FSH ratio: Increased
Total Testosterone: Mildly elevated
DHEA-S: Normal
Prolactin: Normal
Thyroid Profile: Within normal limits
Fasting Insulin: Mildly elevated
Fasting Blood Sugar: Within normal limits
HbA1c: 5.6%

Lipid Profile:
Total Cholesterol: Slightly elevated
LDL: Elevated
HDL: Low
Triglycerides: Elevated

Treatment Protocol:

Component	Drugs	Dosage	Purpose
Herbal Medications	Shatavari (Asparagus racemosus)	500 mg twice daily	Adaptogenic, estrogen modulation
	Ashwagandha (Withania somnifera)	500 mg once daily	Stress reduction, hormonal balance
	Triphala	1 teaspoon at bedtime	Detoxification, digestion support
	Chandraprabha Vati	1 tablet twice daily	Reproductive health, hormonal regulation
	Kanchanar Guggulu	2 tablets twice daily	Cyst reduction, Kapha balance

Component	Treatment	Dosage	Purpose
Dietary Modifications	High-fiber foods, whole grains, fresh vegetables, and fruits	daily	Supports digestion, insulin sensitivity
	Avoidance of processed foods, refined sugars, dairy, and fried items	Continuous	Reduces inflammation, metabolic balance
	Warm, cooked meals	daily	Enhances digestion, prevents Ama (toxins)
	Hydration with herbal teas (cinnamon, fenugreek, spearmint) and lukewarm water	Regular	Supports metabolism, hormone regulation
	Intake of flaxseeds and sesame seeds	Daily	Hormonal support, omega-3 enrichment

RESULTS

The patient was monitored over three months with monthly follow-ups. The observed improvements included:

Menstrual Regularity: The cycle normalized from an irregular 45–60 days to a consistent 30–35 days.

Reduction in Hyperandrogenic Symptoms: Acne and hirsutism showed significant improvement.

Weight Loss: A total of 4 kg weight reduction was noted with better metabolic parameters.

Improved Energy and Mood: The patient reported reduced fatigue and better emotional stability.

Hormonal Balance: Laboratory tests showed a decrease in serum testosterone and improved insulin sensitivity.

Ultrasound Findings: Follow-up scans indicated a reduction in ovarian cysts, suggesting a positive response to treatment.

DISCUSSION

In this particular instance, the results serve as a testament to the effectiveness of Ayurvedic treatments in handling PCOD. Rather than merely alleviating symptoms, the approach focused on tackling the underlying issues through a blend of herbal remedies, dietary changes, and lifestyle adjustments. The herbs Shatavari and Ashwagandha were essential in balancing hormones, while Kanchanar Guggulu and Chandraprabha Vati contributed significantly to shrinking ovarian cysts and enhancing metabolic health. Additionally, Triphala proved beneficial for digestion and detoxification. [6]

In her journey toward better health, she discovered the profound impact of a balanced diet brimming with fiber and plant-based nutrients.[7] This shift not only improved her insulin resistance but also helped to decrease the inflammation that had troubled her for so long. Alongside these dietary changes, she embraced a regular practice of yoga, pranayama, and meditation, finding solace in their ability to manage stress—an important factor in her struggle with PCOD. [8] Additionally, her commitment to weight management led to more regulated menstrual cycles and a newfound stability in her hormones, marking a significant turning point in her wellness journey. [9]

CONCLUSION

This case study indicates that Ayurvedic management may serve as an effective and comprehensive method for addressing PCOD (Polycystic Ovary Disease). The approach involved a combination of herbal remedies, dietary changes, and lifestyle adjustments, which collectively led to considerable improvement in symptoms and hormonal balance. Notably, the patient's menstrual cycle started to normalize, symptoms related to hyperandrogenism decreased, and there was a marked enhancement in metabolic health within just three months of undergoing treatment. Additionally, ultrasound assessments corroborated the treatment's effectiveness by revealing a reduction in ovarian cysts. The Ayurvedic philosophy's focus on personalized treatment plans, detoxification, and lifestyle changes positions it as a sustainable alternative or complementary option for managing PCOD. In contrast to conventional therapies that primarily target symptom relief, Ayurvedic practices aim to tackle underlying causes by harmonizing Doshas, enhancing digestive function, and fostering overall wellness. The inclusion of yoga and pranayama practices further contributed to improved stress management and hormonal balance for the patient in this study. Although this single case study showcases encouraging findings, more extensive studies and clinical trials are essential to develop standardized Ayurvedic treatment protocols for PCOD. An integrative model that combines Ayurvedic principles with contemporary diagnostic and monitoring techniques could offer a more thorough and effective management strategy for PCOD, ultimately benefiting a broader spectrum of women affected by this condition.

Recommendations for Future Research:
Long-term clinical trials with larger sample sizes.
Comparative studies between Ayurvedic and conventional treatments.
Exploration of personalized Ayurvedic approaches based on Prakriti (body constitution). Complementary or alternative therapy for women struggling with PCOD.

REFERENCES

[1]. Liu J, Wu Q, Hao Y, Jiao M, Wang X, Jiang S, Han L. Measuring the global disease burden of polycystic ovary syndrome in 194 countries: Global Burden of Disease Study 2017. Human Reproduction. 2021 Apr 1;36(4):1108-19. oup.com

[2]. Safiri S, Noori M, Nejadghaderi SA, Karamzad N, Carson-Chahhoud K, Sullman MJ, Collins GS, Kolahi AA, Avery J. Prevalence, incidence and years lived with disability due to polycystic ovary syndrome in 204 countries and territories, 1990–2019. Human Reproduction. 2022 Aug 1;37(8):1919-31. [HTML]

[3]. O'Donnell K. Everyday Ayurveda for Women's Health: Traditional Wisdom, Recipes, and Remedies for Optimal Wellness, Hormone Balance, and Living Radiantly. 2024. [HTML]

[4]. Kulkarni SV, Patil SS. Rejuvenating Sexual Health Holistically: An Approach in Ayurveda. Journal of Ayurveda and Integrated Medical Sciences. 2024;9(11):225-39. jaims.in

[5]. Mishra V, Lakra A. AYURVEDIC REVIEW OF PCOD AND ITS MANAGEMENT. researchgate.net. . researchgate.net

[6]. Arun PP, Kumar G, Tiwari RK, Sharma B. HERBAL-BASED MEDICINE APPROACH IN THE TREATMENT OF INFERTILITY: A REVIEW. researchgate.net. . researchgate.net

[7]. Patel V. Whole-Food Plant-Based Diet Impact on Chronic Disease Reversal. 2024. arcadia.edu

[8]. Minocha N, Singh A. Nutrition Essentials: Building a Foundation for Optimal Health Through Diet. InImpact of Yoga and Proper Diet on Cardiopulmonary Function 2025 (pp. 119-160). IGI Global Scientific Publishing. [HTML]

