

CLINICAL STUDY OF THE EFFECT OF NASYA KARMA IN THE MANAGEMENT OF CERVICAL SPONDYLOSIS WITH SPECIAL REFERENCE TO MANYASTAMBHAParesh R. Deshmukh¹, Kavita K. Fadnavis²

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(Published online: January 2021)

Open Access

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Article Received:12/12/2020 - Peer Reviewed:18/12/2020 - Accepted for Publication:25/12/2020

**ABSTRACT**

Human life has become more stressful these days. Sedentary lifestyle, occupational factors are playing a large role in increased prevalence of the common degenerative disorder of Cervical Spine i.e. Cervical Spondylosis. In Ayurvedic view, it can be correlated with *Manyastambha* which is a *VatajaNanatmakaVikara*. Degeneration means *Apatarpana* in *Ayurveda*. It needs to be treated with *Brimhana* Therapy. And *UrdhvajatrugataVyadhis* are best treated with *Nasya* according to *Ayurveda*. So, taking all these factors into consideration, *BrimhanaNasya Karma* with *KsheerabalaTaila* was tried to alleviate the signs and symptoms of patients having Cervical Spondylosis. Assessment was done with regard to pain in neck and shoulder, tingling and numbness in hands and headache alongwith various angles of rotation of neck. The data was collected before and after administration of *Nasya karma*. The 15 days trial was proved to be significantly efficacious in reducing signs and symptoms of cervical spondylosis.

Keywords: Cervical Spondylosis, *Manyastambha*, *VatajaNanatmakaVikara*, *Apatarpana*, *BrimhanaNasya*, *Ksheerabalataila*.

INTRODUCTION

In these days, Cervical spondylosis is one of the most common disorders of cervical spine. It is characterized by severe pain in neck & shoulders, rigid neck, burning & tingling sensation at upper limb & sometimes occipital headache¹. Though it is a degenerative osteoarthritis of joints between the cervical vertebra and is generally associated with ageing, in India, the younger patients of cervical spondylosis are increasing day by day.² So, Along with ageing, the associated risk factors in young patients are Sedentary lifestyle, poor posture & occupational factors such as Computer keyboarding, cell phone texting etc. played a large role in increased prevalence of neck pain in past 20 years.³ Cervical spondylosis affects quality life of a person. A cohort study signifies that Cervical Spondylosis myelopathy may produce anxiety and depression.⁴ According to modern science, treatment is mostly conservative. It consists oral analgesics & physiotherapy. In some cases, cervical collar is advised. Surgery is rarely done.⁵ According to Ayurvedic *Samhitas*, Cervical Spondylosis resembles *Manyastambha* (rigid neck) which is a *Vataj Nanatmaka* disorder (disorder of *Vata*). *Manyastambh* is a condition where the vitiated *Vata* lodges in the neck region due to wrong sleeping positions, use of large pillows, *Diwaswapa*, continuously watching downwards or upwards for a longer period of time causing over stretching of Neck and which leads to *Shosha* (desiccation) of muscles of the neck. *Vyaana Vayu* is responsible for the movements of the body.⁶ Neck is a body part above clavicle so in *Ayurveda* literature it comes under *Urdhvajatrugata Vikara* (diseases above neck region). *Nasya karma* (Nasal Medication) is widely employed in *Ayurveda*. It is the only therapeutic measure among *Panchakarma* which is instilled into the nostrils and has a direct access to head. In all the *Urdhvajatrugata Vikaras*, all the *Acharys* unanimously highlighted *Nasya Karma* to be effective. *Acharya Charaka* mentions all *Urdhvajatrugatavikara* specially *Vatajavikara* like *Manyastambha* etc. are to be treated with *Nasya Karma*.⁷ While *Acharya Vagbhata* appreciates *Nasya* as useful in keeping *Greeva* and

Skandha (Neck & shoulder) healthy⁸. In Cervical Spondylosis, degeneration can be implied as *Apatarpana* (emaciation) according to *Ayurveda*. Hence condition of Cervical spondylosis which is degenerative one need *Brimhana* (nourishing) therapy.⁹ Vagbhata specifically mentioned *Brimhana Nasya* being useful in treating *Vataja Shoola* (pain) like conditions.¹⁰ Keeping all these factors in mind, it was hypothesized that *Brimhana Nasya Karma* may prove effective in relieving symptoms of *Manyastambha* like 'Ruk' (pain) and 'Stambha' (rigidity) in the patients of Cervical spondylosis. So, the present study entitled "Clinical study of the effect of *Nasya Karma* in the management of Cervical spondylosis with special reference to *Manyastambha*" was undertaken.

Material & Methods

Study Design- The study is single group clinical trial., Total 22 patients were registered in the study. There were 2 dropped patients who discontinued the treatment.

Source of Data- 20 diagnosed patients of Cervical Spondylosis coming under inclusion criteria and approaching the OPD of SVERDCT's *Swami Vivekanand Ayurved Medical College, Shrigonda, Ahmednagar* were selected for the study irrespective of age, Sex, Religion and Socio-economic status.

Inclusion Criteria -Patients having signs and symptoms of *Manyastambha*., Patients who are willing for *Nasya Karma*.

Exclusion Criteria

IVDP of Cervical spine, Ankylosing spondylosis, Nasal polyps, *Urdhvajatrugata Raktapitta* (bleeding through upper orifices of body), *Nava Peenasa* (initial stage of rhinitis) and all the *Nasya Anarha* (contraindications of Nasal Medication) conditions., Unwilling patients for *Nasyakarma*.

Method of Collection of Data- A special proforma containing details necessary for the study was prepared. Investigations were carried out as and when necessary.

Duration of the Therapy – 15 days

Intervention- Nasya Karma-The patients were subjected to the following protocol of *Nasya Karma* which was adopted as per *Acharya Vagbhata* mentioned in *Nasyavidhi*¹¹–

1. **Nasya Poorva Karma (Preparatory measures for Nasya) -Urdhvajatru Snehabhyanga** (Massage of Nead, Neck and Face) – with *Dhanvantara taila*¹² for 15 mins. Which was immediately followed by *Urdhvajatru Svedana* (Hot fomentation of head, Neck and Face) – with *Nadisweda* (fomentation with steam through a tube) of *Nirgundi Kwatha* (Decoction) for 5 mins.
2. **Nasya Pradhana Karma (Main Procedure - Nasya)** - For *Brimhana* effect, *Ksheerabalataila* was selected from *Sahastrayogam*¹³.*Madhyam Matra* of *Marsha Nasya* i.e. 8 drops were selected.¹¹8 drops of lukewarm *Ksheerabalatailam* was instilled in each nostril of the patient.
3. **Nasya Pashchat Karma (Post-operative Procedure)** - Patients were allowed to spit the accumulated remnants of *Nasya Taila* if some., *Pashcat Svedana* of *Urdhvajatru* with *Nirgundi Kwatha Nadi Sweda* for 5 mins., *Kavala Dharana* (gargling) with lukewarm water was performed for 5 mins in each patient.

Criteria for Assessment-The assessment criteria were divided into two categories as – Subjective Criteria and Objective Criteria.

Observation and Results -

Table 1: showing Age wise and Sexwise Distribution of 20 patients of Cervical spondylosis

Age	Male	Female	Total
21 – 30 years	1	0	01
31 – 40 years	3	2	05
41 – 50 years	3	2	05
51 – 60 years	4	2	06
61 – 70 years	0	2	02
71 – 80 years	1	0	01

The study shown that the maximum patients were Male i.e. 60%., Most of the patients (80%) were from middle age group – 31 to 60 years of age.

A. Subjective Criteria –

1. Pain in Neck and Shoulder -

- 0- No pain in Neck and Shoulder
- 1- Mild pain in Neck and Shoulder
- 2- Moderate pain in Neck and Shoulder
- 3- Severe pain in Neck and Shoulder

2. Tingling and numbness in hands –

- 0- No tingling and numbness in hands
- 1- Mild tingling and numbness in hands
- 2- Moderate tingling and numbness in hands
- 3- Severe tingling and numbness in hands

3. Headache –

- 0- No headache
- 1- Mild headache
- 2- Moderate headache
- 3- Severe headache

B. Objective Criteria for Neck stiffness -

- 1. Angle of Flexion, 2. Angle of Extension, 3. Angle of Rotation, 4. Angle of lateral rotation (left side)
- 5. Angle of lateral rotation (right side)

Before commencing treatment, all the assessment criteria were recorded and the data was termed as Before Treatment. (B.T.). While the data recorded of all the assessment criteria after completion of therapy was termed as After Treatment. (A.T.)

Data Analysis- The data collected was rendered to Master Chart and tables were constructed. For subjective data, “Wilcoxon’s signed Rank Test” was applied whereas “Paired t – Test” was applied for the analysis of Objective data.

Table 2: Showing Results of ‘Wilcoxon Signed Rank Test’ for the symptom Neck and Shoulder pain, Tingling and numbness in hands and Headache

Symptom	B.T. Mean	A.T. Mean	S.D.	Z value	P value
Pain in Neck and Shoulder	1.75	0.65	19.33	3.51	P < 0.05
Tingling and Numbness in hands	1.56	0.92	17.60	3.20	P < 0.05
Headache	1.62	0.76	18.30	3.38	P < 0.05

It is clear from above table that all the signs and symptoms of Cervical Spondylosis viz. Pain in Neck and Shoulder, Tingling and numbness in hands and Headache showed significant improvement with $p < 0.05$.

Table 3: showing Results of ‘Paired t Test’ for the symptom Neck Stiffness

	Mean		Diff. Of Mean ± SD	SEd	t value	p value
	BT	AT				
Angle of Flexion	152.6	160.20	7.8 ± 9.68	1.46	4.16	p < 0.001
Angle of Extension	135.10	141.20	6.1 ± 10.10	1.76	3.96	p < 0.001
Angle of Lat. Extension (left)	131.50	137.50	6.0 ± 8.80	1.34	4.47	p < 0.001
Angle of Lat. Extension (Right)	133.20	140.20	7.0 ± 9.01	1.60	4.42	p < 0.001

This table clearly shows that Neck stiffness decreases effectively in every angle of rotation of neck with the help of *Ksheerabala Taila Nasya Karma*. The angles of movements of neck shown improvement with $p < 0.001$ which is highly significant.

DISCUSSION

The study shows that number of male patients was more probably because of the etiological factors of cervical discomfort like excessive usage of vehicles on an uneven road, sedentary lifestyle, computer work, etc. are more common in them. Most of the patients were found from middle age group. It can be seen that proper *Snehana* and *Swedana karma* is very essential part of *Nasya Karma*. *Snehabhyanga* with *Dhanwantara Taila*¹² helped in relieving all *Vataj* symptoms which is mentioned by *Sahastrayogam*. While *Swedana* helped in relieving *Stambha* of neck i.e. Neck Rigidity.¹⁴ *Ksheerabala Taila* itself has a *Brimhana* Property. In *Sahastrayogam*, *Ksheerabala Taila*¹² is said to be useful for *Nasya Karma* in 80 types of *Vatavyadhis*. So, it probably helped in decreasing the degenerative changes in Cervical Spondylosis along with *Vatashamamak* (alleviation of *Vata*) and *Brimhana* effect. The overall study shows significant results in subjective criteria viz. Neck and shoulder pain, tingling and numbness in hands and headache with $p < 0.05$. Objective criteria i.e. various angles of rotation of neck also shown significant improvement with $p < 0.001$ with proper *Snehabhyanga*, *Swedana* and *Nasya Karma*. Thus, it

can be said that present study entitled “Clinical study of the effect of *Nasya Karma* in the management of Cervical spondylosis with special reference to *Manyastambha*” shown encouraging results.

CONCLUSION

Cervical spondylosis or *Manyastambha* has increasing prevalence day by day which affects quality of life. *Nasya Karma* along with preoperative and post operative procedures exhibit better results including significant reduction in signs and symptoms. The therapy did not show any side effect. It is a relatively cost-effective therapy than other available therapies for Cervical Spondylosis.

REFERENCES

1. Aspi F Golwalla and Sharukh A Golwalla, Golwalla’s Medicine for Students, 25th edition, 2017, Edited by Milind Y Nadkar, Published by JAYPEE The Health Science Publisher, New Delhi, Page No. 592.
2. www.thehindubusinessline.com>article- (20% of people with back and neck conditions are in age group of 16 - 34) Q1 Spine Clinic’s World Spine Day 2017 – Insights report: Published on October 16, 2017;

- Updated on January 08, 2018. Cited on December 02, 2020.
3. Ccryn.gov.in > default > files pdf Cervical Spondylosis- Naturopathy and Yogic Management of Cervical Spondylosis- Ccryn; cited on December 02, 2020.
 4. Cervical spondylotic myelopathy, Depression and Anxiety: A Cohort analysis of 89 patients – Michael R. Stoffman, Mark S. Roberts, Joseph T. King – Neurosurgery, Volume 57, Issue – 2, Published in Aug 01, 2005, Page No. – 307 – 313. Web address – <https://doi.org/10.1227/01.NEU.00016664.19662.43>
 5. Davidson’s Principles and Practice of Medicine, 23rd edition, 2018, Edited by Stuart H. Ralston, Ian D. Penman, Mark WJ Strachall, Richard P. Hobson, Published by Elsevier Publication, Page No. - 1134.
 6. *Agnivesha, Charak Samhita- Part - 2, Chikitsasthana, Adhyaya 28*, Reprint edition, 2009, Edited with Hindi commentary by Acharya Vidyadhara Shukla and Prof. Ravi Dutt Tripathi, Published by Chaukhambha Sanskrit Pratishthana, Delhi, Page No. - 689.
 7. *Agnivesha, Charak Samhita- Part - 1, Sootrasthana, Adhyaya 5*, Reprint edition, 2002, Edited with Hindi commentary by Acharya Vidyadhara Shukla and Prof. Ravi Dutt Tripathi, Published by Chaukhambha Sanskrit Pratishthana, Delhi, Page No. -98.
 8. *Vagbhata, Ashtangahridayam, Sootrasthana Adhyaya – 20*, 14th edition, 2003, Edited with Vidyotini Hindi Commentary by Kaviraja Atrideva Gupta, Edited by Yadunandana Upadhyaya, Published by Chaukhambha Sanskrit Pratishthana, Varanasi, Page No. 130.
 9. *Vagbhata, Ashtangahridayam, Sootrasthana Adhyaya– 14*, 14th edition, 2003, Edited with Vidyotini Hindi Commentary by Kaviraja Atrideva Gupta, Edited by Yadunandana Upadhyaya, Published by Chaukhambha Sanskrit Pratishthana, Varanasi, Page No. 100.
 10. *Vagbhata, Ashtangahridayam, Sootrasthana Adhyaya– 20*, 14th edition, 2003, Edited with Vidyotini Hindi Commentary by Kaviraja Atrideva Gupta, Edited by Yadunandana Upadhyaya, Published by Chaukhambha Sanskrit Pratishthana, Varanasi, Page No. 127.
 11. *Vagbhata, Ashtangahridayam, Sootrasthana- Adhyaya – 20*, 14th edition, 2003, Edited with Vidyotini Hindi Commentary by Kaviraja Atrideva Gupta, Edited by Yadunandana Upadhyaya, Published by Chaukhambha Sanskrit Pratishthana, Varanasi, Page No. 128 – 129.
 12. Dr. D. B. Panditrao, *Sahastrayogam-Hindi translation, Prakaranam – 5*, Reprint edition, 2011, ISBN- 978-81-6-8, Published by R.K. Print House, Noida, U.P., Page No.- 51.
 13. Dr. D. B. Panditrao, *Sahastrayogam- Hindi translation, Prakaranam– 5*, Reprint edition, 2011, ISBN- 978-81-6-8, Published by R. K. Print House, Noida, U.P., Page No.- 292.
 14. *Agnivesha, Charak Samhita, Part – 1, Sootrasthana, Adhyaya 13*, Reprint edition, 2002, Edited with Hindi commentary by Acharya Vidyadhara Shukla and Prof. Ravi Dutt Tripathi, Published by Chaukhambha Sanskrit Pratishthana, Delhi, Page No. -309.

Source of Support: Nil

Conflict of Interest: None Declared

How to cite this URL: Paresi R, Deshmukh J & Kavita K. Fadnavis: Clinical Study Of The Effect Of Nasya Karma In The Management Of Cervical Spondylosis With Special Reference To Manyastambha. International Ayurvedic Medical Journal {online} 2021 {cited January, 2021} Available from: http://www.iamj.in/posts/images/upload/27_31.pdf

A CASE STUDY ON DADRU W. S. R. TO TINEA**¹Dr. Hirekar S. N., ²Dr. Toshniwal M. B., ³Dr. Nimbalkar N. R.**

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Article Received on
15 Nov. 2020,Revised on 05 Dec. 2020,
Accepted on 25 Dec. 2020

DOI: 10.20959/wjpr20211-19521

Corresponding Author*Dr. Hirekar S. N.**D9, Esmeralde, Kanchanwadi
Aurangabad.**ABSTRACT**

One of the most common skin problem in today's era is the Dadru the Dadru is the state characterised by Kandu i'm looking at the atasi Pushpa, vat pidik, tambravarna varna, visarpani pidit, dirgha pratan scaling, vasication etc. first step towards any treatment is nidan parivargen, pachan, virechan, as treatment this treatment gave up very effective results in patients.

KEYWORDS: Nidan Pariwarjan, Pachan, Virechan.**INTRODUCTION**

Skin is the protective organ of the body. It reflects the health of an individual.^[1] Skin and its appendages are the most visible part of our body & any skin disease will create an emotional concern for an individual at any age. Common psychological problems associated with skin diseases include feelings of stress, anxiety, anger, depression, shame, social isolation, low self- esteem & embarrassment. In recent years, there has been a considerable increase in the incidence of skin problems in tropical & developing countries like India.