[9]. Sridhar K, Bouhallab S, Croguennec T, Renard D, Lechevalier V. Recent trends in design of healthier plant-based alternatives: Nutritional profile, gastrointestinal digestion, and consumer perception. Critical Reviews in Food Science and Nutrition. 2023 Nov 29;63(30):10483-98. [HTML]

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Comparative Antiseptic activity of Sarjarasa Malahar; when prepared with or without Tuttha: A randomized clinical trial

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Abstract
Aim: To compare the antiseptic activity of Sarjarasa Malahara prepared with or without tuttha by external application on padadari (crack heel).
Materials and Methods: 20 no. patients of padadari taken and randomly divided in 2 groups, group 1 treated with Sarjarasa Malahara prepared with tuttha and group 2 treated with sarjarasa malahara prepared without tuttha and their comparative antiseptic activity noted. Assessment criteria for the comparison - no. of cracks and length of cracks are used.
Results: In Group 1 - when Sarjaras Malahara prepared with Tuttha applied daily from the day one, gradually Cracks were reduced from mild to zero cracks, moderate to mild and severe to mild. In Group 2- when Sarjaras Malahara prepared without Tuttha, applied continuously from the day one, gradually Cracks were reduced from mild to almost no cracks, moderate to mild and severe to moderate.

Keywords: Tuttha, Sarjaras Malahara, padadari, visha, amruta, maharasa

Introduction
Tuttha 6th Maharasa Dravya, also known as copper sulfate, “blue vitriol” and “bluestone” is considered as copper sulphate in English with chemical formula CuSO4.5H2O[1]. Mythologically it is considered as vomitus of Garuda deva; after drinking amrita and halahala (toxic substance), Garuda deva vomited on the mountain of marakata (name of mountain) [1]. There after this vomitus, the combination of amrita and visha solidified and collected as Tuttha [1]. It is also called as Sasyak, Tutthanjana, Mayuraka, Tamragarbha, Shikhigreeva etc [1]. It is available in natural and manufactured artificially with the combination of copper and sulphur. The Tuttha having shikhikantha chaya (like peacock neck color), neela varna (bluish color), guru (heavy), snigdha (unctuous), mahojwala (bright) qualities, is to be considered for therapeutic purpose [1].
The properties of Tuttha as a bhasma are mentioned by Ayurvedic classic as pungent (Katu), alkali (Kshara), astringent (Kashaya), light to digest (Laghu), emetic (Vamaka), scraping (Lekhana), penetrating (Bhedana), hot (Usna) in potency, good for eyes (Chakshushya), pacifies Kapha and Pitta [2].
Ayurveda classical texts indicate to use in skin diseases, ulcer, sinus, worm infection, vitiligo, obesity, pain, asthma, hyper acidity, haemorrhoids and diseases of eyes etc [3]. Anti-microbial, useful in Diabetes mellitus, anti-obesity, strengthening, anti-inflammatory, heart disease, skin diseases, Vitiligo, Hyperacidity and as Rejuvenator [3].
Tuttha is used in various kalpas in Ayurveda, commonly in the healing kalpa like Sarjarasa malahar, Jatyadi tail, Jatyadi ghrut, Kasisadi tail etc also in Trailokyachintamani rasa, Mahajwarankush rasa, Varishoshan rasa etc that are used to treat the inflammatory conditions.
Malahar or ointments are generally easy to use, or easy to apply on body parts, easy to prepare and cost-effective, also malahar has a property like oleation, cleansing, healing, scaraping, and beutifying depends on the drugs used in the preparation [4].
so, the tuttha used in ointment i.e. sarjarasa malahar. Which is used for the further study.

Objective of the study
It is an attempt to compare the antiseptic activity of sarjarasa malahara prepared with or without tuttha used to treat the disease padadari (crack heel).

Materials and Methods

Selection of the drug

Drug required to prepare sarjarasa malahar are, Til tail (16 Parts), Ral (4 Parts), Tuttha (1 Parts), Kankshi (1 Parts).

The sample of Tuttha were collected from the local market. It was then evaluated to check whether it matched the grahya lakshanas (acceptable qualities described in classical ayurvedic texts) the assessment confirmed that the sample possessed the required characteristic's and was suitable for therapeutic use. Also, the sample of tiltail, Ral and kankshi collected from local market and identified.

(Quantitative analysis revealed that Tuttha before purification contains copper - 23.78%, Sulphur - 11.98%, Iron - 0.33% [3]. After purification of Tuttha with Lemon juice, the content of copper was 26.74%, iron was 0.76% and sulphur was 8.46%) [3].

Apparatus Required: Stainless steel vessel, spatula, cotton cloth, gas stove and cylinder.

Methods: It involves following pharmaceutical procedures:

1. In a clean stainless-steel vessel Til taila was taken and placed over mild flame.
2. Heat was given until foam starts appearing.
3. After some time required amount of Ral was added to it according to reference.
4. After some time, Ral (Sarjarasa)completely melts in oil then added kankshi at given proportion.
5. Tuttha was added at given proportion along with kankshi, and after completely melts in oil then it was filtered to another clean vessel containing water.
6. Then manthana is done till the complete achievement of Malahara like semisolid consistency.

Same procedure repeated without adding of tuttha for preparation of Sarjarasa malahara without Tuttha.

Precautions

1. Heat was kept mild throughout the process.
2. It was stirred continuously to prevent the material from burning.
3. Mixture was poured immediately after melting into the vessel containing water.

Clinical study

Source of Data: A total twenty patients, aged between 15 to 60 years were diagnosed with Padadari (crack heel). were selected for the study and divided in two group randomly, Group 1 - Treated with Sarjarasa Malahara prepared with Tuttha. & Group 2 - Treated with Sarjarasa malahara prepared without Tuttha.

Study design: A clinical study on the efficacy of sarjarasa malahar prepared with or without tuttha in the management of Padadari (crack heel) was conducted.

Inclusion and exclusion Criteria for Patients

Inclusion Criteria

1. Patients exhibiting the classical sign and symptoms of Padadari (crack heel)., Lakshana of Padadari (crack heel). such as: 1. Padayo Kurute Daari (Cracks in feet) 2. Saruja (with pain) 3. Ruksha (dryness of feet).
2. Patients aged 15 years to 60 years were included in the study.
3. Patients from both the gender were eligible for inclusion.

Exclusion Criteria

1. The patient diagnosed with systemic disorders (e.g. DM, HIV etc.) were not included.
2. The pregnant women and lactating mother were not included in the study.
3. Patient less than 15 yrs. and above 60 yrs. of age were excluded.
4. Patient with history of allergy.
5. Any infection-intervening conditions were excluded.
6. Intervention: Drug: Sarjarasa malahar prepared with or without tuttha.

Method: External application on affected area.

Time: Morning and evening Treatment.

Duration: 15 days: Follow up during treatment: After every 7 days.