There is a wide and extensive description of skin diseases in Ayurveda. Under the heading of Kustha roga, different skin related disorders have been explained in Ayurveda Samhitas. It is also considered as one of the eight mahagada (dreadful diseases).^[2] The term 'Kushtha' which means that it comes out from the inner part to the outer part and destroys the organs of the body, therefore it is called Kustha.^[3] There are eighteen types of kustha roga which are classified in to Maha kustha (major skin ailments) and kshudra kustha (minor skin ailments). Dadru is one of the commonly occurring skin diseases Acharya Charak included Dadru in Kshudrakushta. On other hand, Acharya Sushruta & Acharya Vagbhata included it in Mahakushta.^[4,5]

Kushta is a Tridoshaja Vyadhi where Rasa, Rakta, Mamsadhatupradoshaja vikaras 6 & Ambu

are the main Dushya's. According to Acharya Sushruta Dadru is Kapha Pradhanan according to Charak and Vagbhata it is Pitta-Kapha dominance.

1. सकण्डुरागपिडकदद्रुमण्डलमुदगम्। (च.चि.७/२३)
2. दीर्घप्रतानादूर्वावदतसीकुसुमच्छविः।
उत्सन्नमण्डलादद्द्रुःकण्डुमत्यनुषडिंगणौ। (वा.नि.१४/२४)

In Charak Samhita the clinical description of Dadrukushta is Udagatamandala (Raised Patch) associated with Kandu (Itching), Raga (Redness), Pidaka (Pimples)⁷ Charaka described Dadru in 4th layer of twak. In Sushruta black colour & deep seated dadru is called Mahakushta and which is not blackish in colour & superficially seated reddish in colour & circular lesion dadru is categorised as Kshudrakushta. Sushruta mentioned these type of reddish colour circular lesion as Visarpa Kushta because it spreads more⁸. In Dadru Varna of Twak looks like as Atasi flower which are spreading in nature & are associated with Pidaka(Pimples). Skin reflects emotion physical appearance of a person determines our physiological as well as psychological state. The skin is our covering of the body and skin is largest organ of the integumentary system. Nowadays skin disease are very common to patients experience physical emotional social socio-economic embarrassment in society.

All the skin problems are included under the heading of kustha. This Kustha is further classified into Maha Kustha and Ksudrakusta Dadru is the one of Ksudrakusta. According to Charak but according to Sushruta Dadru is one of the Maha Kustha.

All type of Kustha to have been considered as Raktaj vikar, Kapha - pittahar is the prominently present in the Dadru. Dhruv is a superficial fungal infection. Dadru affect up to 15% of world population.

According to ayurveda Nidaan a Parivarjan Shodhan and shaman are the treatment preferred for the dadru.

AIM

1. To study the Dadru w.s.r to the taenia.

OBJECTIVE

1. To study the Dadru.
2. To study the dadru as per modern science.
3. To study the etiopathogenesis of the dadru as per Ayurveda concept

Case report**Name of patient XYZ****Desh:** Sadharan**Gender:** Female**Religion:** Hindu**Age:** 38yrs**Marital status:** Married**Occupation:** Farmer Wt. 90 kg**Chief complaint**

1. Kandu
2. Raga
3. Atasi pushpawat pidika (Kapal pradesh) Angulimadrya
4. Tambravarna Pidika
5. Visarpani Pidika

The patient was asymptomatic before years. After that patient started complaining of Kandu, Raga, Atasi Pushpawat pidaka, Tamara Varna Pidaka visarpani pidika Etc. she was taking treatment from the general practitioners like local steroids for external application and antifungal antihistaminic drugs oral medicines. after that after that patient get relief but didn't get satisfied with the result so for further treatment he come into Ayurvedic Hospital.

Past history illness: No**Family history:** No**Aahar:** Non Vegetarian**Vyasan:** No**Nidra:** Khandit**Prakurtti:** Vat pitta**Nadi:** 78/min**BP:** 110/80 mm of Hg**Jivha:** Sama**Agni:** Manda**Mala:** 01 time/day**Mutra:** 5-6 times/day**Sparsha:** Drusksha

Druk: Swetabh

Skin examination

Kandu: Present

Stava: Present

Pidika: Present

Rukahata: Present

Routine blood investigation like (CBC, ESR) was done before treatment and found normal. After taking proper history virechan was planned followed by shamans.

MATERIAL AND METHODOLOGY

1. Nidan Pariwarjan
2. Aahar: laghu, Rukshya, Abhishandi.
3. Pachan: Musta, churna 5 GM, Bhojan mhadhya

Shodhan

Sneh pan: 1 St day - 30 ml

2 nd day - 60 ml

3rd day - 90 ml

4 th day - 120 ml

Samyak snigdha lakshana appears on 4 th day

Then snehan Sweden for 3 day (Til tail bashp. Swede) Pradhan karma - abhyadi Modak

2 tablet early in the morning Anupan sheet jal

Patient had 7 Vegas

Then Samar Jan krama for 5 day

Shaman: Arogyavardhini

Khadiradi vati skin

Oil Nimba tail

DISCUSSION

Dadru is kshudra kustha according to charaka under Rakta Pradosh Vikar. It is a chronic condition while explaining the treatment of kustha Acharya Charak told if Laxana are severe shodhan should be done if not then we can do Rakta mokshana.

In this patient vyadhi was chirkari and lakshana were severe so far that shodhan was done with the virechana and then shamana treatment is given.

After that patient get 60 to 70% result.

CONCLUSION

It can be concluded that chronic case of dadru can be successfully manage with Ayurvedic treatment such as virechan and Shaman Chikitsa.

REFERENCE

1. Mythrey R C et al, Journal of Biological and scientific Option, Conceptual analysis of Dadru vis-à-vis Tinea, 2014; 08: 10, 2(5). ISSN 2321-6328, www.jbsoweb.com
2. Acharya Trikamji Yadavji Acharya, Charaka Samita, Indriya Sthana, Varanasi, Chaukhambha Surbharti Prakashan, 2011; 368: 2-9.
3. Dr. Ananta ram sharma, Sushruta Samhita of Maharishi Sushruta Sutra Sthana, Chaukhambha Sanskrit Sansthan, Varanasi Reprint, 2007; 168: 33-4.
4. Vaidya Shri. Pandita Lalachandra Shastri, Ashtanga Sangraha of Sarvanga Sundari Vyakhyaya Samhita, Sutrasthana Shri. Baidyanath Ayurveda Bhavana, pvt. Ltd Nagapur, 1986; 137: 1.
5. Acharya Jadavaji Trikamji, Sushruta Samhita of Sushruta with the Nibhanhasangraha
6. Commentary of Shri. Dalhanacharya; and the Nyaya Chandrika of Shri. Gayadasa Acharya by Vaidya Choukambha Orientalia, Varanasi, 2005; 5: 37.
7. Acharya Vaidya Yadavaji Trikamji, Agnivesha. Charak samhita, chikitsasthana Varanasi, Chaukhambha prakashan, 2011; 450: 7-9.
8. Acharya Vaidya Yadavaji Trikamji, Charaka Samhita, Chikitsaa Sthaan Chaukhamba Surbharati Prakashana, Varanasi, 2011; 451: 7-23.
9. Acharya Vaidya Yadavaji Trikamji, Sushruta Samhita, Nidaana Sthaana Chaukhamba Surbharati Prakashana, Varanasi, 2013; 284: 5-8.

Review of Sadvrutta WSR Buddha Darshana

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Abstract

Ayurveda is the science of life and moreover it is a way of living in the word. Principle aim of Ayurveda is to maintain health rather than treating the disease. For achieving this purpose, certain rules are described in Ayurved Samhitas. By following these rules which include Dinacharya(daily regime), Ratricharya(night regime), Rutucharya (seasonal routine) and Sadvrutta(code of good conduct, mental health and social behavior), everyone can enjoy a healthy life. In Charak Samhita, Acharya Charak explained the Sadvrutta in detail.

The preaches of Buddha are explained in Baudha Darshan. It revolves around the alleviation of sufferings. By explaining 'Four Noble Truths'. Lord Buddha told the existence of Dukkha and how to get rid of it.

Key words- Sadvrutta, Baudha Darshan, Sufferings.

Introduction

Ayurveda believes in making illness to wellness with a healthy lifestyle which includes diet and behavioral rules. Ayurveda explained rules of conduct for achieving healthy life i.e. Sadvrutta. Everyone needs to follow Sadvrutta rules to stay healthy. Journey of life always goes through two stages of health and disease.

Sadvrutta are rules of good behavior and it includes Dinacharya, Rutucharya and Aachar Rasayan(1). Dinacharya and Rutucharya are described for maintenance of physical health, while Sadvrutta is described for sound mental and social health.

In Charak Samhita, Sutrasthana Adhyay 8, there is detailed description of Sadvrutta

i.e

1. Behavioral Do's and Don't
2. Eating etiquettes
3. Social rules
4. Rules for Study, Hawana karma
5. Guidelines for abstinence

In Sushrut Samhita, Chikitsasthana Adhyay 24, Acharya Sushrut described rules of Sadvrutta which should be followed on daily basis for achieving a healthy and wealthy life(2).

In Ashtang Hrudaya, Sutrasthana, Dinacharya Adhyay, Acharya Vagbhat explained rules of good behavior i.e. Sadachar. To gain a healthy, wealthy, long and successful life (3).

Baudha Darshan is an atheist philosophy as it is not believing in God and Vedas (4). When Lord Buddha saw various phases of Dukkhas such as disease, senility, death etc., he left his home to find a way to get rid of these sufferings. He did great penance and found a way out these miseries. Lord Buddha, through his teachings, showed the way of relief from the sufferings to all the mankind. Lord Buddha explained Four Aryasatyas that includes the existence of Dukkha/ suffering and the remedy for getting out of the Dukkhas (5).

Having been taught during the first teachings by Buddha to his first missionaries in Deer Park. Buddhist believe that the path to enlightenment starts with the understandings of Four Noble Truths. In order to attain Nirvana stage from the vicious cycle of birth and death, Lord Buddha has taught us to follow the Panchsheel, the Darsheel, Aryasthangik Marg (6).

Material and methods

- Bruhadtaees have been taken as a source material to review about Sadvrutta.
- Literature of Buddha's philosophy.
- Relevant literature has been consulted and for comparative study and drawing inferences.

- Other internet media has also searched for similar matter and incorporated according to the need of the topic.

A literary review of sadavrutta

‘Sadavrutta’ derived from two words that ‘sad’ means good and ‘vrutta’ means different types of practices mentioned in social behavior, personal behavior either mentally or physically related. The Sadvrutta is briefly mentioned in Charak Samhita and this is also the Achar Rasayana(7).

Types of Sadvrutta :-

These ethics of right conduct are applicable to all people and should be practiced. Sadvrutta can be classified into five groups(8).

1. Ethical conduct (Vyavharik Sadvrutta)

- Always Speak the truth.
- Do not get addicted to sensory pleasures.
- Do not harm anyone.
- Try not to control your passions.
- Observe self control.
- Don’t loose your self control under any circumstances.
- Speak pleasant and sweet words.
- Behave according to time and please where you are rising.
- Control your sense organs

2. Social Conduct (Samajika Sadavrutta)

- In the society one Should be careful about conduct.
- Speak softly, start with smiling face.
- Speak politely with teachers, elderly and intelligent people.
- Behavior, social mannerism are part of social conduct.

3. Mental Conduct (Manasika Sadvrutta)

- Always keep a self-interrogation about who am I and what the purpose of life.
- Try to understand the real divine and eternal of our soul.

4. Moral Conduct (Dharmika Sadvrutta)

- Dharma means good deeds that protects the individual as well as masses.

5. Physical Conduct (Sharirika Savrutta)

- Hygiene, respect and gratitude, care of sense organs and proper clothings etc.

6. Codes towards women and copulation

- No sexual act should be performed in morning and in the evening time.
- Copulation should not be done in any organ other than the genital organ(9).

Bauddha darshan

According to Buddhism, the main cause of sufferings is ignorance. Due to ignorance any human being proceeds to desire i.e. Trushna. Trushna leads to activity which brings in its turn the development of fresh desire. This is vicious cycle of life i.e. Bhavchakra. When ignorance is dispelled by right knowledge the vicious circle is broken and can become free from sufferings to attain peace or Nirvana.

Four Noble Truth(10) – Buddha believed that the path to enlightenment starts with the understandings of the Noble Truths.

1. Dukkha – All form of life is suffering.
2. Dukkha Samuday – Desire is the cause of suffering.
3. Dukkha Nirodh – These sufferings can be ended
4. Dukkha Nirodh Marg

Panchasheel(11) – The five percents of Buddhism form the foundation for the Buddhist path to enlightment. These are seen in regulations concerning theft, murder, consumption, sexual activities, verbal actions.

1. Pranatipata Virati
2. Adattadan Virati
3. Kam Mithyachar Virati
4. Mrushavad Virati
5. Suramaireymajja Virati

Arya Ashthangik Marg(12) – The path which leads us for ending the suffering i.e. Dukkha Nirodh Marg.

1. Samyak Drushti (Right understanding) of four noble truths.
2. Samyak Sankalpa (Right thinking)- following the right path in life. Right aspiration is the true desire to free it oneself from attachment, ignorance and hatefulness.
3. Samyak Vaca (Right speech)- no lying, criticism.
4. Samyak Karma (Right conduct or right action)- involves obtaining from hurtful behaviors such as killing, stealing.

5. Samyak Jivika (Right livelihood)- support yourself without harming others. It means making your living.
6. Samyak Prayatna (Right effort)- promote good thoughts, conquer evil thoughts.
7. Samyak Smruti (Right mindfulness)- become aware of your body, mind and feelings.
8. Samyak Samridhi (Right concentration) – Mediate to achieve a higher state of consciousness.

Discussion

Ayurveda has stated that the reason for the occurrence of physical and mental diseases is Upadha(13) means Trushna. The Bhavachakra(14) starts with Avidya, later it turns into Trushna, which keeps revolving the vicious cycle of birth and death. There is sorrow in the life of every human being and Trushna is the cause of sorrow. Following the rules of Panchasheel and Arya Asthantik marg, everybody can get rid of his/her sufferings and get Nirvana. Lord Buddha remarked the importance of Panchasheel for common people and Dasasheel for Buddhist monks.

In Dasasheel the untimely eating i.e. eating after noon has been prohibited(15). Ayurveda also described the untimely eating as a major cause of diseases.

Buddhist follow the doctrine of the middle way, avoidance of extremes and accept moderation in all things. Ayurveda also advocates moderation i.e. balanced state of Dosha, Dhatu, Mala in the Samhitas(16). Like the eightfold path of Buddhism, Ayurveda also has rules for healthy living i.e. Sadvrutta and Aachar Rasayana.

Like Buddhism, Ayurveda advises us to resist negative thoughts, abstain from physical abuse, resist fear, pride, arrogance and ego(17).

Buddha Darshan refers to the Arya Asthantik marg as the cure for pain. Ayurveda also described Ashtang Ayurveda for the treatment of diseases(18). Ayurveda prescribes Satvavajaya, Yuktivyapashraya and Daivavyapashraya treatment for treating diseased conditions(19). Also in order to stay healthy at all times it is recommended to follow Aachar Rasayana, Swasthavruttavcharan, Dinacharya, Rutucharya in Ayurveda Samhitas. As, Buddhist use the four Aryasatyas for the relief of human

sufferings. Similar principals are followed by Ayurveda to cure disease i.e. Nidan Parivarjan, Aahar Vidhi Vidhan and Chikitsa.

Conclusion

From the above discussion, it can be concluded that, Ayurveda and Bauddha Darshan both explained Trushna/Upadha as the major cause of human sufferings. Buddha preaches that mind is the forerunner of all mental statuses. Human sufferings i.e. Dukkha includes all ills of mind and body in the form of pain imperfection and so on. Knowledge of Four Noble Truths is explained as a path of Dukkha Mukti i.e. Nirvana. Similarly, by practicing Sadvrutta, every human being can attain good health and get rejuvenation effects like longevity, memory intellect, free from disease, excellent potency of body and mind(20). Hence Ayurveda and Bauddha Darshan both give prime importance to the code of right conduct as it helps an individual to obtain and maintain their health, to build a most civilized society and nation.

References

1. Charak Samhita, Vd. Kashinath Shastri, Chaukhamba Publication, Reprint Edition 22nd / 1996, Sutrasthan, Adhyay-8/18 – 29, Page No. 182.
2. Sushrut Samhita, Vd. Ambikadutt Shastri, Chaukhamba Publication, Reprint Edition 2076, Chikitsasthan, Adhyay 24/111 – 133.
3. Sarth Vagbhat, Vd. Ganesh Krushna Garde, Anmol Prakashan, Reprint Edition 2001, Sutrasthan, Adhyay 2/47, Page No. 10.
4. Vyavharik Padartha Vidnyan, Vd. Dinkar Padade, Ruchika Prakashan Pune, First Edition 2007, Page No. 79.
5. <http://en.m.wikipedia-org/wiki/Noble-EightFolderPath>
6. <https://www.researchgate.net/publication/340522086> Revevance_of_Buddhist_Philosophy_in_Modern_ManagementTheory
7. Charak Samhita, Vd. Kashinath Shastri, Chaukhamba Publications Varanasi, Reprint Edition 22nd /1996, Chikitsa Sthan, Adhyay 1/30-35, page no. 58.
8. Charak Samhita, Vd. Kashinath Shastri, Chaukhamba Publications Varanasi, Reprint Edition 22nd/1996, Sutrasthan, Adhyay 8/18,29, page no.182.