Assessment criteria: Assessment and scoring were performed based on the classical sign and symptoms of padadari (crack heel). Therapeutic outcomes were assessed through both subjective and objective criteria. A comprehensive assessment was carried out based on multiple research parameters. Assessment was done 0^{th} 7^{th} & 15^{th} day during the entire study period.

Objective parameters and their Assessment criteria -

Total number of cracks observed on the hands and feet -

1. G0 - No crack
2. G1 - 1-10 crack
3. G2 - 11-20 crack
4. G3 - > 20 crack

Overall length of cracks measured in millimetre

1. G0 - Absent
2. G1 - < 10mm
3. G2 - 10-20 mm
4. G3 - > 20 mm

The overall assessment of the therapy was conducted after treatment, based on both subjective and objective parameters. The percentage of improvement was calculated and classified as follows -

1. Maximum improvement - > 75% improvement.
2. Moderate improvement - > 50% to 75% improvement.
3. Mild improvement - > 25% to 50% improvement.
4. Unsatisfactory - Negligible (≤ 25%) improvement.

Observations

In the present study, 20 patients were selected and randomly assigned to two groups, group 1 & group 2 out of these, 10 patients diagnosed with Padadari (Crack Heel) were selected for the treatment with Sarjarasa Malahara prepared with Tuttha and considered as group 1 and 10 patients treated with Sarjaras Malahara prepared without tuttha are considered as group 2. The trail was completed by all selected patients without any discontinuation.

At the onset, the vital data of all the patients of this series are being oriented. Thereafter, the therapy is described.

Crack of feet Among 10 patients of group 1- 30% had mild crack, 50% had moderate crack, and 20% had severe crack.

Measured length of cracks in the 10 patients of group 1 - 50% with superficial cracks, and 50% with severe cracks.

Crack of feet Among 10 patients of group 2 - 30% patients show mild cracks, 60% patients show moderate cracks, and 10% patients presents severe cracks.
Length of cracks Among 10 patients of group 2- superficial cracks were observed in most patients i.e. 60%. and 40% patients with severe cracks.

Results
Group 1: The count of cracks on the feet was measured in each of 10 patients as follows - 30% patients present with mild crack, 50% with moderate crack, and remaining 20% shows severe cracks.
Measured length of cracks in the 10 patients of group 1 - 50% patients present with superficial cracks; and remaining 50% shows severe cracks.
With consistant application of Sarjarasa Malahara prepared with Tuttha from the day one, the cracks showed progressive healing over time, from mild to zero cracks, moderate to mild and severe to mild.

Group 2: the number of cracks present in the 10 patients was assessed - 30% patients present with mild crack, 60% with moderate crack, and remaining 10% shows severe cracks.
Measured length of cracks in the 10 patients of group 2- most of the patients, 60% shows superficial cracks; and remaining 40% presents with severe cracks.
With consistant application of Sarjarasa Malahara prepared without Tuttha, from the day one, cracks showed progressive healing over time from mild to zero cracks, moderate to mild and severe to moderate.

Here are the results of the statistical tests
Within-Group Comparison (Before vs. After Treatment)
Group 1

Number of cracks
Paired t-test p = 0.0001
Wilcoxon p = 0.002

Length of cracks
Paired t-test p = 0.000013
Wilcoxon p = 0.002
Group 2

Number of cracks
Paired t-test p = 0.000001
Wilcoxon p = 0.002

Length of cracks
Paired t-test p = 0.00009
Wilcoxon p = 0.007

Interpretation: Both groups show a statistically significant reduction in both number and length of cracks after treatment.
Between-Group Comparison (Change from Before to After)

Reduction in Number of Cracks
Independent t-test p = 0.91
Mann-Whitney U test p = 0.65

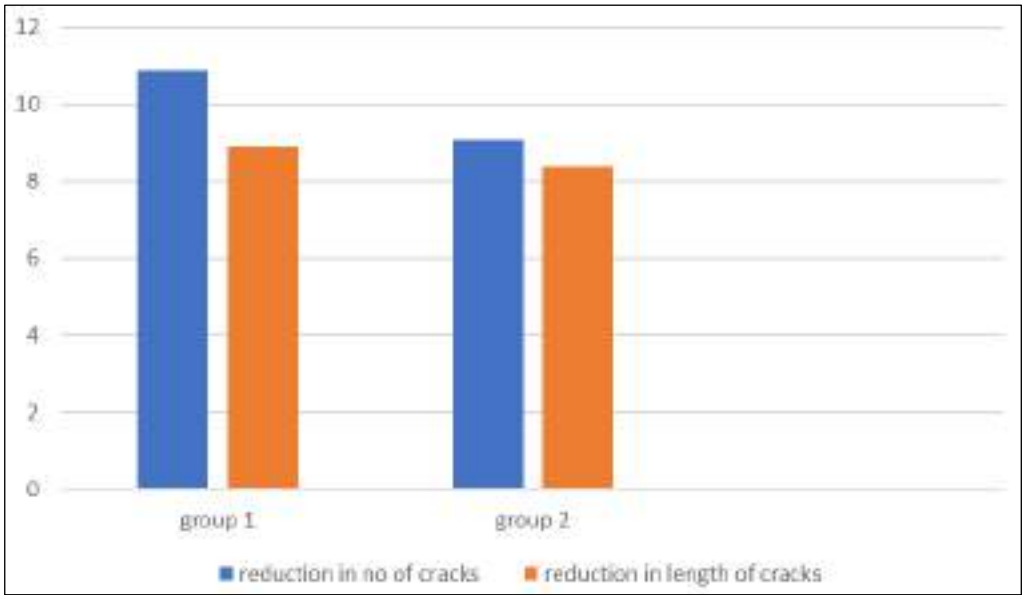
Reduction in Length of Cracks
Independent t-test p = 0.48
Mann-Whitney U test p = 0.79

Interpretation: There's no significant difference between Group 1 and Group 2 in terms of how much they improved. Both treatments seem to work similarly.

Group 1
Mean reduction in number of cracks = 10.9
Mean reduction in length of cracks = 8.9

Mean of Differences
Group 1 - Number of cracks: 10.9 & Length of cracks: 8.9
Group 2 - Number of cracks: 9.1 & Length of cracks: 8.4

Here's the bar plot showing the mean reduction in both the number and length of cracks for Group 1 and Group 2 after treatment.



Group 1: Had slightly greater mean reductions in both outcomes, The differences between groups are relatively small.

Discussion

Proposed Mode of Action of Sarjarasa Malahara Lepa in the management of Padadari (Crack Heel): According to constituents - the contents are Tilataila, Sarjarasa, kankshi, & Tuttha.