9. Sushrut Samhita, Vd. Ambika Shastri, Chaukhamba Publication, Varanasi, Reprint Edition 2074 , Chikitsasthan, Adhyay 24/10
10. Baudha Saunskruti, Rahul Sankrutyan, Kaushalya Prakashan, Reprint Edition 2020, Adhyay ½, page no. 6
11. http://en.m.wikipedia.org/wiki/Noble_EightFoldPath
12. Vyavharik Padartha Vidnyan, Vd. Dinkar Padade Ruchika Prakashan, Pune, First Edition 2007, page no. 81
13. Charak Samhita, Vd. Pandit Kashinath Shastri, Chaukhamba Publication Varanasi, Reprint Edition 22nd/1996, Sharirasthan, Adhyay 1/134, page no. 829.
14. Vyavharik Padartha Vidnyan, Vd. Dinkar Padade Ruchika Prakashan, Pune, First Edition 2007, page no. 82.
15. Charak Samhita, Vd. Pandit Kashinath Shastri, Chaukhamba Publication Varanasi, Reprint Edition 22nd/1996, Sutrasthan, Adhyay 8/19, page no.183.
16. Charak Samhita, Vd. Pandit Kashinath Shastri, Chaukhamba Publication Varanasi, Reprint Edition 22nd/1996, Sutrasthan, Adhyay 16/27-28, page no.324.
17. Charak Samhita, Vd. Pandit Kashinath Shastri, Chaukhamba Publication Varanasi, Reprint Edition 22nd/1996, Sutrasthan, Adhyay 8/18, page no.182.
18. Sushrut Samhita, Vd. Ambikadutt Shastri, Chaukhamba Publication, Varanasi, Sutrasthan, Adhyay 1/6-7, page no. 5.
19. Charak Samhita, Vd. Pandit Kashinath Shastri, Chaukhamba Publication Varanasi, Reprint Edition 22nd/1996, Sutrasthan, Adhyay 1/58, page no.35.
20. Charak Samhita, Vd. Pandit Kashinath Shastri, Chaukhamba Publication Varanasi, Reprint Edition 22nd/1996, Chikitsasthan, Adhyay 1/7, page no.5.



To Evaluate the Efficacy of Patra Pinda Sweda in Pain Management of Gridhrasi W.S.R to Sciatica

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Abstract:-

Girdhrasi as mentioned in Ayurveda explains a disorder where in pain starts from Sphik pradesha and radiates downwards to Kati, Prusta, Uru, Janu, Jangha and Pada, Due to this, the patient is unable to walk properly. Gridhrasi can be compared with Sciatica. Sciatica is a relatively common condition with a life time incidence varying from 13% to 40%.The corresponding annual incidence of an episode of Sciatica ranges from 1 to 5%.The incidence of Sciatica is related to age. It is rarely seen before the age of 20. Incidence peaks in fifth decade declines thereafter. Snehana and Swedana are considered as the general line of treatment for vatavikars. which can be taken as the Line for ghridhrasi.

Patra pinda Sweda is a form of Sankarasweda where different vatahara drugs are used.In this procedure, leaves of medicinal plants having Shothahara and Vedanastap and qualities this leaves are fried in medicated bala oil and materials divided into a two equal parts and tied into a Pottali. Thus, It has both Snehana and Swedana effect which helps in reducing the symptoms of Gridrasi. This article is review of clinical application of Patrapinda Sweda and its efficacy in Gridrasi.

Key words: Gridhrasi, Vatavyadhi, Snehana, Swedana, PatraPindaSweda, Vedanasthapana.

Introduction :-

Panchakram is specialty of Ayurveda panch means five and karma means action. Ayurveda deals with the preventive and curative aspect of health . This therapy restores balance with natural law to maintain the equilibrium of doshas and stabilize internal milieu of body .Its also help to eliminates toxin , cleaning of srotas channels ,improving digestion and mental function.

In Ayurveda Acharyas explained 80 vatavyadh is Gridhrasi is one of the shoalapradhan vatavyadhi where altered function of vata affect Girdhrasindhi sciatica nerve, characterized by stambha (stiffness), Ruk(pain), Toda(pricking pain). This symptoms initially affect sphik(buttock) as well as posterior aspect of kati (waist) and then gradually radiates to posterior aspect of uru (thigh,janu (knee), jangha(calf)and pada(foot). In panchakarma snehan and swedan are used as poovakrama as well as pradhankarma for treating different disease. Swedana is one of the upakarma which can be adopted for the management of vatakapradhan disorder and can be performed by using various method.

Sankarasweda is a method in which the materials are tied in cloth and used for swedana and it is commonly known as pindaswead . patrapindaswead or Ela Kizhi is one of the best example in which leaves of medicinal plants along with conventional drugs are roasted in pan with little oil and bolus is prepared by tying in cloth, pind means bolus and sweda means sweating. This bolus heated upto a tolerable temperture and swedan is done.

This prepared patrapindapottly is gently rubbing over the painful area to heal the pain and related condition and strength and rejuvenate joints, Muscle and soft tissue.

Aim:-

To evaluate the efficacy of patra pinda sweda in pain management of Gridhrasi W.S.R to sciatica.

Material Method

1. Source of the data:

Sample source:-

- The patient from IPD/OPD of C.S.M.S.S Ayurvedic medical college hospital kachanchawadi Aurangabad.

Drug source:

- Patra pinda swead.

2. Method of collection of data:

Study Design:

- Patra panda swaad was done for 7 day for 45 minutes.
- 2 follow up were taken first on 8th day and on 15th day of starting the treatment.

Sample Size

15 Patients of Ghridhrasi were taken irrespective of sex and socio-economic status

3.Inclusion Criteria

1. Both male and female patients between the age of 30 to 60
2. SLR test positive 40 to 70 degree.
3. patients with pratyatmaLakshanas of ghridhrasi.

4.Exclusion Criteria

- 1k/c/o-DM,HTV
- 2 pregnant woman and lactating mother.
- 3 patient who are not willing for trial.

5 Assessment Criteria:

Ruk(pain):

- No pain-0
- Painful in same posture-1
- Painful,walk without limping-2
- Painful, walk with limping but without support-3
- Painful,can walk only with support- 4
- Painful, unable to walk-5.

6.Method of preparation of patrapindapottali:²

Material Required:-

- Leaves-shigru,Nirgundi,Eranda,Chincha 100gm each patra.
- Grated coconut-100gm
- Lemon-4
- Haridra
- Rasna churn-10gm
- Shatapushpa-10gm
- Saindhava-10gm
- Cotton cloth
- Tags
- Gas
- Vessels for frying leaves and heating pottali
- Bala Oil- For frying leaves -100ml
For heating pottalis -20
For Abhyanga- 10ml
For Talam as per requirement
- 2 Therapist

7.preparation of pottali

- The fresh leaves should be washed in water and chopped in small pieces
- The leaves, Grated Coconut , Haridra, slicedleamn, sanidhava should be mixed thoroughly and fried together into 100ml oil well.
- Then prepared material divided into 2equal part and made into pottalis.

Standard of operative procedure

1) Purv- karama:

- The patient should be lie comfortable prone position exposing the affected area.
- Bala tail will be warmed and Abhyangais done over the area
- Talam with bala oil and choorna should be applied.

2) Pradhan karma:

- Prepared pottali will be heated with bala oil in hot iron pan up to 40 to 42 degree.
- Then it should be applied over the affected area after checking the temperature of pottali with mild pressures.
- Care should be taken to maintain the temperature throughout the procedure by reheating the pottalis

3) paschat-karma

- After completion of treatment body should be wiped with clean towel
- Remove talam and apply Rasnadi churna.
- Advised to take hot water bath after half hour
- **Duration:** 45min

Precaution:

- Care should be taken to prevent charring while frying leaves and also while reheating the pottalis.
- Every time the therapist should ensure the temperature of the pottali by placing it over their own dorsum of hand. Also enquire the patient whether the temperature is bearable.
- If the patients feels any discomfort or attains good perspiration at any time during the treatment the therapy should be stopped.
- Ideal time to perform the procedure is between 7- 11am and 3-6pm.

Complications:

- Burns and fainting: if occurs, stop the procedure and Agnidagdha chikitsa has to be done.

Indication: Intervertebral disc protrusion or prolapsed (IVDP), Sciatica (Gridhrasi), Osteoarthritis, Chronic stage of RA, Cervical spondylosis, Ankylosing spondylitis, Frozen shoulder, Pakshvadhya, etc.

Contraindication:

Taruna jwara (Acute Fever), Atisara (Diarhoea), Raktapitta (Hemorrhagic disorder) Twak Vikara (Infective eczema), etc.³

Observational And Result:

- 15 Patient with the diagnosis of gridhrasi /sciatica were selected for the study irrespective of their socio-economic status ,gender etc.
- These patients were treated with patra panda swaed .
- The detailed description of sample of 15 patient is given in the following 2 headings.

A. DEMOGRAPHIC DATA:

- The results were tabulated first and then mean was calculated and converted into the percentage.

1. Distribution of Patient according to Age

Age Group (This Year)	No. Of Patients	% of Patient
20-35	6	40
36-50	4	26.67
51-65	5	33.33

4. Distribution of Patient according to Marital Status

Marital Status	No. of Patient	% of Patient
Married	14	93.33
Un-Married	1	6.67

5. Distribution of Patient according to Religion

Religion	NO. Of Patient	% of Patient
Hindu	15	100
Muslim	0	0
Other	0	0

6. Distribution of Patient according to Habitat

Habitat	No. Of Patient	% of Patient
Urban	1	6.67
Rural	14	93.33

7. Distribution of Patient according to Socio-economic Status

Socio-economic status	No. Of patient	% of Patient
Poor	6	40
Low-Middle	6	40
Middle	3	20
Upper-Middle	0	0
Rich	0	0

3. Distribution of Patient according to Gender

Gender	No. Of Patient	% of patient
Male	5	33.33
Female	10	66.67

8. Distribution of Patient according to Occupation

Occupation	No. Of Patient	% of Patient
Labourer	5	33.33
Office	1	6.67
House wife	5	33.33
Farmer	1	6.67
Other	3	20

9. Distribution of Patient according to Addiction

Addiction	No. Of Patient	% of Patient
Smoking	2	13.33
Tobacco	5	33.33
Alcohol	3	20
None	5	33.33

10. Effect OF Treatment of Ruk (Pain) in FU1

Parameter	Mean		Reduction In Mean	Reduction %	S.D		S.E.M		T.V. Value	P.V. Value
	B.T	F.U			B.T	F.U	B.T	F.U		
Ruk	2.433	1.133	0.86	36.90	1.11	0.92	0.02	0.02	4.02	0.0013

11. Effect of Treatment of Ruk (Pain) in FU2

Parameter	Mean		Reduction in Mean	Reduction %	S.D		S.E.M		T.V. Value	P.V. Value
	B.T	F.U			B.T	F.U	B.T	F.U		
Ruk	2.333	1.533	0.80	34.33	1.11	0.99	0.02	0.06	4.00	0.0013

Discussion:

On Effect of Treatment: Here the disease is produced due to the degeneration of the disc and it lead to compression of the nerve .in this condition vitiation of vata would have take place. in between the inter vertebral disc the shleshaka kapha reduce which lead to friction between two vertebrae. so it to compression on the nerve .The chikitsa sutra of gridhrasi is snehana and swedana .patra pinda sweda is a form of sankara swed where vatahara patra are taken and being practiced its easy procedure and excellent fast action in relieving the symptoms.The assessment of result were made by signs and symptoms of gridhrasi which includes subjective and

objective parameters like Ruk , samyak swedan, lakshana ,SLR.

Effect on Ruk:Ruk is due to vatavidhi .There will be derangement in vatadosha leading to vataprakopa. once vata vitiation is corrected Ruk will be reduced. Patra pinda sweda is having ushnvirya,vatakaphahara ,vedanasthapaka, sothahara property. On external application of patra panda sweda is having sothahara and vedanasthapana property. By the action of these drugs Ruk may reduce. Also Swedana by increasing temperature locally to the muscle ,improves blood circulation and help to reduce pain.

Conclusion:

Gridhrasi is one among the 80 vata – nanatmaja vikaras which can effectively treated with swedana .Patra pindswed are sagni ,Ekanga,Madhyama,Samshamaneeya type of sweda . Patra pinda sweda was highly effective in the pain management of gridhrasi .It can be concluded that patra pinda sweda can be better option in the pain management of gridhrasi because the results are statistically significant.

References :

- 1 Charak Samhita of Agnivesa , Foreword by Acharya Priya Vrata Sharma,Sutrasthan swadopaniya Adhaya shlok no.18 to 24.Chaukhamba Sanskrit Pratishthan Reprint 2015 page no.219-220.
- 2 Charak Samhita of Agnivesa , Foreword by Acharya Priya Vrata Sharma , Sutrasthan swadopaniya Adhaya shlok no.41.Chaukhamba Sanskrit Pratishthan Reprint 2015 page no.41 • Charak Samhita of Agnivesa , Foreword by Acharya Priya Vrata Sharma,Sutrasthan
- 3 Vatavadhayechikitsa Adhaya shlok no. 56 Chaukhamba Sanskrit Pratishthan Reprint 2013 page no.698.
- 4 Susruta Samhita of Maharshi shusrut foreword by Dr.Pranajivana Manekchanda Mehta ,Sutrasthan Agropaharaniya Adhya shlok 3,Chaukhambha Sanskrit Sansthan Reprint 2016 page no.22.
- 5 Panchakarma vigyan ,Dr. Ramesh Dnyanoba Sonawane, swedan Adhaya,Saraswati prakashan print 2015 page no.

- 6 Panchakarma Sangrah, Dr Manoj K.Shamkuvar, swedan Adhya ,Dhanvantari prakashan and store Jagnade cholk ,Nadanvan ,Nagpur,print 2013,page no.126-128Dr. Pavitra, role of patra pinda swead in Gridrasi w.s.r to sciatica, JAIMS /sept-oct 2020 /vol 5/issue5, Page no. 290-296 AReview artical.
- 7 Dr Annie Sebastian ,Muralidhar,A comparative study of effect of chichalavan pindswead and patra pindaswead in Gridrasi,IAMJ/Aug2019/vol 7/Issue 8/(www.iamj .in)page no1281-1285.
- 8 Dr. chanakya kaushal ,Clinical study of katibasti with Narayan tail mahat in the management of ruk in vataja gridhrasi w.s.r to sciatica.



Clinical Study to evaluate the efficacy of Bala Tail Abhyanga in Physically Working Person w.s.r. Shramahar

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Abstract:

Abhyanga is the anointing of the body with oil. Often medicated, massage with oil to the body daily does not become affected much even if subjected to accidental injuries, or excessive physical work.

In Dincharya abhyanga of the whole body with oil is one of the main procedures to maintain to rejuvenate, to improve blood circulation. In day-to-day life, we do multiple physical and mental activities due to which our body gets tired and fatigued. Hence or Acharyas described abhyanga in Dincharya with specific manner time, duration. Due to physical exertion or activity vaddosha is aggravated so the tail is the best medicine to control vaddosha. Bala tail has properties of vata Shamana and Datu poshak. Abhyanga with bala tail controls the vaddosha and develops strength both physical as well as mental i.e. Shramahar Guna of Abhyanga

Key Words – *Abhyanga, Dincharya, Bala tail, Antarpamarjan, Bahirparimarsjan, Shramahar*

Introduction

Panchakarma offers a unique approach of Ayurveda to therapy with specially designed five procedures of internal purification of the body. Panchakarma not merely a shodhana therapy as it is understood, but also a wider range of therapeutics such as Snehan, Rukshan, Brimhana, Lekhana, Stambhana, among this Snehana is the major preparatory procedure and it has two types - Abhyantar snehana and bahya snehana. It also includes Antar parimarjan and Bahirparimarjan Chikitsa.

Bahirparimrajan Chikitsa means Medicine that treats the disease with the support of external application on the skin. and this done with Snehana in different ways such as Abhyanga, Gandusha, lepa, Udavartan, Padaghat, Murdhatal, Parishek, Akshitarpan, Samvaahana, Karnpuran, Nasatarpan, Snehavagahana.

The prime motive of Ayurveda is Swasthasya swasthya rakshnam then aturasya vikar prashmana. In Dincharya, Abhyanga, massage of the whole body with oil is one of the main procedures to maintain, to rejuvenate, to improve blood circulation, and mainly to strengthen the body or do physical activities. In day-to-day life, a man does multiple physical

activities due to which we get tired and feel fatigued i.e. Muscle weakness, chronic tiredness or sleepiness, headache, dizziness, sore or aching muscles.

Hence our Acharya described Abhyanga in Dincharya in a very specific manner with definition or timing and duration of abhyanga due to physical exertion or activity Vaddosha is aggravated, and for Vaddosha Tail is the best medicine. And Bala Tail (Sahastrayog) has properties of Balya, Vatshamak, Dhatusposhak and specifically acts on Mansdhatu, Abhyanga of Bala Tail controls vaddosha and the person developed strength both physical as well as mental, i.e. Shramahar Guna of Abhyanga. Out of various properties of the Abhyanga Shramahar is one of the properties, that's why I choose this topic.

Aim-

- To Rule out the clinical trial of bala tail Abhyanga in Physically working person w.s.r. to Shramahar

Objective-

- To establish the Mechanism of Action of Bala Tail Abhyanga in physically working person w.s.r. Shramhar.

Materials and methods

Patient with following symptoms were included in study,

- Fatigue
- Muscle weakness

- Headache
- Dizziness
- Sore or aching muscles
- Un refreshing sleep

Inclusion criteria

Patient having symptoms like fatigue, due to physical exertion or working person

Exclusion criteria

- K/C/O Anaemia, Tuberculosis
- Patient who are not willing for trial

Drug Review, Preparation of Drug

The Drug used in the study is commercially available Bala Tail

Procedure – Method of Abhyanga

Duration- 35 minutes for 8 days

Slowly massage on the body in the downward direction by Vataghna, Sukoshna, and medicated oil is called Abhyanga.

- Abhyanga can be done either sitting or standing or lying position.
- Massage with slight warm oil should be started by applying on the scalp and massaging the head gently.
- Massage on head, ear, feet daily
- Massage in a circular manner on joints.
- Massage on hand and leg towards the downward direction
- Massage the neck and the upper part of the back with the flat surface of open palm and fingers.
- Massage on each part of the body will be done by position.
 1. Straight leg with sitting position.
 2. Supine position
 3. Lying on the left lateral position
 4. Lying on right lateral position
 5. supine position
 6. straight leg with sitting position

Benefits of Abhyanga/Guna:

According to Acharaya Vagbhata Abhyang is

- Jarahar – Anti aging
- Shramahar- It relieves the tiredness, fatigue due to excessive physical working person, exercise, muscle weakness.
- Vatahar- Due to Snigadha Guna

- Drushtiprasadakar – improve eye vision
- Pushtikar – Dhatuposhan
- Ayushykar – increased life spanning
- Swapnakar- improve sleep
- Twaka dardhyakrut- soft and shine skin

Contraindications of Abhyanga

- High fever
- Sever renal and cardiac disease
- Osteoporosis
- Recent fracture
- Acute inflammation
- Open wound
- Dehydration condition
- Kaphaj Rog
- Ajirna

Criteria for Clinical Assessment

The common symptoms like generalized pain, fatigability lethargy

1. Fatigue

Gradation	
Fatigue on excessive physical work	0
Fatigue on daily physical work	1
Fatigue on normal physical work	2
Fatigue on rest	3

2. Muscle weakness

None	0
Mild	1
Moderate	2
Sever	3

3. Headache

Gradation	
No pain	0
Mild pain	1
Moderate	2
Worst	3

4. Dizziness

Treatment	After Treatment
Present	Absent

5. Sore or Aching Muscle

Gradation	
No pain	0
Mild pain	1
Moderate	2
Worst	3

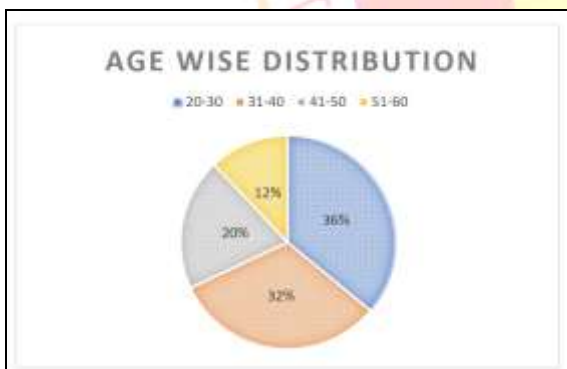
6. Unrefreshing Sleep

Before Treatment	After Treatment
Present	Absent

Observations & Results

• Age wise Distribution

Age in years	No. of Patient	% of pt in different age group
20-30	8	36
31-40	6	32
41-50	4	20
51-60	2	12



• Gender wise Distribution

Sex	No. of Patient	%
Female	6	30
Male	14	70



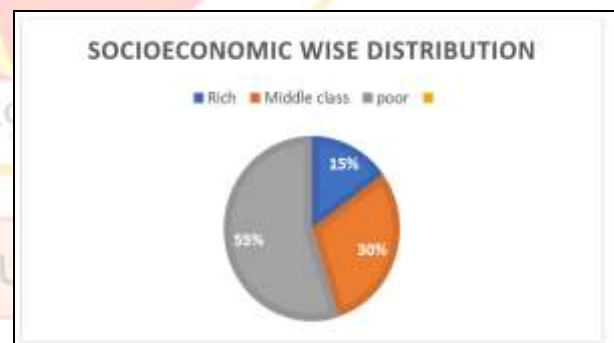
• Occupation wise Distribution

	No. of Patient	Percentage%
Worker	12	60
Service	4	20
Housewife	4	20



• Socioeconomic wise Distribution

	No. of Patient	Percentage%
Rich	3	15
Middle class	6	30
Poor	11	55



• Lakashana wise Distribution

Lakashana	No. of Patient	Percentage%
Fatigue	8	40
Muscle Weakness	6	30
Headache	2	10
Dizziness	2	10
Soar or Aching Muscle	2	10



becomes strong, charming and least affected by old age, massage enhances medical treatment and helps people feel relaxed from stress n anxiety.

The Tail used for Abhyanga nourishes the tissue, gives strength and increases the Agni, reduces heart rate, lower blood pressure and increased blood circulation, especially nerves system gets stimulated, thus providing stimulation to the muscular system, vessels and glands governed by the particular nerve and keeps the human body healthy, massaging also improve the circulation system thus reducing the pain.

Conclusion:

Vata is mainly responsible for tactile sensation and the tactile sensation is through the skin. So Abhyanga is best for the skin and so it should be done daily.

In this way, massage / Abhyanga is a protector, preserver, and rejuvenator, increasing strength, muscle power, it helps for refreshing sleep, stamina for doing physical work.

References

1. Dr. Ravidatta Tripathi, Ashtang Sangrah, Sutrasthan Dincharya Adhaya shlok no.55 Chaukhambha Sanskrit Pratishthan, Reprint 1999 page no.47
2. By Kaviraj Atrideva Gupta Ashtang Hridayam of Vagbhata, edited by Vaidya Yadunandana Upadhyay, Sutrasthan Dincharya Adhaya sholk no.8 Chaukhambha Sanskrit Pratishthan, Reprint 2018 page no.24
3. Ashtang Hridayam of Vagbhata, By Kaviraj Atrideva Gupta edited by Vaidya Yadunandana Upadhyay, Sutrasthan Dincharya Adhaya sholk no.9 Chaukhambha Sanskrit Pratishthan, Reprint 2018 page no.24
4. Charak Samhita of Agnivesa, By Dr. Brahmanand Tripathi, forward by DR Ganga Sahay Pandy, Sutrasthan Tristreshaniya Adhaya shlok no.55 Chaukhambha Sanskrit Pratishthan Reprint 1997 page no.250
5. Dr. Ramesh Dnyanoba Sonawane Panchakarma Vigyan Snehana Acharya, Saraswati Prakashan print 2015 page no. 51
6. Sahastrayog Vidya Mahendrapal Siham Aarya, Kendriya Ayrvediya Vigyan

Wilcoxon Test:

Sr . No	Variabls	Before T/t	After T/t	P	Result	%
1	Fatigue	3.405	0.73	<0.0001	Significant	73.06
2	Muscle Weakness	2.62	0.9	<0.0001	Significant	65.64
3	Headache	2.59	0.73	<0.0001	Significant	71.81
4	Sore or Aching muscle	2.59	0.6	<0.0001	Significant	76.83

- P-value of **Fatigue** is <0.0001, hence result is highly significant
- P-value of **Muscle weakness** is <0.0001, hence result is highly significant
- P-value of **Headache** is <0.0001, hence the result is highly significant.
- P-value of **Sore or aching muscle** is <0.0001, hence result is highly significant

Result:

- According to statistical analysis, significant results were observed in the following parameters as Fatigue, Muscle weakness, Headache, Sore or aching muscle.
- Thus, it can be concluded that Abhyanga of Bala tail in physically working person w.s.r.to Shramahar is effective

Discussion

By using oil massage daily, a person is endowed with pleasant touch, trimmed body part and

Anusandhan Parishad, New Delhi, Pancham prakaran Tailyoga, Rreprint 2011 page no.275

7. Sachin S. Bangali¹, Umapati C. Baragi², Importance of Abhyanga In Today's Scenario, Jan-Feb2018/vol.3/issue1
8. Dr.Reena¹, Dr. Yogesh² , Dr. Sunayana Sharma³ and Dr. Anupam Pathak⁴ Importance of Abhyanga In Today's Stress Full Life : A Review Article, www.wjpmr.com



Ayurvedic Management of Yuvanpidika with Special Reference to Acne Vulgaris in Adolescence – A Case Report

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Abstract:- *Yuvanpidika* is mentioned in the *Kshudra Rogas* in Ayurved. *Kshudra Rogas* are the group of diseases which are diminutive in nature. Other synonym of *Yuvanpidika* is *Mukhadushika*. The first one means the eruptions occurring in young generation specifically adolescents. The latter means the barrier which disturbs the beauty of the face. Its modern equivalent is Acne Vulgaris. Acne is chronic inflammatory pilo-sebaceous glands derangement. The modern treatment is time taking and often produces adverse effects. The conscious younger generation in the need to get complete relief need proper counselling about the healthy lifestyle along with the treatment. Present study shows a case of a teenager girl of grade 3 Acne Vulgaris treated with Ayurvedic *Shamana Chikitsa* and *Jalaukavacharana* along with *Nidanaparivarjana* over the course of 2 months only. However she was advised to follow proper lifestyle afterwards.

Keywords:- *Yuvanpidika, Kshudra rogas, Mukhadushika, Acne Vulgaris, Shamana Chikitsa, Jalaukavacharana, Nidanaparivarjana.*

I. INTRODUCTION

Humans have engaged with the concept of beauty for ages. Everyone wants to look more beautiful and attractive. So, the smallest spot on the face might lessen the legacy of the beauty especially in adolescents. Adolescent age group is referred as '*Youvanavastha*' in Ayurved. And the common culprit which disturbs the beauty of these adolescent teenagers is said to be *Yuvanpidika*. Another synonym of *Yuvanpidika* is '*Mukhadushika*' which literally means barrier of the beauty of the face.

The diseases which are *Kshudra* or diminutive in nature, which symptoms and signs are in less quantity and quality compared to other diseases and which are not life threatening are termed as '*Kshudra-roga*' in Ayurved context. *Yuvanpidika* is one of the *Kshudra-rogas*. The main symptom of *Yuvanpidika* mentioned by *Acharya Sushruta* is – *Pidika* (eruption) which looks like *Shalmali kantaka* (Thorn of the herb named *Shalmali malabarica*). It is formed over face because of the vitiated *Kapha-Vata* and *Rakta Doshas*.¹ *Acharya Vagbhata* added the symptoms – *Saruja* (having pain) and *Ghana* (dense) in nature. It also contains *Meda* (fats) in it.²

If we compare all these symptoms of *Yuvanpidika* in modern context, it can be correlated with Acne Vulgaris. Acne is a chronic inflammation of pilo-sebaceous units. It has been estimated to affect over 90% of adolescents, most commonly between the ages of 12 to 20. Acne can have negative effects on self esteem. The consequences can be devastating leading to embarrassment, school avoidance and lifelong effects on ability to form friendships and acquire and keep employment.³

II. CASE REPORT

A 15 year old female patient reported in the in the OPD of *Kaumarbhritya* department of CSMSS Ayurved Hospital, *Kanchanwadi, Aurangabad, Maharashtra* complaining with acne papules and pustules over bilateral cheeks and forehead along with inflammation since last one year. The patient had very oily skin. The problem started when patient was 14 year old when reddish comedones started to erupt on both cheeks associated with tenderness and itching. The patient got very anxious and consulted dermatologist. The treatment she received was local retinoid application and oral antibiotics. She continued this treatment for two months. But only during the treatment would she get relief, after discontinuing the treatment the symptoms would exaggerate and worsen. She approached two more dermatologists for allopathic treatment but did not get sustained relief. Then she came to our hospital for seeking Ayurvedic treatment.

General Examination:

General condition- Good

Pulse- 78/min.

Respiratory System- Air Entry Bilaterally Equal

Cardiovascular System- S₁ S₂ Normal

Ashtavidha Parikshana-

Nadi- Vatapradhana Kapha

Mutra- Samyak Pravritti

Mala- Samyak Pravritti

Jivha- Saama

Shabda- Prakrit (normal)

Sparsha- Samashitoshna, Snigdha

Druka-Prakrit

Akriti- Madhyama

Prakriti Parikshana- Vata-Kapha Pradhana

Koshtha- Madhyam

Local Examination- The skin of the face of the patient was very greasy. The eruptions were located at cheeks and forehead with multiple reddish inflamed papules and pustules. The eruptions were dense and associated with pain and severe itching.

Brief History –

Socioeconomic status- Higher middle class

Ahara itivritta (Dietic history) - Excessive eating of curd, pickles, groundnuts, sesame, salty-fried food stuffs, junk foods on daily basis.

Vihara itivritta (Lifestyle) - Irregular sleep and diet patterns due to study, and excess stress of the study.

Diagnosis – It was mainly based on *Sushruta Samhita* and *Ashtangahridayam*. The signs and symptoms of the patient were taken as per *Acharya Sushruta* and *Vagbhata* said e.g.- *Shalmali* thorn like *Pidika* (papules and pustules), *Saruja* (pain or tenderness), *Ghana* (dense-inflamed), and *Kandu* (itching).

Nidanapanchaka -

Nidan- *Ati-amla* and *lavana rasapradhana*, *Atisnigdha*, *Paryushita ahara*, and stressful *Vihara*

Poorvarupa- *Reddish comedones* and greasy skin.

Rupa- *Shalmali kantaka Pidika* (*Shalmali thorn like Reddish papules and pustules*), *Ghana* (inflammation), *Saruja* (pain and tenderness), *Kandu* (itching)

Samprapti- Due to habitual eating of *Ati-amla*, *lavana rasapradhana*, *Atisnigdha*, *Paryushita ahara* and *Manasika Chinta (stress)*, *Kapha* and *Maruta* vitiated and impurified *Rasa* and *Rakta dhatu* and *Twacha of face* resulting in *Yuvanpidika*.

Dosha- *Kapha -Vata*

Dushya- *Rasa, Rakta, Twak*

Srotasa- *Rasa-Raktavaha*.

Avastha- *Jeerna (chronic)*

Sadhyasadhya- *Kashtasadhya*

III. MATERIALS AND METHODS

First of all, *Nidanaparivarjana*⁴ (avoidance of cause) was advised. The patient was asked to stop eating of curd, pickles, groundnuts, sesame, salty-fried food stuffs and junk foods. Also she was advised to follow regular *Dinacharya* (regular diet and sleep pattern).

The patient was mainly subjected to *Shamana chikitsa* (pacification therapy) and *Shodhana Chikitsa* (Purification therapy). Throughout the therapy of 2 months, the patient was followed every 15 days at OPD of Dept. of *Kaumarbhritya* of CSMSS Ayurved Hospital, *Aurangabad, Maharashtra*.

Table no. 1 showing Shamana Chikitsa

Sr. No.	Medicines	Dose	Anupana
1.	Shankhabhasma Vati – 250 mg	2 tablets twice a day Mor. – Eve. After meals	With lukewarm water
2.	Gandhaka Rasayana- 125 mg	2 tablets twice a day Mor. - eve. After meals	With milk
3.	Triphala Guggula- 250 mg	2 tablets twice a day Mor. – Eve. After meals	With lukewarm water

Shodhana Chikitsa- The patient was subjected to *Jalaukavacharana* (Leech application) twice in the 2 months course. The first sitting was on the second visit i.e. after 15 days of oral medicines started. And the second sitting was done on 45th day of the treatment. While each Leech

application sitting, both the cheeks were applied with 2 – 2 leeches (considering the severity of pustules and papules) and this application continued uptill the *Shuddha Rakta* comes out. The *Jalaukavacharana Vidhi* and Leech care procedure was adopted from the *Sushrut Samhita*.⁵

IV. OBSERVATIONS

Table no. 2 showing remarkable effect of therapy on subjective criteria

Symptoms	BT	After 15 days	After 30 days	After 45 days	After 60 days
<i>Shalamali Kantaka pidika</i>	++++	+++	++	+	-
<i>Saruja (painful)</i>	+++	++	+	+	-
<i>Shotha (inflammation)</i>	+++	++	+	+	-
<i>Kandu (pruritus)</i>	+++	++	++	+	-
<i>Ghana (denseness)</i>	++++	+++	++	+	-

Table no. 3 showing Grades of Acne Vulgaris⁶

Mild acne	Grade 1	Comedones and few papules
Moderate acne	Grade 2	Comedones, papules and few pustules
Severe acne	Grade 3	Mainly pustules, abscesses and few nodules
Cystic acne	Grade 4	Cysts, nodules and widespread scarring

Table no. 4 showing effect of therapy on Grades of Acne Vulgaris

BT	After 15 days	After 30 days	After 45 days	After 60 days
Grade 3	Grade 2	Grade 1	Grade 1	--

**Photograph -1- Before Treatment****Photograph -2- Leech application****Photograph -3- After 45 days of Treatment****Photograph -4- After completion of Treatment**

V. DISCUSSION

In modern point of view, Acne vulgaris generally treated with topical Retinoid, Azelaic acid, Salicylic acid, Banzoil peroxide which are very well known for the adverse effects like irritation, bleaching and resistance. The antibiotics used to treat Acne show side effects like gastrointestinal upset, pseudomotor cerebri etc. Hormonal agents like Spiranolactone etc used to treat Acne leads to irregular menstruation in girls.⁷

In Ayurved context, *Shankha Bhasma* is specifically indicated to treat *Yuvanpidika*.⁸ It specifically acts on *Rasa-Rakta Dhatu*. So the first preference for internal medication in this patient was *Shankha Bhasma*. The powdered form of this drug was found to be difficult to ingest by the patient hence, modified form was used as tablets. *Shankha bhasma Vati* was given to the patient which purified *Rakta dhatu*.

The main impact of *Gandhaka Rasayana*⁹ is found to be on *Rakta dhatu* and *Twacha* which are main *Dushya* in *Yuvanpidika*. It is mentioned in *Rasayana Prakarana* of *Yogaratanakara*. It acts as *Rasayana* (rejuvenating factor) on the skin which might be resulting in less scarring in any skin ailments. Therefore *Gandhaka Rasayana* was selected for oral administration and it indeed helped in less scarring and early healing of Acne eruptions.