Tilataila (Sesamum Indicum) possesses Madhur (sweet), Kashaya (astringent), Tikta (bitter), Katu (pungent) tastes, it is characterised by Guru (heavy), Snigdha Guna (unctuous), Ushna Virya (hot), and is known to pacify all three doshas i.e. Tridosha shamaka it exhibits Snehana (Oleation and lubrication), Vrana Shodhana (Wound cleansing), Vedana sthapaka (Analgesic and Pain reliving), and Sandhaniya[6] (Promoting union of fissured part).

Sarjarasa (Shorea Robusta) possesses Kashaya Rasa (astringent taste), along with Ruksha (dry) and Sheeta (cold) Gunas (qualities) it exhibits Vranaropaka (Wound Healing), Sandhaniya (tissue unifying), Jantughna[6] (Anti-microbial).

Kankshi possesses kashay-amla rasa (astringent-sour taste), vishaghna (anti-poisonous), vranaghna (Wound Healing) tridoshashamak.

Tuttha possesses pungent (Katu), alkali (Kshara), astringent (Kashaya) tastes, and exhibits antimicrobial, antifungal also anti-inflammatory property.

Discussion on cracks - cracked heel, or padadari, are a common condition characterised by dryness, fissuring, and thickening of the skin, primarily on the soles and heels. The pathogenesis can be correlated with vatapradhan kshudra kushta. The healing can be attributed to the combined effects of the ingredients used, As Sarjarasa Malahara consist of Tilataila (Sesamum Indicum), Sarjarasa (Shorea Robusta), Kankshi and Tuttha (Copper Sulphate). Therapeutic action of Sarjarasa, Tilataila are Snigdha Guna (Moisturizing/Humidifying), Vranaropaka (Wound Healing), Sandhaniya (Approximation), Snehana (Lubrication) which is effectively contributed to the wound healing process. Also, it helped to soften skin, relieve pain, and restores the integrity of skin.

The Sarjarasaa malahar has wound healing or antiseptic activity when prepared with Tuttha. But many people prepare Sarjarasa malahar without adding Tuttha, because Tuttha is considered as poisonous, and ignores his anti-microbial, anti-fungal and anti-inflammatory activity, so this study is to rule out the role of tuttha in Sarjarasa malahar to treat crack heel.

Group 1 patients - The count of cracks on the feet was measured in each of 10 patients as follows - 30% patients present with mild crack, 50% with moderate crack, and remaining 20% shows severe cracks.

Measured length of cracks in the 10 patients of group 1 - 50% patients show superficial cracks; and remaining 50% shows severe cracks.

After consistant application of Sarjarasa Malahara prepared with Tuttha from the start, Cracks were reduced gradually from mild to zero cracks, moderate to mild and severe cracks converted to mild with significant result.

Group 2 patients- The count of cracks on the feet was measured in each of 10 patients - 30% patients show mild crack, 60% shows moderate crack, and remaining 10% patients show severe cracks.

Measured length of cracks in the 10 patients of group 2- most of the patient, i.e. 60% presnts superficial cracks; and reaming 40% shows severe cracks.

with consistant application of Sarjarasa Malahara prepared without Tuttha, from the day one, cracks showed progressive healing over time from mild to zero cracks, moderate to mild and severe to moderate.

Conclusion

In group 1: Sarjarasa Malahara Lepa (Sarjarasa Ointment) demonstrated significant effectiveness in decreasing both the number of cracks and length of cracks, along with reducing foot dryness.

In group 2: Sarjarasa Malahara Lepa (Sarjarasa Ointment) demonstrated less effectiveness in reducing number of cracks and length of the cracks, but showed marked improvement in addressing foot dryness.

hence, Sarjarasa Malahara (Sarjarasa Ointment) prepared with Tuttha can be considered an effective therapeutic option in the treatment of padadari, the topical application of Sarjarasa Malahara (Sarjarasa Ointment) showed statistically significant improvement in the signs and symptom of the disease. Throught out the treatment period, no side effects or adverse events were reported.

Further Scope

The other formulations like Jatyadi tail, Jatyadi ghrut, Kasisadi tail used for healing purpose contains Tuttha. By studying this preparation prepared with or without Tuttha can also evaluate the tuttha's antiseptic activity.

References

1. Jayalaxmi, *et al*. Tuttha Shodhana: Classical view and scientific review. Int J Res Ayurveda Pharm. 2021;12(3). ISSN: 2229-3566.
2. Mahapatra A, *et al*. Physico-chemical analysis of crude Tuttha and Tuttha Bhasma prepared through three different procedures. Ann Ayurvedic Med. 2013;2(4):Oct-Dec.
3. Mahapatra A, *et al*. Physico-chemical analysis of crude Tuttha and Tuttha Bhasma prepared through three different procedures. Ann Ayurvedic Med. 2013;2(4):141-144.
4. Vinyasa TE, *et al*. Critical review on ratio of ingredients in Malahara Kalpana (Ayurvedic ointments). J Ayurveda Herb Med. 2013;1(8). Available from: www.jahm.in. ISSN: 2321-1563.
5. Mishra S. Textbook of Bhaishajyakalpana Vigyan. Varanasi: Chaukhamba Publication House; 2020. p. 300.
6. Mishra S. Textbook of Ayurvedic Rasashastra. Varanasi: Chaukhamba Orientalia; 2017. p. 337.
7. Akhtar J, *et al*. Comparative clinical study on the effect of Sarjarasadi Malahara and Vipadikahara Ghrita-Taila in the management of Vipadika. Ayushdhara. 2021; ISSN: 2393-9583 (P) / 2393-9591.

ROLE OF PRAVAL PANCHAMRUT IN THE MANAGEMENT OF AMLAPITTA (PEPTIC ULCER) W.S.R. BHAISHAJYA RATNAVALI

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Abstract:

This study aims to study the effect of *Praval Panchamrut* in the management of *Amlapitta* i.e. Peptic ulcer. It is the disease which occurs due to vitiated *Pitta dosha*. It is caused due to improper digestion of food which is the result of faulty food habit. When *Pitta* is increased in the body by *amlaguna* it is called as *Amlapitta*. According to *Ayurved Praval panchamrut* is *sheetal*, *pittashamak* and it is indicated for *Amlapitta, chhardi, raktapitta, mootravikar, jwara* etc. *Praval Panchamrut* contains calcium carbonate (CaCO3) which rapidly neutralizes oesophageal acid and may prevent reflux. In *Bhaishajya Ratnavali* has been mentioned in the management of *Amlapitta, Aanah, Gulma, Shwas, Kaas, Grahani* etc. In *Bhaishajya Ratnavali, Praval panchamrut* mentioned in the management of *Amlapitta*. *Praval Panchamrut* contains *Mukta, Shankh, Shukti, Praval* and *Kapardik*, which are *sheeta* and *pitta shamak dravyas*. All these dravyas are having *madhur tikta rasa, madhur vipaka*. *Sheeta guna* and *madhur vipaka* of these dravyas helps in reducing *vidagdha pitta, Amlapitta* i.e. Peptic Ulcer.