The *Triphala Guggula* mentioned in *Vrana-Shotha adhikara*¹⁰ is useful to reduce all types of *Shotha* which is a characteristic feature of *Yuvanpidika*. It is also useful in *Medadushti* which is essentially present in case of *Yuvanpidika*. Hence, *Triphala Guggula* was given orally to the patient which resulted in reducing the pain and inflammation of Acne.

Jalaukavacharana (Blood-letting with the help of leech) is a well accepted treatment for vitiated *Raktadosha*. It is painless and non-invasive way of bloodletting. *Acharya Vagbhata* mentioned bloodletting with *Siravedha*¹¹ (venous puncture) in the management part of *Mukhadushika*, we opted *Jalaukavacharana*. *Acharya Sushruta*¹² mentioned the Leech therapy as '*Param Sukumara Raktamokshana*' (Blood-letting for weak people) and is useful in *Balyavastha*. Leech sucks vitiated blood from applied area. Leech's saliva contains many enzymes viz- Hirudin, anti-inflammatory- Bdelin, anti-platelet aggregate factor- Apyrase, diffusion & antibiotic factor-Hyaluronidase and Vasodialator substances. So, considering the age of the patient we have done Leech therapy twice on the patient with the gap of 30 days and the patient showed excellent result without any problem.

After taking oral medications continuously for 2 months along with Leech application, patient got sustained relief. However she was advised to avoid the *Nidanas* lifelong.

VI. CONCLUSION

Yuvanpidika is most common adolescent skin disease mainly seen over the face. It harasses the teenager physically and mentally. Oral Ayurvedic management aims to give blissful life to the patient by decreasing the vitiated *Doshas*. Leech therapy also found to be effective and non-invasive simple technique in relieving signs and symptoms.

From this study it can be concluded that *Shamana Chikitsa* along with *Jalaukavacharana* and *Nidanaparivarjana* is very effective in the management of *Yuvanpidika*.

REFERENCES

- [1]. *Maharshi Sushruta, Sushruta Samhita- Part-1, Nidana sthana – Adhyaya 13 / 38, Hindi Commentary Ayurved Tatva Sandipani* by *Ambikadutta Shastri, Choukhambha Sanskrit Sansthana, Varanasi, 9th edition, 1995, Page No. -287.*
- [2]. *Acharya Vagbhata, Ashtangahridayam- Uttarantra – Adhyaya – 31 / 5, Vidyotini Hindi Commentary* by *Atrideva Gupta, Choukhambha Sanskrita Sansthana, Varanasi, 14th edition, 2003, Page No. -561.*
- [3]. Davidson, *Davidson's Principles and Practice of Medicine*, edited by *Stuart Ralston, Ian D Panman, Mark Strachan, Richard Hobson, 29th chapter – Dermatology- Acne and Rosacea, Elsevier Publication, 23rd edition, 2018, Page No.- 1241.*
- [4]. *Maharshi Sushruta, Sushruta Samhita- Part 2- Adhyay- 1/25, Hindi Commentary Ayurved Tatva Sandipani* by *Ambikadatta Shastri, Chaukhambha Sansthana Prakashana, 7th edition- 1990, Page No. 11.*
- [5]. *Maharshi Sushruta, Sushruta Samhita- Part-1, Sootra sthana – Adhyaya 13 / 23, Hindi Commentary Ayurved Tatva Sandipani* by *Ambikadutta Shastri, Choukhambha Sanskrit Sansthana, Varanasi, 9th edition, 1995, Page No. -46.*
- [6]. *S.N.Chugh, Text book of Medicine, Arya Publications, New Delhi, Reprint edition – 2013, Page No. 1237.*
- [7]. *Robert B. Kleigman, Nelson Textbook of Pediatrics- Vol.-3, Elsevier Publications, India, 1st South Asia Edition, Reprint -2016., Page No.- 3231-3233.*
- [8]. *Yogaratanakara- Part 1- with Vaidyaprabha Hindi commentary* by *Indradev Tripathi, Chaukhambha Prakashana, Fourth edition, Reprint - 2013, Page No. – 128.*
- [9]. *Yogaratanakara- Part 2 - Rasayanadhikara with Vaidyaprabha Hindi commentary* by *Indradev Tripathi, Chaukhambha Prakashana, Fourth edition, Reprint - 2013, Page No. – 892.*
- [10]. *Govinda Das, Bhaishajya Ratnavali-Vranashotha-adhikara, with Sanskrit commentary* by *Jayadeva, Motilal Banarasidas Prakashana, 8th edition, Reprint-2007, Page No.- 553.*
- [11]. *Acharya Vagbhata, Ashtangahridayam, - Uttarantra – Adhyaya – 32 / 3, Vidyotini Hindi Commentary* by *Atrideva Gupta, Choukhambha Sanskrita Sansthana, Varanasi, 14th edition, 2003, Page No. -564.*

- [12]. *Maharshi Sushruta, Sushruta Samhita- Part-1, Sootra sthana – Adhyaya 13 / 3, Hindi Commentary Ayurved Tatva Sandipani* by *Ambikadutta Shastri, Choukhambha Sanskrit Sansthana, Varanasi, 9th edition, 1995, Page No. -45.*



REVIEW ARTICLE

Concept of Aama and Dhatvagni in Ayurveda

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Abstract: Ayurveda is the science which mentioned various principles for prevention and treatment of disease. Ahara is extremely important entity in everybody's life. According to Ayurveda 'Sarvam Dravyam Panchbhoutikam' [1] i.e. all creation arises out of five great elements known as 'Mahabhutas'. Agni is the important key factor for transformation of consumed ahara, viharadi dravyas of Vijatiya origin to Sajatiya nature and converts the food consumed and produces energy. Agni regulates the course of digestion and metabolism and the main cause for all the disease formation is 'Mandagni [2].' Due to mandagni there is formation of 'Aama'; which is unripe / undigested food. Aama further causes Jatharagni, Dhatvagni dushti. The concept of Aama is the most important fundamental principle of Ayurveda in understanding the Physio-pathology of the diseases³. Now days, due to increasing pollution, lack of exercise, the immunity is decreased. Aama production can result in variety of diseases like Aamavata, Madhumeha / Prameha (Diabetes mellitus), Medoroga, Sthoulya, etc.

Keywords: Aama, Mandagni, Ahara, Dhatvagni, Etc.

Article Received: 23 Jan. 2020

Revised: 12 Feb. 2021

Accepted: 25 Feb. 2021

Introduction

In Ayurvedic classics, Aama which is the product of metabolic defect it has been considered an important factor for the pathogenesis of most of the diseases and also in modification of disease process. The concept of Aama is the most important and fundamental principle in understanding the physio-pathology of the diseases [3].

It is formed due to improperly metabolized by product of food at level (macro level), Bhutagni level (micro level) and at responsible for the development of various diseases process in the body. Aama is not a single entity but is a generalized term, which can be applied to many malformed substances in the body comparing them with that of Aama.

The role of these factors is all ready established fact in certain auto immune disorders. The different types of Aama depending upon their origin and properties depending upon Agni.

Materials and Methods

Concept of Aama

Aama is produce from Ahara rasa when it is not properly digested. In case of jatharagnimandya, the Ahara rasa is the undigested food but in case of rest of agnis it is the metabolites that are undergoing process of metabolism by these Agni's. Place of origin of Aama is given as Amashaya. But considering the presence of Agni at different level Aama can be produced at different levels at different sites in the body [4].

Aama is Developed with the 3 Causes [5]

- **Jatharagni-dourabalya janya**-It is formed in the process of Avasthapaka due to Agnimandya.
- **Dhatvagni-dourbalya janya**-It causes paka in Rasa-Raktadi dhatu.
- **Dosha-ati matra janya**-Developed due to excessive consumption of dushta ahara.

Concept of Dhatvagni

Ayurveda science titles 'Rasa' to that sensation which is perceived by taste-buds of tongue. The taste which is perceived by tongue known as 'Rasa'. It indicates physiology of Mahabhutagni in living body. This agni / fire in living body occupies entire body and various bio-transformations. Dhatvagni is name to that part of fire, which assimilates or synthesizes 'Dhatu' of living body. This need particular environment hence these 'Dhatvagni' are located in Strotas related to that particular dhatu. This agni is responsible for nourishment of seven Dhatus. It exists in Dhatu itself.

Hence It is called 'Dhatavagni'. When digested nutrients reach this Dhatvagni. Aahara rasa is final product of digestion by Pachakagni in Mahastrotas. This has to be circulated throughout the body. Rasa Dhatu circulates continuous for twenty four hours. Ahara rasa and Rasa Dhatu provide nutrients to strotas. Seven Dhatu contain their own Agni in them. This Agni once more digests already digested food or products into two portions. One portion is called 'Sara', which actually nourishes concerned Dhatu and other portion, not useful for that concerned Dhatu, is 'Kitta' portion [6].

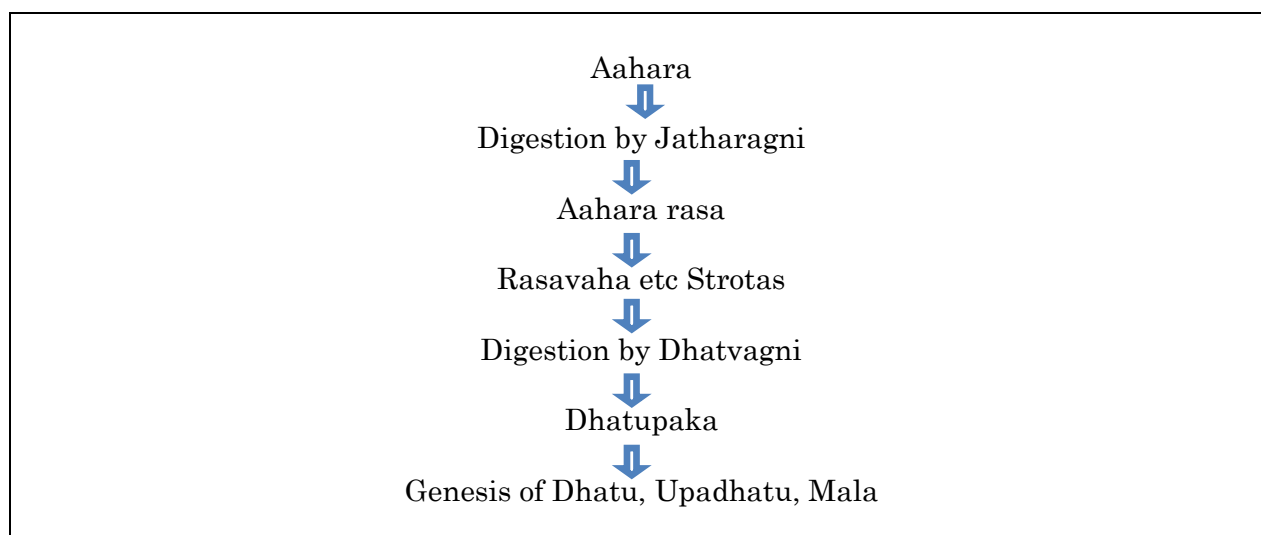


Figure1: Role of Aama and Dhatvagni in metabolic disorders

When food is indigested, it has to be digested to get absorbed. In Ayurvedic concept of digestion, every food particle undergoes a common path of three stages. Each of these three stages through which every food particle has to pass while getting digested is called 'Avastha-Paka' [7]. Each of these three stages is denoted by Rasa. After this final bio-transformation it gets assimilated in body entities due to action of 'Dhatvagni'.

Functions of Dhatvagni are mainly two; one is synthesis of new tissue and second is to yield energy for the function of tissue. If Dhatvagni is impaired both of these will impair. Seven categories of agnis, & dhatus undergo metabolic transformation in two different ways for the sustainers of the body. One is Prasad paka is stated to is kitta paka. The Prasad paka is stated to yield the seven kinds of poshaka or Asthayi dhatus. Kitta paka is the waste products [8].

The nutrient fraction of Rasa (Plasma) provides nourishment to Rakta (Blood), that of Rakta to Mansa (Muscle tissue), that of Mansa to Medas (Fat), that of Medas to Asthi (Bone), that of Asthi to Majja (Bone marrow), and the nutrient fraction of Majja provides nourishment to Shukra [9]. Aama can be produced at various levels. When it manifests due to improper function of Jatharagni, Dhatvagni; it causes so many diseases of gastro-intestinal origin like Atisara, Visuchika, etc. Altered functions of Dhatvagni cause Dhatu-pradoshaja vikaras like Rasa-pradoshaja vikara, Rakta Pradoshaja Vikaras, etc [10].

Due to improper functioning of dhatvagni sama dhatu is formed i.e. Sama Rasa, Rakta, Mansa, etc. These incompletely formed dhatus may also hamper nutrition of next consecutive dhatu to be nourished. When there is defect in the function of bhutagni, it will not be able to digest Aahara.

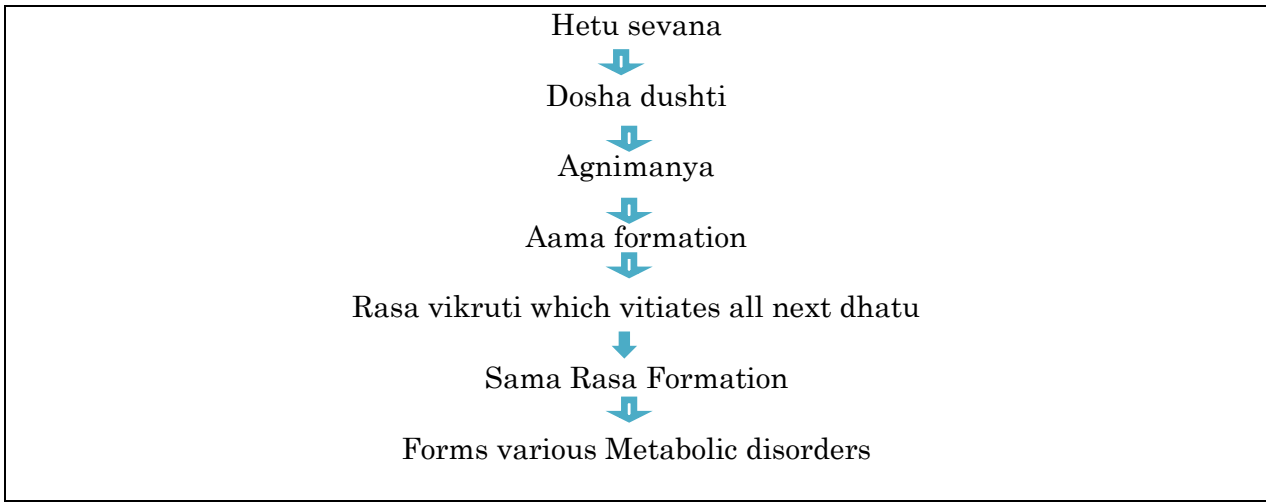


Figure 2: Process of various metabolic disorders

Discussion

Aama is very unique and important concept explained in Ayurveda science. Which causes various dosha, dushya dushti in the body and develops various Agnimandyanit Vikaras? Aama also hampers the bio-transformation activity / energy of the body i.e. Agni. It vitiates Agni, Dhatvagni, Mahabhutagni, etc. Which enables to digest and forms energy from the food? As in Ayurveda described that all disease formation is due to the Agni mandya / Jatharagni mandya. Therefore for treatment concept of Aama and Agni / Jathargni / Dhatvagni is very important.

Conclusion

For development of Metabolic disorders like Aamavata, Medoroga, Prameha (Diabetes Mellitus), Stholya, etc. Role of Aama and Dhatvagni is very important. They are the basic concepts explained in Ayurveda. Which are important factors to rule out the cause and important for treatment.

References

1. Chakrapani, Charaka Samhita (2017) by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Sutrasthana, adhyaya 28th, Shlok 10, Chaukhamba Publications, New Delhi, Reprint,138.
2. Vagbhatta, Dr. Brahman, Tripathi, Ashtanga Hridaya, Nidanasthana (2014) adhyaya 15th, Shlok 1, Chaukhamba Sanskrit Pratishthana, Delhi, Reprint, 512.
3. Vagbhatta, Dr. Brahman Tripathi, Ashtanga Hridaya, Sutrasthana (2014) adhyaya 13th, Shlok 27, Chaukhamba Sanskrit Pratishthana, Delhi, Reprint, 188.
4. Nandini Dhargalkar, Sarira kriya (2009) Vidnana (2), 2nd edition, Chaukhamba Sanskrit Series Office, Varanasi.
5. Ajay Kumar Sharma (2014) Kayachikitsa textbook (1), Aama Vivechana, 11th chapter, Chaukhamba Orientalia, Delhi, reprint, 257-258.
6. Nandini Dhargalkar, Sarira kriya (2009) Vidnana (2), 2nd edition, Chaukhamba Sanskrit Series Office, Varanasi.
7. Chakrapani, Charaka Samhita (2017) by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Chikitsa sthana, adhyaya 15th, Shlok 9-11, Chaukhamba Publications, New Delhi, Reprint, 512-513.
8. Chakrapani, Charaka Samhita (2017) by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Chikitsa sthana, adhyaya 15th, Shlok 18-19, Chaukhamba Publications, New Delhi, Reprint, 515.
9. Chakrapani, Charaka Samhita (2017) by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Chikitsa sthana, adhyaya 15th, Shlok 16, Chaukhamba Publications, New Delhi, Reprint, 514.
10. Chakrapani, Charaka Samhita (2017) by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Sutra sthana, adhyaya 28th, Shlok 9-12, Chaukhamba Publications, New Delhi, Reprint, 179.