Keywords: Praval Panchamrut, Amlapitta, Peptic ulcer.

INTRODUCTION:

Ayurveda is a holistic system of medical science and is the oldest healing science which is almost 5000 years old. Ayurveda contains two Sanskrit words: *Ayu* which means life or lifespan and *Veda* meaning knowledge. Thus, Ayurveda means "the science of life." Ayurveda is based on the principle of maintaining a balance between the interrelated relationships within the body and mind. It helps the patient to understand the benefits of knowing their body and mind and to live in intimate relationship with nature. Ayurveda comprehends body, mind and spirit likewise and has specific methods for working on each. It divides the constitution of people into three humoral categories-*Vata, Pitta* and *Kapha*. *Vata* rules mental mobility, Pitta or fire, governs digestion and assimilation on all levels from food

to ideas and Kapha or water, governs form and substance and is responsible for weight and stability. According to the concept of good management, ayurveda insists that the 'Fault' or Dosha, the 'Tissue' or Dhatu and the 'Impurity' or Mala should be in harmony with each other, with all the components properly balanced. These are basically therapeutic measures taken either to prevent diseases or cure them. Thus, ayurvedic procedures are done either to detoxify the body and to strengthening the immune system.[1] due to change in life style and eating habits, an increasing frequency of gastric symptoms in persons can be observed now a days, the most common being peptic ulcer. Peptic Ulcer in Ayurveda is considered a type of Acid Gastritis. This Disorder is generally classified under *Grahani* disorder. Ulceration of the stomach wall which is the classic description of a peptic ulcer is clearly due to excessive amount of *Prakupita pitta* in the body and causes *Amlapitta*. And according to modern aspect, peptic ulcer can be explained as imbalance between acid, pepsin and bile. According to *doshabala* it is of three types as *Vatanubandhi*, *Pittanubandhi*, *Kaphanubandhi*. As per Gati it is of two type i.e Urdhvag and Adhog[2]. Due to modernization, life style and food habits are changing day by day such as taking junk food, and late-night dinner has become common. Such habit causes indigestion and gastric problems. In Ayurveda so many drugs are described for this disease such as Suvarnasutshekhar, Praval Panchamrut, Avipattikarchurna, Bhunimbadikwath etc. In Bhaishajya Ratnavali has been mentioned in the management of Amlapitta, Aanh, Gulma, Shwas, Kaas, Grahani etc. In Bhaishajya Ratnavali, *Praval panchamrut* mentioned in the management of *Amlapitta*. *Praval Panchamrut* contains Mukta, Shankh, Shukti, Praval and Kapardik, which are sheeta and pitta shamak dravyas[3]. All these dravyas are having madhur tikta rasa, madhur vipaka. Sheeta guna and madhur vipaka of these dravyas helps in reducing vidagdha pitta[4, 5]. Chemically *Praval Panchamrut* contains calcium carbonate (CaCO3) which rapidly neutralizes oesophageal acid and may prevent reflux, suggesting another mechanism of action independent of acid neutralization. Calcium carbonate is a good antacid and it also provides calcium, which is desirable[6].

OBJECTIVES:

To study the role of *Praval Panchamrut* in the management of *Amlapitta* i.e. peptic ulcer w. s. r. Bhaishajya Ratnavali.

METHODOLOGY:

1. Amlapitta: Amlapitta is commonly occurring disease worldwide. Change in life style and food habits such as taking fast food, alcohol consumption and stress are

causing many health problems. Amlapitta is concerned; it is explained with the help of samprapti of grahani roga mentioned by Charaka. In Amlapitta the Nidanas are predominantly from the non compliance of dietetic code of selection and eating. However psychological status of a person also plays an important role. Agnimandhya causes Agnidushti occurs it results in Ajirna. In this state of whatsoever food material are consumed by an unwise person, become Vidagdha (acidic) and are converted into Shukta (acid) form which leads to formation of Amavisha. Vidagdha (acidic) and are converted into Shukta (acid) form which leads to formation of Amavisha. Thus, Amavisha i.e. acidic dietary toxins in the body produced disturbs the Grahani and once it happened it further produces the Amadosha. Amavisha Produced by this Samprapti when mixes with Pitta, it will produce Amlapitta[7].

2. Peptic Ulcer: Amlapitta has symptomatically and clinically correlated with peptic Ulcer. In modern aspect of peptic ulcer can be explained as imbalance between the aggressive acid, pepsin, bile etc. and the defensive gastric mucus and bicarbonate secretion, prostaglandins, nitric oxide, innate resistance of the mucosal cells[8].The ulcer in the intestinal tract is called duodenal ulcer and ulcer in the stomach is called gastric ulcer both together is called peptic ulcer. Peptic ulcer disease (PUD), encircling gastric and duodenal ulcer is a major gastrointestinal disorder[9].

3. Ingredients of Praval Panchamrut:

Sr. No.	Sanskrit name	Latin Name	Proportion
1.	Mouktik bhasma	Mytilius margaritiferus	1 part
2.	Praval bhasma	Corallium librum	2 part
3.	Shauktik bhasma	Avicula	1 Part
4.	Kapardik bhasma	Calcium carbonate	1 part
5.	Shankha bhasma	Tritonium	1 part
6.	Arkaksheer	Calotropis procera	6 Part

4. Mouktik: Mukta (Pearl) is an organic gem. Chemically it is Calcium Carbonate. Mouktik Shodhan[10] in jayanti swarasa which has in Rasatarangini. The roughly pounded Mukta is tied in a pottali and subjected for 3 hours (1 yama) of swedana in Dolayantra by keeping Jayanti Swarasa as liquid media. Later the drug is dried and stored in airtight container as Suddha Mukta for further pharmaceutical use.

Mouktik Marana[11]-Required quantity of shuddha mukta is taken in a clean khalva yantra.it is carefully pounded and triturated to bring it in fine powder form. this powder is added with

equal quantities of Godugdha, triturated thoroughly and later dried under hot sun. The dry powder obtained is enclosed in sharava samputa and subjected for one Laghuputa. The entire procedure is repeated for 3 times to obtain appropriately prepared Mukta Bhasma.

5. Praval: Pravala is marine animals in class of Anthozoa of Phylum Cnidaria typically living in compact colonies of many identical individual "polyps". The group includes the important reef builders that inhabit 'tropical oceans' and secrets Calcium Carbonate to form a hard skeleton.

Pravala Shodhana[12] that is tied in a pottali and subjected for 3 hours (one yama) of swedana in Dolayantra by keeping Tanduliya jala as liquid media. Later the drug is washed, dried and stored in airtight container as shuddha Pravala for further pharmaceutical use.