The Management of Kshina Shukra Dhatu in Ayurveda w.s.r. to Oligospermia

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Abstract: Infertility is a significant clinical problem today, which affects 8-12 % of couples worldwide. In all infertility cases, approximately 40-50 % is due to 'Male factor'. According to W H O, Infertility is a disease of reproductive system defined by failure to achieve the clinical pregnancy after 12 months or more of regular unprotected sexual intercourse. Infertility affects around 1 in 7 couples of reproductive age, often causing psychological distress. According to Ayurveda, this condition is considered as Vandhyatva. The factors responsible for conception are considered as Ritu (season/time), Kshetra (uterus), Ambu (nutrients with water) and Bija (Sperm & ovum) Vandhyatva found in both male and female. The Oligospermia is one of the conditions related to male infertility defined as low sperm count. Ayurveda the science of Indian medical system described various terms related to male infertility such as; Kshina Shukra, Kshina Retasa, Alpa Retasa and Shukra Dosha which resembles conditions associated with Oligospermia. In Ayurveda there are various methods are given in which Shodhana and Shamana Chikitsa are useful in the management of Kshina Shukra. Patient was treated with shodhan and shaman chikitsa. Results were found quite satisfactory.

Keywords: Infertility, Vandhyatva, Male factor, Kshina shukra, Oligospermia, Shodhana chikitsa, Shamana chikitsa.

Article Received: 16 Dec. 2020

Revised: 18 Jan. 2021

Accepted: 24 Jan. 2021

Introduction

Infertility is defined as a disease of the reproductive system and results in disability. It is a global public health issue. It is defined as the inability of a couple to conceive a child after 1 year of sexual intercourse without contraceptive use. Infertility affects an estimated 15% of couples globally, amounting to 48.5 million couples [1].

In men, infertility may result from impaired sperm quality (ex. Reduced motility)/ reduced sperm numbers [2]. As per the WHO estimates 60-80 million couples worldwide currently suffer from infertility. It was reported that 40% of infertility cases were related to men, 40% of women & 20% of both

sexes. A recent report on the status of infertility in India, states that nearly 50% of infertility is related to the reproductive anomalies / disorder in the male [3].

According to Ayurveda, Shukra present in all over the body but in invisible manner. As ghee is indistinguishable in milk. Same way jaggary cannot directly see in sugar cane [4]. Moolasthan of Shukravaha Strotasa in Ayurveda is Vrushana (Testis) and Shefa (Urethra) [5]. The endocrine function of testis is formation & maturation of germ cells (Spermatozoa) and production of male sex hormone (Testosterone). It is responsible for Vruddhi and Kshaya of Shukra [6].

Shukra Dhatu Karma

'शुक्रं धैर्यं च्यवनं प्रीतिं देहबलं हर्षं बीजार्थं च |..... (सु. सु.15 / 7)

Shukra performs various functions like Dhairyam, Chyavanam, Pritim, Dehabalam, Harsha and Bijartham [7]. When these karmas are affected by the vitiated doshas, hetus then it reduces Shukra formation and leads to Kshina-Shukrata. Kshinashukra is kshaya of shukra dhatu in the body due to change in diet, lifestyle, stress and disorders like hormonal imbalance, orchitis, mumps & varicocele, etc.

Further aggravating the problems now a day are Manasika hetus like Chinta, Shoka, Stress are creating disturbances in sleeping problems, also the people who are more associated with poor nutrition, persons

having Mandagni-Vishamagni are more prone to get Shukra dushti [8]. Out of total infertility worldwide 40-50% male factors is responsible due to different pathology related to shukra especially Kshinashukra (Oligospermia). Due to Shukra dourbalata symptoms found like loss of erection, premature ejaculation, muscle weakness, wrinkling of skin, hair whitening, fatigue, and loss of concentration power are seen.

Shukrakshaya Lakshanas are as follows

'दौर्बल्यं मुख शोषश्च पाण्डुत्वं सदनं भ्रमः |

क्लैब्यं शुक्राविसर्गश्च क्षीणशुक्रस्य लक्षणम् | |.....(च.सु. 17 / 69) [9]

'शुक्रक्षये मेढ्रवृषणवेदनाअशक्तिमैथुने चिराद् वा प्रसेकः प्रसेके चाल्परक्तशुक्रदर्शनम् |..... (सु.सु. 15/9) [10].

Table 1: Conditions and Pathophysiology of Oligospermia

Samprapti (Kshina-Shukra)	Pathophysiology of Oligospermia
<p style="text-align: center;">↓</p> <p>Aaharaj hetu - Excessive Salt intake, Spicy foods, Fast foods, Ruksha ahara, Alpa ahara, etc.</p> <p>Viharaj hetu - No exercise, Diwasvapa, Ratrijagarana, No physical exertion.</p> <p>Manasa hetu - Stress, Mild depression (due to death of mother), Bhaya, Shoka, etc.</p> <p style="text-align: center;">↓</p> <p>Agnimandya</p> <p style="text-align: center;">↓</p> <p>Rasavaha strotos dushti, Rasagni mandya</p> <p style="text-align: center;">↓</p> <p>Alpa Rasadi Dhatu Poshana</p> <p style="text-align: center;">↓</p> <p>Shukragni Mandya, Shukravaha Strotos dushti</p> <p style="text-align: center;">↓</p> <p>Alpa Shukra Dhatu Karma</p> <p style="text-align: center;">↓</p> <p>Kshinashukra</p> <p style="text-align: center;">↓</p> <p>Vandhyatva</p>	<p>Causes – Harmonal imbalance, Ejaculation issues, infections, etc.</p> <p style="text-align: center;">↓</p> <p>Impairment in Hormone secretion + Gonadotropin deficiency</p> <p style="text-align: center;">↓</p> <p>Less secretion of testosterone from the testis</p> <p style="text-align: center;">↓</p> <p>Oligospermia</p>

Aims & Objectives

To study the effect of Shodhana and Shamana Chikitsa in the management of Kshina-Shukra (Oligospermia).

Objectives

- To study the effect of Shodhana Chikitsa in the management of Kshina - Shukra (Oligospermia).

- To study the effect of Shamana Chikitsa in the management of Kshina-Shukra (Oligospermia).

Methodology

Case Study

A 32 year old male patient, approached in Kayachikitsa Opd with his wife. The couple

were married and were unable to conceive even after having 8 years of married life. He had presenting with the complaints of.

- Dourbalya
- Mukhashosha
- Sadanam / Angamarda
- Shukra-avisarga
- Klaibya
- Malabaddhata
- Chinta, Shoka,
- Anidra

Ashtavidha Pariksha

- Nadi = 80/min
- Mala = Asamyaka
- Mutra = Samyaka
- Jivha = Alpa Sama
- Shabda = Spashta
- Sparsha = Anushna

- Drika = Prakruta
- Akruiti = Madhyam

General Examination

- PR = 80/ min
- BP = 120/90 mm of Hg
- RS = Clear, AE=BE
- CVS = S1, S2 Normal
- CNS = Conscious, Oriented
- P/A = Soft, No tenderness
- Prakruti = Vatapradhana Pitta Prakruti
- Koshta = Krura koshta
- Occupation - Farmer

Past History

H /O-No any major disease illness

But patient had lost his mother and he was suffering from mental stress.

Treatment

In every disease Samprapati bhanga is very important for Chikitsa.

Table 2: Samprapati bhanga

Nidana Parivarjanam	It is important Chikitsa in every disease. It is a first line of treatment. Due to this 50% of the causes are reduced.
Agni Chikitsa	Aampachana ⇨ Rasadhātu Poshana ⇨ Shukra Dhātu Poshana ⇨ Mild Kshinashukra Lakshanas.
Satvavajaya Chikitsa [11]	This helps in controlling Manas (Mind) away from Ahita artha (distractible, unwholesome objects / thoughts / perceptions). It is very important Chikitsa for Manasika Swasthya. In this Chikitsa, Councelling, daily Ashwasana Chikitsa about patients illness, Pranayama, Yoga, Meditation, etc. are used to relieve mental stress, Chinta, Shoka & Bhaya.
Shodhana Chikitsa	
Basti	
Poorvakarma	Snehana: Chandana bala lakshadi Taila Swedana: Dashmoola, Nirgundi patra, Shigru patra, etc. Bashpa swedana given. Pradhana Karma -in shodhana chikitsa, Basti is given. As it helps for Mala Shodhana from the body and it helps to improve Apana Vayu Karma. (causes Shukra Pravartana). Yapan Basti is given for increasing Virya, Bala & Mansa. • Mustadi Yapan Basti [12]: it helps to increase Shukra, Mansa & Bala. It is one of the type of Rasayana Basti. It is given for 8 days. • Sahacharadi Anuvasana Basti [13]: it also helps to increase Virya, Varna & Bala.
Shirodhara [4]	It is done with the Jatamansi siddha taila. For 7 days. Helps to relieve Stress, Chinta, Shoka, For Samyaka Nidra & Indriya prasadana.
Nasya	Anutaila used for the Nasya. Given for 7 days.
Shamana Chikitsa	Aampachaka Vati [15] – For Dipana & Pachana. 500 mgm two tablets two times after meal. Given for 3 days. Snehapana : ‘Phalaghrita’ [16] – 10 ml OD, early morning with warm water in empty stomach. Vrushya Yoga [17]: it includes Ashwagandha, Shatavari, Sharkara, Musali, Vidari, Gokshur Churna. Matra of Vrushya Yoga is 10 gm with Dugdha anuapana.

	Avipattikara Churna [18]: For Vata-Anulomana.5 gm churna given at the time of bed. (Nishakale).
Pathya-Apathya	Pathya – Snigdha ahara, ghrita, taila, godhuma, dugdha, masha, draksha, Aamalaki, Samyaka Nidra, etc. Apathya - Ruksha ahara, stress, chinta, bhaya. Shoka, Vega dharana, Ratrijagarana, Divaswapa, heavy work etc.

Table 3: Tretment result

Symptoms	Before Treatment	After Treatment
Dourbalya	+++++	++
Mukhashosha	++++	+
Sadanam / Angasada	++++	+
Chinta, Shoka	+++++	++

+ = Mild, ++ = Moderate, +++ = Severe

After the complete treatment of 30 days, there is relief in the complaints of Shukra - Avisarga, Klaibya, Malabaddhata and Anidra. In the examination of total sperm count before treatment it was 18 million / ml & Motility was 30 % and after treatment it was 65 million / ml & Motility was 52 %.

Results

Semen Examination

The total sperm count which was 18 million/ml + Sperm Motility 30 % at the beginning of the course of Shodhana and Shamana Chikitsa increased to 65 million / ml + Sperm Motility 52 % after completion of treatment.

Discussion

Oligospermia or synonymously Oligozoospermia is a condition in which sperm count is reduced. WHO describes the condition as the one in which total sperm count will be less than 20 million / ml [19]. In this study, observations was done before and after treatment based on symptoms and through the investigations. Due to the proper

Shodhana Chikitsa

Mustadi Yapan Basti

It is one of the Rasayana ad it increases Shukra, Mansa, Bala.

Sahacharadi Anuvasana Basti

It helps to increase Bala, Mansa & Virya. Bastikarma is indicated in vatavikara 15 and it also enriches shukra. 16 Yapan basti maintains dhatusamya and it increases low level of shukra and improves vitality, vigor and lifespan of individual.

Shirodhara

Shirodhara helps to reduce the Chinta, Shoka and bhaya. As in today's era Manasika

hetus are also important cause in the disease formation.

Nasya

Nasya also helps to relieve Stress, provides proper sleep.

Shamana Chikitsa

Aampachaka Vati

It is given for Agni Dipana & Aama Pachana. Because Chikitsa of Agni is very important. As Agnimandya causes various diseases.

Phalaghrita

It is indicated for Vandhyatva in both male and female. Also, it is snigdha it is best for increased rukshata as found in the patient.

Vrushya Yoga

(Ashwagandha, Shatavari, Musali, Sharkara, Vidari, Gokshura, Ghrita, and Taila): all drugs work as Vrushya and helps in Shukra Shodhana. They act on Neuro endocrine-immune system. Also reduces Stress.

Avipattikar Churna

It is used for the Vata – Anulomana. Also helps to balanced Agni and proper Apana Vayu nirharana.

Conclusion

In this case all complaints like Dourbalya, Mukha Shosha, Angamarda, Klaibya, Shukra-Avisarga, Malabaddhata, Chinta, Shoka & Anidra are markedly diminished in the management of 30 days. In conclusion Shodhana Chikitsa - Mustadi Yapan Basti, Sahacharadi Anuvasana Basti, Shirodhara, Nasya and Shamana Chikitsa are significantly effective in Kshina-Shukra (Oligospermia), followed by proper Pathya-Apathya.

References

1. Maxine A, Papadakis, Stephen J, Mc Phee et al (2018) Current medical diagnosis & treatment, A Lange Medical book, Mc Graw Hill Education, 57th edition, New Delhi, 977.
2. Brian R, Walker, Nicki R, Colledge et al (2014) Davidson's Principles & Practice of Medicine, 22nd edition, 761.
3. www.who.infertilityinformation.in
4. Chakrapani (2017) Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Chikitsa sthana, adhyaya 2nd Vajikarna Pada 4th, Shlok 46, Chaukhambha Publications, New Delhi, Reprint, 397.
5. Chakrapani (2017) Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Vimana sthana, adhyaya 5th, Shlok 8, Chaukhambha Publications, New Delhi, Reprint, 250.
6. Shukradhara kala, Shukragni article, Vd. Yogita Shrotriya (2020) Shukravaha Strotsa 2, Srujana Chikitsa Dvaimasika, 6.
7. Sushruta, Kaviraj Ambika datta Shastri, Sushruta Samhita, Sutrasthana (2015) adhyaya 15th, Shlok 7, Vol.1, Chaukhambha Sanskrit Sansthana, Varanasi, Reprint, 75.
8. Concept of Shukra Dhatu-Shukravaha Strotasa, Vd. Amar Shinde (2020) Shukravaha Strotsa 2, Srujana Chikitsa Dvaimasika, 32.
9. Chakrapani (2017) Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Sutrasthana, adhyaya 17th, Shlok 69, Chaukhambha Publications, New Delhi, Reprint, 103.
10. Sushruta, Kaviraj Ambika datta Shastri, Sushruta Samhita (2015) Sutrasthana, adhyaya 15th, Shlok 9-1, Chaukhambha Sanskrit Sansthana, Varanasi, Reprint, 79.
11. Chakrapani (2017) Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Sutrasthana, adhyaya 11th, Shlok 54, Chaukhambha Publications, New Delhi, Reprint, 77-78.
12. Chakrapani (2017) Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Siddhi sthana, adhyaya 12th, Shlok 17, Chaukhambha Publications, New Delhi, Reprint, 731.
13. Chakrapani (2017) Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Siddhi sthana, adhyaya 12th, Shlok 19, Chaukhambha Publications, New Delhi, Reprint, 734.
14. Chakrapani (2017) Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Sutrasthana, adhyaya 5th, Shlok 83, Chaukhambha Publications, New Delhi, Reprint, 42.
15. Aampachak Vati, Ayurveda Rasa Shala, Pune.
16. Vagbhatta, Dr. Brahmanand Tripathi, Ashtanga Hridaya, Uttartantra (2014) adhyaya 34th, Shlok 63-67, Chaukhambha Sanskrit Pratishthana, Delhi, Reprint, 1142.
17. Shri Brahmashankar Mishra, Shri Rupalalaji Vaishya, Bhavaprakasha, Purvardha (2016) Chaukhambha Sanskrit Bhawan, Varanasi, Reprint. 560,559,943,557,469.
18. Vagbhatta, Dr. Brahmanand Tripathi, Ashtanga Hridaya, Kalpasthana (2014) adhyaya 2nd, Shlok 21-23, Chaukhambha Sanskrit Pratishthana, Delhi, Reprint, 836-837.
19. www.who.oligospermiainformation.in

NEPHROTIC SYNDROME IN PEDIATRICS WITH AYURVED APPROACH

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Article Received on 05/02/2021

Article Revised on 25/02/2021

Article Accepted on 15/03/2021

ABSTRACT

Childhood nephrotic syndrome is not a disease in itself; rather, it is a group of symptoms that

- indicate kidney damage—particularly damage to the glomeruli, the tiny units within the kidney where blood is filtered
- result in the release of too much protein from the body into the urine
- When the kidneys are damaged, the protein albumin, normally found in the blood, will leak into the urine. Proteins are large, complex molecules that perform a number of important functions in the body.
- The two types of childhood nephrotic syndrome are
- primary—the most common type of childhood nephrotic syndrome, which begins in the kidneys and affects only the kidneys
- secondary—the syndrome is caused by other diseases

A health care provider may refer a child with nephrotic syndrome to a nephrologist—a doctor who specializes in treating kidney disease. A child should see a pediatric nephrologist, who has special training to take care of kidney problems in children, if possible. However, in many parts of the country, pediatric nephrologists are in short supply, so the child may need to travel. If traveling is not possible, some nephrologists who treat adults can also treat children.

The kidney are two bean-shaped organs, each about the size of a fist. They are located just below the rib cage, one on each side of the spine. Every day, the kidneys filter about 120 to 150 quarts of blood to produce about 1 to 2 quarts of urine, composed of wastes and extra fluid. Children produce less urine than adults and the amount produced depends on their age. The urine flows from the kidneys to the bladder through tubes called ureters. The bladder stores urine. When the bladder empties, urine flows out of the body through a tube called the urethra, located at the bottom of the bladder. Kidneys work at the microscopic level. The kidney is not one large filter. Each kidney is made up of about a million filtering units called nephrons. Each nephron filters a small amount of blood. The nephron includes a filter, called the glomerulus, and a tubule. The nephrons work through a two-step process. The glomerulus lets fluid and waste products pass through it; however, it prevents blood cells and large molecules, mostly proteins, from passing. The filtered fluid then passes through the tubule, which sends needed minerals back to the bloodstream and removes wastes.