Pravala Marana[13] –Shuddha Pravala is taken in khalva yantra and triturated to obtain it in the form of fine powder. This fine powder is added with required quantity of Ghrtakumari Swarasa and triturated thoroughly to prepare the chakrika of even size and shape.these chakrika dried the sun and enclosed in sharava samputa and subjected for one laghuputa.all this process is repeated three times to obtain clean, bright moon like white bhasma of Pravala.

6. Shauktik: Shauktik i.e. Oyster is used as a common name for a number of distinct groups of bivalve molluscs which live in marine. The valves are highly calcified. Chemically they are Calcium Carbonate.

Shauktik Shodhana[14] -Shauktik is selected in bigger size. Their posterior surface is scraped with a sharp knife to clean the ocean alkaline deposites. These cleaned shukti are tide in a cloth like pottali, hung in a dolayantra containing kanji or any other amla dravya as liquid media and subjected for swedana of one yama later the drug in the cloth is washed with water, dried and stored as shuddha shuktika.

Shauktik Marana[15] -shuddha shuktika are enclosed in sharava samputa and subjected for one Gajaputa. When cool on its own the white coloured bhasma inside the samputa is collected, triturated and use for further pharmaceutical use.

7. Shankha: Shankha i.e. Conch Shell is a common name that is applied to a number of different mediums to large sized sea snails or their shells. Chemically it is also Calcium carbonate.

Shankha Shodhana[16]- Shankha is made into smaller pieces and those pieces are tied in a cloth like Pottali and it is hung in a Dola yantra Containing Jambira Nimbu Swarasa as liquid media and subjected for swedana of four yama (12 hours). Later, the drug in the cloth is washed with warm water, dried and use in pharmaceutical preparations.

Shankha Marana[17]- Shuddha shankha are enclosed in sharava samputa and subjected for Gajaputa. When cool on its own the white coloured bhasma inside the samputa is collected, triturated and use for further pharmaceutical use.

8. Kapardika: kapardika or varatika identified as marine shell, cowries. Cowrie is the common name for a group of small to large sea snails, marine gastropod molluscs in the family Cypraeidae, the cowries.

Kapardika Shodhana[18]- Kapardika are tide in a cloth like pottali, hung in a dolayantra containing kanji or any other amla dravya as liquid media and subjected for swedana of one yama later the drug in the cloth is washed with water, dried and stored as shuddha Kapardika.

Kapardika Marana[19]- Shuddha Kapardika are enclosed in sharava samputa and subjected for Gajaputa. When cool on its own the white coloured bhasma inside the samputa is collected, triturated and use for further pharmaceutical use.

Preparation of Pravala Panchamrut[20]-

The Preparation of Pravala Panchamrut is mentioned in the Bhaishjya Ratnavali, in which drugs are Mouktik bhasma, Shautik bhasma, Shankha bhasma, Pravala bhasma, Kapardik bhasma and bhavana of Arkadugdha ksheer. All ingredients are made into sukshma choorna by pounding in khalva yantra, then Arkadugdha ksheer is added and triturated to make it paste, rolled into Chakrika, dried in sunlight, kept in Sharav samputa and given Laghuputa and resultant smooth bhasma is collected.

Mode of action of Drug - Pravala Panchamrut

Chikitsa means nothing but the treatment given to disintegrate or destroy the Samprapti or pathogenesis of the disease. In Amlpitta, due to increase in drava guna of pitta, there is anna vidah and indigestion, so symptom such as amlodgar, hrutshul, udarshul is increased. Due to sheet veerya, madhur vipak and ruksha guna of Pravalpanchamrut it is very effective in reducing these symptoms. As it contains calcium carbonate (CaCO3), it rapidly neutralizes oesophageal acid and may prevent reflux. Amlapitta correlated with Peptic ulcer. Praval

panchamrut is an effective medicine in Amlapitta as it is shitaveeryatmak, madhur, tiktarasatmak and madhurvipaki[21].

DISCUSSION:

Peptic Ulcer is a very common disease now days. In ayurveda vata, pitta or both are told as the causative factor of peptic ulcer. Peptic ulcer can be described as ulcers occurring in stomach or duodenal wall either due to discontinuation of mucosal lining or excess secretion of acid. The cause of most ulcers lies in a medley of vata and pitta provoking factors. due to change in life style and eating habits, an increasing frequency of gastric symptoms in persons can be observed now a days, the most common in amlapitta. In Amlpitta, due to increase in drava guna of pitta, there is anna vidah and indigestion. Acharya Charaka describes some of common cause of peptic ulcer like deranged Agni. In Bhaishajya Ratnavali, praval panchamrut has been mentioned in the management of Amlapitta. Praval Panchamrut is sheetal, pittashamak and it is indicated for Amlapitta, chhardi, raktapitta, mootravikar, jwara etc. Pravala Panchamrut is mentioned in the Bhaishjya Ratnavali, in which drugs are Mouktik bhasma, Shautik bhasma, Shankha bhasma, Pravala bhasma, Kapardik bhasma and bhavana of Arkadugdha ksheer. Praval Panchamrut contains calcium carbonate (CaCO3) which rapidly neutralizes oesophageal acid and may prevent reflux, suggesting another mechanism of action independent of acid neutralization. These useful properties of Praval Panchamrut and need of time for the management of Amlapitta. Praval Panchamrut dravyas are having madhur tikta rasa, madhur vipaka. Sheeta guna and madhur vipaka of these dravyas helps in reducing vidagdha pitta. Pravalpanchamrut has significant results in symptoms of Amlapitta such as Aruchi, amlodgar, chhardi, hrutshul, udarshul.

CONCLUSION:

From the above study we can conclude that Praval Panchamrut mentioned in Bhaishajya Ratnavali possesses madhur tikta rasa, madhur vipaka. Sheeta guna and madhur vipaka of these dravyas helps in reducing vidagdha pitta i.e. Peptic Ulcer. Most common cause of ulcers according to Ayurvedic aspect is vata and pitta or both together. So, to treat the ulcer we need the drugs which pacify both vata and pitta or drugs which are Shita in Virya and Madhura in Vipaka. Praval panchamrut has significant results in symptoms of Amlapitta i.e.Peptic Ulcer such as Aruchi, amlodgar, chhardi, hrutshul, udarshul.

REFERENCE:

1. Mishra L, Singh BB, Dagenais S. Ayurveda: A historical perspective and principles of the traditional healthcare system in India. Alternative Therapies in Health and Medicine. 2001; 7(2):36-42.
2. Madhavakara Madhava nidana – part II Madhukosha Sanskrit comm. by Shri Vijay Rakashit and Shri Kantha Dutta - Vidhyotinihindi Comm. by Shri Sudarshan Shastri, Amlapitta Adhayaya 21st edi. published by Chaukamba Sanskrit sansthana, Varanasi 1993, Pg No. 170, 171,172.
3. Rasatarangini 12th Taranga, Sadananda Sharma – 11th edi. Published by Shri Jainendra press, New Delhi, 1994 Pg.No. – 285, 286, 287and 288.
4. Bhavprakash Nighantu – savimarsh hindi ,By K.C. Chunekar, haritkyadivarga, chaukhamba prakashan 2006. Pg 13, 14.
5. Bhaishajya Ratnavali, Shastri Ambikadutta,Gulmaadhikar,Chaukhambha Sanskrit sansthan, Varanasi 2004; pg. no.430.
6. R.S. Satoskar – Pharmocology and Pharmacotherapeutics, 14th edi. Published by Bombay popular prakashana 1995.
7. Charaka Samhita with Ayurveda Dipika Commentary of Chakrapanidatta. Jadavji Trikamji Acharya. Ed 2004, Chaukhambha Sanskrit Sansthan Varanasi, Chikitsa Sthana 15:42–60.
8. K D Tripathi,Essentials of Medical Pharmacology, Chapter 46, Drugs for Peptic Ulcer, p. no. 627, Jaypee Brothers Medical Publishers Ltd., Sixth edition, 2008.
9. Valle D. L. (2005) Peptic ulcer diseases and related disorders. In: Braunwald E, Fauci AS, Kasper DL, Hauser SL, Longo DL, Jameson JL, editors. Harrison's principles of internal medicine. 16th ed. New York: McGraw– Hill; p. 1746–1762.
10. Rasa tarangini, Sharma Sadananda, Trans Pandit Shastri Kashinath, First Edition 1971; Motilal Banaras das, Varanasi; 772-PP; Chapter-11, Shloka 23/67.
11. Rasa tarangini, Sharma Sadananda, Trans Pandit Shastri Kashinath, First Edition 1971; Motilal Banaras das, Varanasi; 772-PP; Chapter-11, Shloka 23/70.
12. Rasa tarangini, Sharma Sadananda, Trans Pandit Shastri Kashinath, First Edition 1971; Motilal Banaras das, Varanasi; 772-PP; Chapter-11, Shloka 23/133.
13. Rasa tarangini, Sharma Sadananda, Trans Pandit Shastri Kashinath, First Edition 1971; Motilal Banaras das, Varanasi; 772-PP; Chapter-11, Shloka 23/134-135.

14. Rasa tarangini, Sharma Sadananda, Trans Pandit Shastri Kashinath, First Edition 1971; Motilal Banaras das, Varanasi; 772-PP; Chapter-11, Shloka 12/66-67
15. Rasa tarangini, Sharma Sadananda, Trans Pandit Shastri Kashinath, First Edition 1971; Motilal Banaras das, Varanasi; 772-PP; Chapter-11, Shloka 12/67-68.
16. Rasa tarangini, Sharma Sadananda, Trans Pandit Shastri Kashinath, First Edition 1971; Motilal Banaras das, Varanasi; 772-PP; Chapter-11, Shloka 12/6-7.
17. Rasa tarangini, Sharma Sadananda, Trans Pandit Shastri Kashinath, First Edition 1971; Motilal Banaras das, Varanasi; 772-PP; Chapter-11, Shloka 12/17-19.
18. Rasa tarangini, Sharma Sadananda, Trans Pandit Shastri Kashinath, First Edition 1971; Motilal Banaras das, Varanasi; 772-PP; Chapter-11, Shloka 12/87.
19. Rasa tarangini, Sharma Sadananda, Trans Pandit Shastri Kashinath, First Edition 1971; Motilal Banaras das, Varanasi; 772-PP; Chapter-11, Shloka 12/91-93.
20. Bhaishajya Ratnavali, Shastri Ambikadutta,Gulmaadhikar,Chaukhambha Sanskrit sansthan, Varanasi 2004; pg. no.430.
21. Bhavprakash Nighantu – savimarsh hindi comm. By K.C. Chunekar, haritkyadivarga, chaukhamba prakashan 2006. Pg 13, 14.

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Ayurvedic management of Panduroga: A case study

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Abstract
Panduroga is known to Indians since ancient times. Panduroga is pale yellowish discolouration of skin, sclera which occurs due to Rasa and Rakta dhatu dushti. In Panduroga tridosha gets vitiated but predominace is of Pitta dosha. Panduroga can be correlated with Iron deficiency anaemia. Globally anaemia affects 1.62 billion people, which corresponds to 24.8% of the population. Hence as a PG Scholar it is important to study all aspects of Panduroga. So most importan motive of this article is to present a case study on how to manage Panduroga with Ayurvedic treatment. Three principle of treatment are mentioned in Charaka Samhita of which only Yuktivyapashraya method is going to be used in this study. Pandu can be managed with Ayurvedic preparations like Lauhadi vati, Navayas loha which will help to decrease symptoms like Panduta, Daurbalya, Hrutspandana, Pindikodweshtana, Hrutspanadana, Akshikutshotha, Shirshoola.
In Panduroga pitta dosha gets vitiated predominantly hence mrudu virechan works best to decrease pitta dushti.

Keywords: Panduroga, pitta dosha, dushti, hrutspandana, pindikodweshtana, akshikutshotha, daurbalya, Navayas loha, Lauhadi vati

Introduction
Ayurveda is the science which mentioned various principles for prevention and treatment of disease. Prevention is better than cure [1] is the main concept of Ayurveda.In high and middle economy class due to busy and stressful lifestyle many peopleare not paying attention to their time of taking meeals, it's nutritional value and in low economy class due to poverty,literacy and lack of health services most people having nutritional deficiencies like Panduroga (Iron deficiency anaemia).
Most predominant diagnostic feature of Panduroga is pallor of skin, conjunctiva, nails [2] which occurs due to qualitative and quantitative deficiency of Rakta dhatu caused either in the form of deficiency of haemoglobin or RBC'S. Considering Panduta (pallor) as predominant sign the disease is termed as Panduroga. The similar diagnostic features are found in Iron deficiency anaemia hence we can easily correlate Panduroga with Iron deficiency anaemia.
Pandu is one of the Santarpanjanya vyadhi [3]. Acharya Charaka mentioned this in Raspradoshaja vyadhi, [4] while Acharya Sushruta mentioned it as Raktapradoshaj vyadhi [5]. Iron deficiency occure when demand is greater than supply which may occur due to blood or haemoglobin loss, increased physiological demands as in pregnancy, lactation, adolescence, decreased dietary intake or impaired absorption.

Materials and Methods
Case study
Past History – A 23 years old female patient came to Kayachikitas OPD of CSMSS Ayurved college with complaints of –
1. Daurbalya (Generalised weakness)
2. Shirshoola (Headache)
3. Hrutspandana (Palpitation)
4. Pindikodweshtana
5. Akshikutshotha (Periorbital oedema)

The duration of these sypmptoms is approximately 1 month, but they increase since last 8 days.

History of past illness
1. Patient does not have any systemic disorders like Hypertension, Diabetes mellitus, Epilepsy, tuberculosis etc.
2. Surgical history – No any surgical history**.**

History of addiction: Nil
Drug allergy: No any drug allergy.
Gynaecological and obstretrics history: Regular menses.LMP-1/6/2025.