MATERIALS AND METHODS**DEFINATION**

Nephrotic syndrome is a condition that causes the kidenys to leak large amounts of protein in to the urine. This can lead to arrange of problems including swelling of body tissues and a grater chances of catching infection.

CAUSES

While idiopathic, or unknown, diseases are the most common cause of primary childhood nephrotic

syndrome, researchers have linked certain diseases and some specific genetic changes that damage the kidneys with primary childhood nephrotic syndrome.

The cause of secondary childhood nephrotic syndrome is an underlying disease or infection. Called a primary illness, it's this underlying disease or infection that causes changes in the kidney function that can result in secondary childhood nephrotic syndrome.

Congenital diseases—diseases that are present at birth—can also cause childhood nephrotic syndrome.

Primary Childhood Nephrotic Syndrome

The following diseases are different types of idiopathic childhood nephrotic syndrome:

- **Minimal change disease** involves damage to the glomeruli that can be seen only with an electron microscope. This type of microscope shows tiny details better than any other microscope. Scientists do not know the exact cause of minimal change disease.

Minimal change disease is the most common cause of idiopathic childhood nephrotic syndrome.^[1]

- **Focal segmental glomerulosclerosis** is scarring in scattered regions of the kidney:
- “Focal” means that only some of the glomeruli become scarred.
- “Segmental” means damage affects only part of an individual glomerulus.
- **Membranoproliferative glomerulonephritis** is a group of disorders involving deposits of antibodies that build up in the glomeruli, causing thickening and damage. Antibodies are proteins made by the immune system to protect the body from foreign substances such as bacteria or viruses.

Secondary Childhood Nephrotic Syndrome

Some common diseases that can cause secondary childhood nephrotic syndrome include

- diabetes, a condition that occurs when the body cannot use glucose—a type of sugar—normally
- IgA vasculitides, a disease that causes small blood vessels in the body to become inflamed and leak
- hepatitis, inflammation of the liver caused by a virus
- human immunodeficiency virus (HIV), a virus that alters the immune system
- Lupus an autoimmune disease that occurs when the body attacks its own immune system
- malaria, a disease of the blood that is spread by mosquitos
- streptococcal infection, an infection that results when the bacteria that causes strep throat or a skin infection is left untreated

Other causes of secondary childhood nephrotic syndrome can include certain medications, such as aspirin, ibuprofen, or other nonsteroidal anti-inflammatory drugs, and exposure to chemicals, such as mercury and lithium.

Congenital Diseases and Childhood Nephrotic Syndrome

Congenital nephrotic syndrome is rare and affects infants in the first 3 months of life.^[2] This type of nephrotic syndrome, sometimes called infantile nephrotic syndrome, can be caused by

- inherited genetic defects, which are problems passed from parent to child through genes
- infections at the time of birth

SIGNS AND SYMPTOMS

The signs and symptoms of childhood nephrotic syndrome may include

- edema—swelling, most often in the legs, feet, or ankles and less often in the hands or face
 - Albuminuria—when a child’s urine has high levels of albumin
 - hypoalbuminemia—when a child’s blood has low levels of albumin
 - hyperlipidemia—when a child’s blood cholesterol and fat levels are higher than normal
- In addition, some children with nephrotic syndrome may have
- blood in urine
 - symptoms of infection, such as fever, lethargy, irritability, or abdominal pain
 - loss of appetite
 - diarrhea
 - high blood pressure

COMPLICATIONS

The complications of childhood nephrotic syndrome may include

- **infection.** When the kidneys are damaged, a child is more likely to develop infections because the body loses proteins that normally protect against infection. Health care providers will prescribe medications to treat infections. Children with childhood nephrotic syndrome should receive the pneumococcal vaccine and yearly flu shots to prevent those infections. Children should also receive age-appropriate vaccinations, although a health care provider may delay certain live vaccines while a child is taking certain medications.
- **blood clots.** Blood clots can block the flow of blood and oxygen through a blood vessel anywhere in the body. A child is more likely to develop clots when he or she loses proteins through the urine. The health care provider will treat blood clots with blood-thinning medications.
- **high blood cholesterol.** When albumin leaks into the urine, the albumin levels in the blood drop. The liver makes more albumin to make up for the low levels in the blood. At the same time, the liver makes more cholesterol. Sometimes children may need treatment with medications to lower blood cholesterol levels.

DIAGNOSIS

A health care provider diagnoses childhood nephrotic syndrome with

- a medical and family history
- a physical exam

- urine tests
- a blood test
- ultrasound of the kidney
- kidney biopsy

Medical and Family History

Taking a medical and family history is one of the first things a health care provider may do to help diagnose childhood nephrotic syndrome.

Physical Exam

A physical exam may help diagnose childhood nephrotic syndrome. During a physical exam, a health care provider most often

- examines a child's body
- taps on specific areas of the child's body

Urine Tests

A health care provider may order the following urine tests to help determine if a child has kidney damage from childhood nephrotic syndrome.

Dipstick test for Albumin - A dipstick test performed on a urine sample can detect the presence of albumin in the urine, which could mean kidney damage. The child or a caretaker collects a urine sample in a special container. For the test, a nurse or technician places a strip of chemically treated paper, called a dipstick, into the child's urine sample. Patches on the dipstick change color when albumin is present in urine.

Urine albumin -creatinine ratio-. A health care provider uses this measurement to estimate the amount of albumin passed into the urine over a 24-hour period. The child provides a urine sample during an appointment with the health care provider. Creatinine is a waste product filtered in the kidneys and passed in the urine. A high urine albumin-to-creatinine ratio indicates that the kidneys are leaking large amounts of albumin into the urine.

Blood test--involves drawing blood at a health care provider's office or a commercial facility and sending the sample to a lab for analysis. The lab tests the sample to estimate how much blood the kidneys filter each minute, called the GFR, or eGFR. The test results help the health care provider determine the amount of kidney damage. Health care providers may also order other blood tests to help determine the underlying disease that may be causing childhood nephrotic syndrome.

Ultrasound of the Kidney

Ultrasound uses a device, called a transducer, that bounces safe, painless sound waves off organs to create an image of their structure. A specially trained technician performs the procedure in a health care provider's office, an outpatient center, or a hospital. A radiologist—a doctor who specializes in medical imaging—interprets the images to see if the kidneys look normal; a child does not need anesthesia.

Kidney Biopsy

Kidney Biopsy- is a procedure that involves taking a small piece of kidney tissue for examination with a microscope. A health care provider performs the biopsy in an outpatient center or a hospital. The health care provider will give the child light sedation and local anesthetic; however, in some cases, the child will require general anesthesia. A pathologist—a doctor who specializes in diagnosing diseases—examines the tissue in a lab. The test can help diagnose childhood nephrotic syndrome.

When the health care provider suspects a child has minimal change disease, he or she often starts treatment with medications without performing a biopsy. If the medication is effective, the child does not need a biopsy. In most cases, a health care provider does not perform a biopsy on children younger than age 12 unless he or she thinks that another disease is the cause.

TREATMENT

Health care providers will decide how to treat childhood nephrotic syndrome based on the type:

- primary childhood nephrotic syndrome: medications
- secondary childhood nephrotic syndrome: treat the underlying illness or disease
- congenital nephrotic syndrome: medications, surgery to remove one or both kidneys, and transplantation.

• Primary Childhood Nephrotic Syndrome

Health care providers treat idiopathic childhood nephrotic syndrome with several types of medications that control the immune system, remove extra fluid, and lower blood pressure.

- **Control the immune system.** Corticosteroids are a group of medications that reduce the activity of the immune system, decrease the amount of albumin lost in the urine, and decrease swelling. Health care providers commonly use prednisone or a related corticosteroid to treat idiopathic childhood nephrotic syndrome. About 90 percent of children achieve remission with daily corticosteroids for 6 weeks and then a slightly smaller dose every other day for 6 weeks.^[2] Remission is a period when the child is symptom-free.

Many children relapse after initial therapy, and health care providers treat them with a shorter course of corticosteroids until the disease goes into remission again. Children may have multiple relapses; however, they most often recover without long-term kidney damage.

When a child has frequent relapses or does not respond to treatment, a health care provider may prescribe other medications that reduce the activity of the immune system. These medications prevent the body from

making antibodies that can damage kidney tissues. They include

- cyclophosphamide
- mycophenolate (CellCept, Myfortic)
- cyclosporine
- tacrolimus (Hecoria, Prograf)

A health care provider may use these other immune system medications with corticosteroids or in place of corticosteroids.

- **Remove extra fluid.** A health care provider may prescribe a diuretic, a medication that helps the kidneys remove extra fluid from the blood. Removing the extra fluid can often help to lower blood pressure.
- **Lower blood pressure.** Some children with childhood nephrotic syndrome develop high blood pressure and may need to take additional medications to lower their blood pressure. Two types of blood pressure-lowering medications, angiotensin-converting enzyme inhibitors and angiotensin receptor blockers, have the additional benefit of slowing the progression of kidney disease. Many children with nephrotic syndrome require two or more medications to control their blood pressure.

Secondary Childhood Nephrotic Syndrome

Health care providers treat secondary childhood nephrotic syndrome by treating the underlying cause of the primary illness. For example, a health care provider may treat children by

- prescribing antibiotics for an infection
 - adjusting medications to treat lupus, HIV, or diabetes
 - changing or stopping medications that are known to cause secondary childhood nephrotic syndrome
- While treating the underlying cause, the health care provider will also treat the child to improve or restore kidney function with the same medications used to treat primary childhood nephrotic syndrome.

Caretakers should make sure that children take all prescribed medications and follow the treatment plan recommended by their health care provider.

Congenital Nephrotic Syndrome

Researchers have found that medications are not effective in treating congenital nephrotic syndrome, and that most children will need a kidney transplant by the time they are 2 or 3 years old. A kidney transplant is surgery to place a healthy kidney from someone who has just died or a living donor, most often a family member, into a person's body to take over the job of the failing kidney. To keep the child healthy until the transplant, the health care provider may recommend the following:

- albumin injections to make up for the albumin lost in urine
- diuretics to help remove extra fluid that causes swelling

- antibiotics to treat the first signs of infection
- growth hormones to promote growth and help bones mature
- removal of one or both kidneys to decrease the loss of albumin in the urine
- dialysis to artificially filter wastes from the blood if the kidneys fail

PREVENTION

Researchers have not found a way to prevent childhood nephrotic syndrome when the cause is idiopathic or congenital.

Eating, Diet, and Nutrition

Children who have nephrotic syndrome may need to make change to their diet such as

- limiting the amount of sodium, often from salt, they take in each day
 - reducing the amount of liquids they drink each day
 - eating a diet low in saturated fat and cholesterol to help control elevated cholesterol levels
- Parents or caretakers should talk with the child's health care provider before making any changes to the child's diet.

AYURVED ASPECTS

According to Ayurveda Nephrotic syndrome is caused by the blockage of minute body channels called as strotas in kidney .The body channels known as Mutravaha Strotas carry urine and responsible for the flow of liquid in to out of the kidney .If there are blockages in the incoming strotas the kidney are denied fluids and shrinkage occurs and if the outgoing channels are blocked ,swelling occurs.

As per Ayurveda there are 3 doshas -Vata, Pitta,Kapha disease caused due to the vitiation of pitta dosha treatment includes medication for normalizing pitta dosha.

TREATMENT

Ayurvedic treatment for Nephrotic syndrome have specific herbs which directly effect on the kidney cell to improve their function to stop the Auto-immune and anti-inflammatory pathology and to regenerate the new normal cell.

PUNARNAVA-Specific action on the heart it increases the output of blood from the heart .It also increases the circulation of blood to the kidney thus reviving kidney from may disease like renal failure ,nephrotic syndrome and GFR and others.

GOKSHURU-It is the best genitu urinary tonic and giving the strength to the kidney, urinary bladder,ureter and penis by increases the blood circulation.

RAKTCHANDAN-Diuretic and Anti infective also act as urine alkalizer.

PALAASH-It act as urine alkalizer GOKSHURADI GUGGUL-It is the combination of various herbs for diseased kidney and they improve the renal function at all levels.

REFERENCES

1. Kaviraj ambikadatta shastri sushrut samhita, chaukhamba sanskrit sansthan , Varanasi.sutra sthan 35-13.
2. Charak samhita, chaukhamba bharti prakashan, varanasi, sharir sthan 8-10. Kashyap samhita or vrudhrajivkiy tantra pandit Hemraj sharma, varanasi chaukhamba sanskrit sansthan, 5-8.
3. Charak samhita, chaukhamba bharti prakashan, Varanasi, sharir sthan 8-19 & ashtang hrdayam of aacharya vagbhat , sharir sthan 1-37.
4. Charak samhita, chaukhamba bharti prakashan, Varanasi, sharir sthan 8-19.
5. Sushrut samhita, kaviraj ambikadatt shastri, chaukhamba sanskrit sansthan, Varanasi, sharir sthan 2-35.
6. Charak samhita chaukhamba bharti prakashan, Varanasi, sharir sthan 8/32-38.
7. Charak samhita, chaukhamba bharti prakashan , Varanasi, sharir sthan 8/46.
8. Sushrut samhita, kaviraj ambikadatt shastri, chaukhamba sanskrit sansthan , Varanasi, sharir sthan 10/15-17.
9. Kashyap samhita or vrudhrajivkiya tantra, pandit Hemraj Sharma, Lehaddhyay 4-5.
10. Charak samhita, chaukhamba bharti prakashan, Varanasi, sharir sthan 8-50.
11. Sushrut samhita, kaviraj ambikadatt shastri, chaukhamba Sanskrit sansthan, Varanasi, sharir sthan 10/27.
12. Ashtang sangrah, chaukhamba Sanskrit series office, uttar tantra 1/29-30.
13. Kashyap samhita, vrudhrajivkiy tantra, pandit Hemraj Sharma, chaukhamba sanskrit sansthan, Varanasi, khilsthan 12/4-5.
14. Kashyap samhita, vrudhrajivkiy tantra , pandit Hemraj Sharma, chaukhamba sanskrit sansthan, Varanasi, khilsthan 12-10.
15. Kashyap samhita, vrudhrajivkiy tantra, pandit Hemraj Sharma, chaukhamba sanskrit sansthan, Varanasi, Khilsthan 2-15.
16. Sushrut samhita, kaviraj ambikadatt shastri, chaukhamba sanskrit sansthan, varansi, sharir sthan 10-54.
17. Sushrut samhita, kaviraj ambikadatt shastri, chaukhamba sanskrit sansthan.

PANCHAKARMA AND ITS APPLICATION IN PEDIATRICS PRACTICE- A REVIEW ARTICLE

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Article Received on
16 February 2021,

Revised on 06 March 2021,
Accepted on 26 March 2021

DOI: 10.20959/wjpr20214-20138

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ABSTRACT

Amavata is the most commonly observed *vaatavyaadhi* which mainly affects *sandhi* to produce *ruja* and *shopha*. In this disease, vitiated *vata* along with *kapha* gets *sthaanasamshraya* in *sandhi* to produce different *lakshanas*. *Gulpha Sandhi* is a kora variety of *chala sandhi* and one of the most important Sandhi of the lower extremities as it is mainly associated with locomotion and equilibrium of our body weight and help in walking. *Gulpha* sandhi in our body are two in number, which is present in between *pada* and *jangha*. The ankle joint present at the junction of leg and foot can be understood as the same. *Amavata* is a disease in which vitiation of *Vata Dosha* and accumulation of *Ama* take place in joints, which simulate rheumatoid

arthritis (RA). Localized ama gets in the body tissue or joints, it can lead to production of pain, stiffness, swelling, tenderness, etc., in the related joints. Rheumatoid arthritis (RA) is a systemic inflammatory condition that results in cartilage and bone destruction. It is characterized by a typical pattern and distribution of synovial joint involvement.

KEYWORDS: Gulpha sandhi, Manibandha, Amavata, mamsa peshi, Snay.

INTRODUCTION

Considering *Sharirik and Manshik* approach ayurveda explains the treatment for various disorders. *Sharir Shodhana* is one in all the modalities of treatment which is best for uprooting the disease from the basis itself. Pathophysiology of disease mainly involves disturbances of three *Doshas* (*Vata, Pitta, Kapha*) thus *doshic* balance is extremely important for retaining healthiness. Panchakarmas are indicated in children although cohort isn't

specific. Same was explained by *Acharya Kashyapa* that it is often administered in moderate or the minimum level by contraindicating excess *Apatarpana* and bloodletting as *Shodhana treatment*.^[1]

Panchakarma includes *Vaman, Virechan, Basti, Nasya and Raktamokshan* as it is mainly for cleansing the body toxins to achieve balanced state of body that facilitates rejuvenation.^[2]

Ayurveda considers that the cleansing of the body is significant before the commencement of any intervention by Ayurveda. According to basics of Ayurveda the *doshas* i.e. *vata, pitta and kapha* are principal functional components of body. They run all activities happening in organs, channels and tissues of our physical body. If *doshas* get disturbed by any means i.e. *Ahar, Vihar* as and many diseases get manifested. These imbalanced *doshas* should be expelled out to protect body from further pathological happening of disease from the body. Vitiated *doshas* can be expelled by administering *Panchakarma* therapy. Aim & Objectives:

1. To elaborate the *Panchakarma* and to study the significance of *Panchakarma* Therapy in Paediatrics.
2. To study the applied *Panchakarma* procedure in children and their benefits.

METHODS

A critical review done from Ayurvedic treatise like *Sushrutsamhita, Charak Samhita, Astanghruday, and Kashyapa Samhita*.