Personal history
Occupation: Student
Diet: Vegetarian
Apetite: Reduced

General Examination
O/E – S/E -
BP- 110/80 mmHg CVS -S1S2 normal
Pulse rate – 66/min CNS -Concious oriented
Spo2-98% ON Room air RS – AEBE
Body teamperature – Afebrile
RR-16/min.

Local examination
Pallor ++ On conjunctiva, nail bed, oral mucosa.

Laboratory Investigations
1. CBC – Haemoglobin – 8.9 gm%, RBC -3.40 milli/cmm, MCV -70.5fl, MCH – 25.5pg, MCHC – 27g/dl.
2. Iron studies – Serum Iron – 30microgram /dl, TIBC-455 microgram/dl, Serum ferritin- 14ng/ml.
3. PS for Expert opinion -RBC – Hypochromic, microcytic, red cells with pencil cells, tear drop cells. Platelet – Increased. Red cell indices -Decreased.

Management
Internal medications
1. Lauhadi modaka [6] – 500 mg BD for 45 days
2. Navayas loha [7]-250 mg BD For 45 days.
3. Dhatryavaleh [8] – ½ spoon once a day for 45 days.

External Medications
Bahya snehan: Sarvang snehan with Haridradi ghrita once a day.
Virechan: Cow milk consumption for6 times a day [9].
Duration: All above medications given for 45 days.
Follow up: On 15th, 30th and 45th day.

1. Pathya
a) Ahar: Wheat, cooked saali rice,meat juices of animals of forest habitat, soups of mudg, adhaki, masur, ghee, pomegranate, black raisins.
b) Vihar: Proper rest.

2. Apathya
a) Ahar: Void pittavardhak ahar like oily, spicy food.
b) Vihar: Avoid sleeping during day time, avoid chinta, krodh, avoid exertion.

Assessment Criteria
1. Daurbalya [10] (Generalised weakness)-
Grade 0: No feeling of weakness during daily activities.
Grade 1: Sometimes feels weakness but performs daily activities.
Grade 2: Often feels weakness hampering daily activities.
Grade 3: Always feels weak unable to perform daily activities.

2. Akshikutshotha [11] (Periorbital oedema)
Grade 0: No periorbital oedema.
Grade 1: Periorbital oedema in the eye sockets only.
Grade 2: Present all over body.
Grade 3: Present always and hampers routine activities.

3. Panduta [12] (Pallor)
Skin, conjunctiva, nailbed, oral mucosa.
Grade 0: Absent
Grade 1: Any 2 of the above.
Grade 2: Any 3 of the above.
Grade 3: Pallor in all of the above.

4. Pindikodweshtana [13] (Leg cramps) –
Grade 0: No leg cramps
Grade 1: Leg cramps after heavy work.
Grade 2: Leg cramps after daily work.
Grade 3: Leg cramps at rest without work.

5. Hrutspandana [14] (Palpitations)
Grade 0: Absent
Grade 1: Palpitations during mild exercise.
Grade 2: Palpitations sometimes during normal routine activities.
Grade 3: Palpitation persist throughout day.

Readings were taken before starting the treatment.
Observations and result

Sr. Number	Symptoms	Before treatment	After treatment
1	Daurbalya	Grade 3	Grade 1
2	Panduta	Grade 3	Grdae 0
3	Akshikutshotha	Grade 3	Grade 0
4	Pindikodweshtana	Grade 3	Grade 1
5	Hrutspandana	Grade 3	Grade 0

Discussion
In Panduroga all three dosha gets vitiated but there is predominance of pitta dosha, henceit is a pitta dosha Pradhan vyadhi. Due to excessive intake of oily, sour, pungent, spicy food, day time sleeping and emotions like krodha, bhay, shok pitta gets vitiated. Along with it Rasa dhatu also gets vitiated.The undernourishment of Rasa dhatu causes varna, bala, oja, twak dushti also occurs. Apprantely whole body remains undernourished (nissar).
Acharya Sushrut describe four types of Panduroga which are Vataj, piitaj, kaphaj, tridoshaj. Acharya Charaka added one more type which is Mridbhakshyanjanya panduroga. Acharya Vaghbhat further elaborated panduroga. Hence it is important to study Pandu roga with different point of view like our Acharya as it is one of the crucial disease.

Conclusion
So along with single drug and with snehan and virechan the symptoms of Panduroga has been found to be declining. Lauhadi modaka contains Lauha Bhasma, swarnamakshik Bhasma which helps to reduce iron deficiency and it also contains other herbal components such as shunthi,marich, pippali which makes it easy to digest and increases its bioavailability. Navayas loha works in similar manner. In panduroga Pitta dosha primarily gets vitiated so virechan

helps to reduce pittadushti. So overall regimen helps to decrease symptoms like daurbalya, panduta, akshikutshotha, pindikodweshtana, hrutspandana.

References

1. Charaka, Sharma P. Charaka Samhita, Sushrut Samhita, 30th Adhyaya, Shlok no. 26. Varanasi: Chaukhamba Orientalia; 2010. p. 240.
2. Boloor A, Padakanti A. An Insider's Guide to Clinical Medicine (NMC). 2nd ed. p. 34.
3. Charaka, Tripathi B. Charaka Samhita, Sutrasthana, 23rd Adhyaya, Shlok no. 5. Varanasi: Chaukhamba Surbharati Prakashan; 2013.
4. Charaka, Tripathi B. Charaka Samhita, Sutrasthana, 23rd Adhyaya, Shlok no. 5. Varanasi: Chaukhamba Surbharati Prakashan; 2013.
5. Sushruta, Shastri A. Sushruta Samhita, Uttartantra, 44th Adhyaya, Shlok no. 3. Varanasi: Chaukhambha Sanskrit Sansthan; 2018. p. 364.
6. Vangsena. Vangsena Samhita, Saxena N, editor. Adhyaya 12, Shlok 23.
7. Charaka Samhita, Chikitsa Sthan, Adhyaya 16, Shlok 70–71.
8. Charaka Samhita, Part 2, Chikitsa Sthan, Adhyaya 16, Shlok 101. p. 395.
9. Charaka Samhita, Part 2, Chikitsa Sthan, Adhyaya 16, Shlok 67. p. 391.
10. Baghel MS. Guidelines for Research Methodology in Ayurveda. 2011. p. 91.
11. Baghel MS. Guidelines for Research Methodology in Ayurveda. 2011. p. 58.
12. Baghel MS. Guidelines for Research Methodology in Ayurveda. 2011. p. 94.
13. Baghel MS. Guidelines for Research Methodology in Ayurveda. 2011. p. 58.
14. Baghel MS. Guidelines for Research Methodology in Ayurveda. 2011. p. 58.