Panchakarma in Balroga

The basic pre requirement - (*Purva Karma*) involves *Deepan* and *Pachan* (Administering oral medicines to improve digestion in order to enhance Agni), *Snehan* (Oleation) and *Swedan* (Hot fomentation).^[3] *Panchakarma* procedures (*Pradhan Karma*) such as *vaman, virechan, basti* etc. are performed to flush out toxins from the body from the nearest tract either through mouth or anus.^[4] After this procedures, precautions and diet regimen are advised (*Pashchat Karma*) to prevent any further complications to obtain desired results and also to bring back the patient's body to normal lifestyle⁵. The five therapies which include *Panchakarma* are –

1. *Vamana* – therapeutic emesis
2. *Virechana* – therapeutic purgation
3. *Niruha / Asthapana Basti* – decoction enemas
4. *Anuvasana Basti* – oil and ghee enemas, unctuous enemas

5. *Nasya* – nasal medication

Acharya Sushruta has considered blood as fourth *dosha* and mentioned *raktamokshana* i.e. bloodletting as one among five *Panchakarma* measures.

Application of *Panchakarma* therapy in Paediatrics: Childhood is very decisive period where teen pick up growing and development with respect to physical, mental and social aspect. *Panchakarma* measures are similarly effective in a paediatric patient as they are done in adults; only precaution should be taken in the prevention of complications. To some extent the alterations in the *Panchakarma* with regards to Paediatric practice has been explained in the classics.

***Panchakarma* therapy**

***Deepana and Pachana (Purva Karma)*^[6]**

Niramavastha of doshas should be there before any *panchhakarma* procedure with the help of *deepana* and *pachana*. For *Deepan* purpose, hot water boiled with piece of dry ginger or dry coriander can be used in paediatric patient, water should be warm and can be given in small quantity initially, it relieves *ama* (toxic accumulation) at the level of *koshta* (abdomen). It also help in making *Agni* proper in children.

***Snehana (Oleation)*^[7]**

Oleation is nothing but *snehana* of the body by using medicated oils and ghee internally and externally which is actual essential prior to any *Panchakarma* procedure. *Ghritha*, *Taila*, *Vassh*, *Majja* are explained as a major *Snehana* constituents and more importance has been given to *Ghruta* for *Snehan* in children. *Snehapana* is given to the patient early in morning in the prescribed dose. The dose of *Sneha dravya* can be assessed by ascertaining *agnibala* (digestive power) of the patient, nature of disease, condition of the body. *Snehapana* continue up to *samyaka snigdha lakshanas*(symptoms of desired oleation) are observed and usually it is obtained within 3 to 7 days.

Table 1: Indications and contraindications of snehana.^[8]

Indications	Contraindications
Hikka (Hiccough) Krisha balak (Emaciated child)	Chardi vomiting), Atisara (Diarrhoea), jvara (fever), galamaya (throat disorder)
Vatarogas (hemiplegic, cerebral palsy) Rukshata (Roughness all over body)	Kaphaja vikara- sthoulya (obesity) Raktapitta (Bleeding disorders)
Prior to panchakarma (bio-cleansing therapy)	Kshirad avastha (breastfeed babies), chardi (vomiting)

Swedana (Sudation)^[9,10]

It is a procedure where sweating (sudation) induced artificially by which it relieves heaviness, stiffness and coldness of the body. Acharya Kashyapa explains eight types the Swedana methods in the childhood Pan- chakarma practice with prodigious importance. Types of swedan are hast, pradeha, nadi, prastara, sankar, upnaha, avgaha and parisheka.

According to Acharya Kashyapa, Hastha Sweda, and Pata Sweda are very useful in neonates and infants especially in abdominal colic. Nadi Sweda, Prasthara, Sankara, Pradeha, Upanaha, Avagaha, Parisheka are other types which are practically applicable in children.^[11]

Shashtika Shali Pinda Sweda^[12]

This is the general method of swedana used in paediatric patients in which specific part or whole body made to sweat by the application of shashtika shali (a variety of rice) in the form of pottalis (boluses tied in a cotton cloth). Shashtika shali is cooked with milk and decoction of dashamoola. This cooked rice is to be kept in pieces of cloth to make pottalis (boluses tied in a cotton cloth).

Table 2: Indications and contraindications of swedana.^[13]

Indications	Contraindications
After snehana and prior to panchakarma	Dagdha (burnt), Acute fever, Kamala (jaundiced)
Vata rogas (hemiplegic, cerebral palsy)	Pittarogi, madhumehi (diabetic)
Jadya, kathinya and ruksha sharira (heaviness, stiffness, dry- ness of body)	Chhardi (Vomiting), Trishna (dehydrated) Karshya (emaciated)
Shwas (asthma), kasa (cough), pratishyaya	Hridaya Rogas (Cardiac Diseases),
Rheumatic and degenerative conditions	Raktapitta (Bleeding disorders)
Obstruction to Mala (stool), Mutra (urine) and Shukra (semen)	Vishart (poisoned)

Vaman^[14]

Bala is the stage with delicate body and mind with dominance of the Kapha hence the Mridhu Vamana with full stomach milk or breast milk followed by physical stimulation of

the throat has been indicated. Indications of *Virechana* should be substituted by *Basti*, similarly *Marsha Nasya* by *Pratimarsha*. Acharya Kashyapa mentioned that, babies who emit vitiated milk from stomach repeatedly will never suffers from diseases. When baby takes first breath Acharya advised that baby should be undergone the process of *Garbhodaka Vamanam* using *Saindhava* and *Ghritha*. In other contest he told that those babies are vomiting the milk after breast feed, never suffers with the disease due to expulsion of excessive *Kapha Dosh*.^[15]

Table 3: Indications and contraindications of *vamana*.^[16]

Indications	Contraindications
Gastric problems - <i>ajeerna</i> (indigestion)	Acute peptic ulcer
<i>Peenasa</i> (<i>Sinusitis</i>)	<i>Bala</i> (young children)
<i>Madhumeha</i> (Diabetes),	<i>Hridroga</i> (Cardiac disorders)
<i>Unmada</i> (Schizophrenia),	<i>Shranta</i> (Exhausted)
<i>Kushtha</i> (Skin diseases)	<i>Pipasita</i> (Thirsty)
<i>Kasa</i> (Cough), <i>Shwasa</i> (bronchial Asthma)	<i>Kshudhita</i> (Hungry)
<i>Shlipada</i> (Filariasis)	<i>Atikrisha</i> (Emaciated body)

***Vamana dravya* used in Paediatrics**

Vamana is indicated in child just after birth as *Garbhodaka*. *Vamana* can be done by administrating *Vacha* (*Acorus calomus*) and *Saindhava Churna*. In *ksheerad* child, *Vamana Sadhya* diseases, *Vamana* could be done with *Madanaphala* on nipple along with areola i.e. dose of *Madanaphala* should not be more than that. Indication of *Vamana* is in baby above the age of five year.

Virechana^[17]

Normally, *Virechana* should not be given to children, if it's necessary, it can be used as a last option; if all other measure failing to cure the disease. This procedure should be administered with extreme caution as there lays a potent danger of dehydration which the children more prone. One can utilise *mridu verech-noushadha* as *trivritta*, *chaturangula* can be logistically used. The *Vega* of *Virechana* is 2, 3, and 4, in place of 10, 20, and 30 for adult *Kanistha*, *Madhyama*, and *Ut-tama* respectively. It is proved that *Virechana* is best for *Pittaja* disorders and imparts the clarity of *Indriyas* (sense organs) and good for ensuring the growth and development of the child. It also enhances the functional capacity of the child by purifying the *Amashaya* and *Paskwashaya* by regularising the bowel habits. However, *Virechana* is better avoided in children except in the emergencies and substituted by *Basti*. *Virechana* in case administered, should be given at least fifteen days after the *Vamana* by

satisfying all the prerequisites.

Table 4: Indications and contraindications of Virechana.^[18]

Indications	Contraindications
<i>Tamak Shwasa</i> (Bronchial Asthma), Eczema, Allergic dermatitis etc.	<i>Navajwara</i> (Acute fevers)
<i>Pakshaghat</i> (Hemiplegic), <i>Madhumeha</i> (Diabetes), <i>Arbuda</i> (Tumour),	<i>Krishha</i> (Emaciated patients) <i>Rajyakshma</i> (Tuberculosis)
<i>Krimi</i> (Worm infestation), <i>Kamala</i> (Jaundice),	<i>Garbhini</i> (Pregnant women)

Basti^[19,20]

In childhood clinical practice *Basti* acts just like the *Amrita* (nectar). *Basti* can be administered to one-year baby. *Basti* is the procedure where the medicines in suspension form are administered through rectum or genitourinary tract using *Basti yantra* (enema can or specific apparatus). The *Niruha Basti* can cause the *Karshana* in child which leads to the poor development, *Acharya Kashyapa* told the *Anuvasana Basti* or *Basti* in which oil more than quantity of *kashaya* should be used. In *Vata dosha* elimination and diseases where there is association of *Vata*, *Basti karma* should be used.

Table 5: Indications and contraindications of Basti.

Indications	Contraindications
<i>Amavata</i> (Juvenile Rheumatoid Arthritis)	<i>Amatisara</i> (acute diarrhoea)
<i>Vata rog</i> (hemiplegic, muscular dystrophy)	<i>Kasa</i> (Cough), <i>Shwasa</i> (Asthma)
<i>Rajonash</i> (Secondary Amenorrhoea)	<i>Chhardi</i> (Vomiting)
<i>Jeerna jvara</i> (Chronic Fever)	<i>Krishha</i> (Emaciated body)
<i>Ashmari</i> (kidney stone, bladder stone)	<i>Madhumeha</i> (Diabetes)
<i>Niram atisar</i> (chronic diarrhoea)	<i>Shoona Payu</i> (Inflamed Anus)
(cerebral palsy, delayed milestones)	<i>Kritahara</i> (Immediately after taking food)

Commonly used Basti Yogas: *Madhutailika Basti*, *bala guduchyadi Basti*, *patolanimbadi Basti*, *vaitarana Basti*, *mustadi yapana basti*, *tikta kshira basti*.

Nasya^[21]

Process of administration of medicines through nostrils is called *Nasya*. It is indicated mainly in aggravated and accumulated *doshas* (disease causing factor) of head and neck. *Kashyapa* has stated two types of *nasya*; namely *Brimhana nasya* (nourishing) and *Karshana Shodhana nasya* (cleansing). *Nasya karma* is mainly proposed to clean the channels in the head and neck region. The aggravated *kapha dosha*, which usually blocks the upper respiratory tract, is eliminated with the help of nasal instillation of herbal. juices, oils, or powders. During *nasya* the patient should sit or lie down in a comfortable posture, then applied gentle massage over

the head, forehead and face followed by mild *swedana*. *Nasya* cures certain childhood disorders like *Trishna*, *ShiroRoga*, *Pippasa* etc.

DISCUSSION

Panchakarma can be very carefully implemented in *Swatantra Bala* (healthy Child) or independent child by considering *Bala*, *Desha*, *Kaala* etc. Here the *Swatantra Bala* refers to that child who does not require any assistance in its day to day activities like eating, talking, walking, and explaining good and bad suffering during the course of treatment, while *Paratantra* who is depends on parents or care takers for its day to day activities is not fit for the same.^[22]

Snehan karma pacifies *vata*, regularise bowel movements, and improves digestion, strength and complexion. *Swedana* is quite beneficial in removing the stiffness of the body, heaviness, body contractures, pain, constipation *Vakgraha*, *Alasaka* and other *Vata Kaphaja* disorders. In *Vatapradhana Rogas*, *Snigdha Sweda* while in *Kapha Pradhana rogas* the *Ruksha Sweda* is indicated.^[23] It is well known fact that *Virechana* is best for *Pittaja* disorders and imparts the clarity of *Indriyas* (sense organs) however keeping in mind the power and complication of *Virechan* one should avoid in Child unless necessary. In childhood clinical practice *Basti* will have very better results and act as *Amrut* in child.

CONCLUSION

Panchakarma acts as preventive as well as curative measure and improves the body immunity thus helps to maintain good mental and physical health status through detoxification and rejuvenation. *Panchakarma* therapy can be beneficial in children as a comprehensive cure for many diseases because it made the equilibrium of *Dosha* when it is used with precaution and scientific rationale.

REFERENCES

1. Kashyapa Samhita or Vridha Jeevaka Tantra” (Text with English commentary) By Prof. (km.) Sutr stana shodhana Adhyaya by P.V.Tewari, 1st edition Published by Chaukhambha Vishwa Bharathi Varanasi.
2. Upadhyaya Y., Ashtang Hridya Of Vagbhata, Edited with The Vidyotini Hindi Commentary By Kaviraj Atridev Gupta, Sootra Sthana: Dvidividhopkramani-yadyaya; Chapter 14, Varanasi: Choukambha Prakashana; Reprint Edition, 2011; 135.
3. Charaka Samhita, Acharya Vidyadhara Shukla and Ravidatta Tripathi, Chaukambha

- Sanskrit Pratishthan, Delhi, 2007.
4. Vasanta. C. Patil, Principles and Practice of *Pan- chakarma*, Atreya Ayurveda Publication, 2007.
 5. Astanga Hridaya with the commentaries, Sar- vanga-sundara of Arundutta and Ayurveda rasayana of Hemadri; Uttarsthana, 23/24-26; Reprint edition, V.S. 2066 Published by Choukhambha Samskrit series, Va- ranasi.
 6. Tripathi B., Sarangdhara Samhita Of Pandit Sa- rangdharacharya, Purva Khanda; Deepan-pa- chanavykhy adhyaya: Chapter 4, Varanasi: Choukhambha Surbharati Prakashana, Reprint Edition, 2007; 46.
 7. Bhishgacharya S., Kashyapa Samhita Of Vriddha Jivaka Revised By Vatsya, Vidyotini Hindi Commentary, Sootra Sthana; Snehadhyaya: Chapter 22, Varanasi: Choukhamba Sanskrita Sansthan, Reprint Edition, 2012; 16.
 8. Bhishgacharya S., Kashyapa Samhita Of Vriddha Jivaka Revised By Vatsya, Vidyotini Hindi Commentary, Sootra Sthana; Snehadhyaya: Chapter 22, Varanasi: Choukhamba Sanskrita Sansthan, Reprint Edition, 2012; 20.
 9. Shashtri K, Chaturvedi G., Caraka Samhita Of Agnivesa Revised By Caraka And Dridhabala, Vidyotini Hindi Commentary, Sootra Sthana; Langanbrihaniyadhyaya: Chapter 22, Varanasi: Choukhamba Bharati Acadami, Reprint Edition, 2013; 424.
 10. Bhishgacharya S. Kashyapa Samhita Of Vriddha Jivaka Revised By Vatsya, Vidyotini Hindi Commentary, Sootra Sthana; Swedadhyaya: Chapter 23, Varanasi: Choukhamba Sanskrita Sansthan, Reprint Edition, 2012; 26.
 11. Kashyapa Samhita or Vridha Jeevaka Tantra” (Text with English commentary) By Prof. (km.) Sidhi sthana Nasya karma by P. V. Tiwari, 1st edition Published by Chau-khambha Vishwa Bharathi Varanasi.
 12. Shashtri K. And Chaturvedi G., Caraka Samhita Of Ag- nivesa Revised By Caraka And Dridhabala, With Vidy- otini Hindi Commentary, Sootra Sthana; Swedadhyaya: Chapter 14, Varanasi: Choukhamba Bharati Acadami, Reprint Edition, 2013; 290.
 13. Bhishgacharya S., Kashyapa Samhita Of Vriddha Jivaka Revised By Vatsya, With Vidyotini Hindi Commentary, Sootra Sthana; Snehadhyaya: Chapter 22, Varanasi Choukhamba Sanskrita Sansthan, Reprint Edition, 2012, 26.
 14. Sushruta Samhita Sutra sthana 1st part and 2nd part by Kaviraja Dr. Ambikatanaya Datta Shastri; 13th edition Published by ChaukhambhaSamskrithaBhavan, Vara- nasi.
 15. Bhishgacharya S., Kashyapa Samhita Of Vriddha Jivaka Revised By Vatsya, With Vidyotini Hindi Commentary, Siddhi Sthana; Vamanvirechaniyasidhi: Chapter 3, Va-

- ranasi: Choukhamba Sanskrita Sansthan, Reprint Edition, 2012; 154.
16. Shukla V. And Tripathi R., Caraka Samhita Of Agnivesa Revised By Caraka And Drdhabala, With Vaidyamano-rama Hindi Commentary, Siddhi Sthana; Panchkarma-siddhi: Chapter 2, Varanasi: Choukambha Surbharati Prakashana, Reprint Edition, 2013; 889.
 17. Kashyapa Samhita or VridhaJeevaka Tantra” (Text with English commentary) By Prof. (km.) Sidhi sthana Nasya karma by P.V.Tiwari, 1st edition Published by Chau- khambha Vishwa Bharathi Varanasi.
 18. Upadhyaya Y., Ashtang Hridya Of Vagbhata, With Vidyotini Hindi Commentary By Kaviraj Atridev Gupta, Sootra Sthana: Vamanvirechanavidhi; Chapter 18, Varanasi: Choukambha Prakashana, Reprint Edition, 2011; 155.
 19. Prof. Premwati Tiwari Kashyapa Samhita Siddhi Sthana ch. Vamana virechana siddhisthan 3/15 published by Chaukhambha Viswabharti Varanasi, 2005.
 20. Shukla V. And Tripathi R., Caraka Samhita Of Agnivesa Revised By Caraka And Drdhabala, With Vidyotini Hindi Commentary, Siddhi Sthana; Bastisidhi: Chapter 10, Varanasi: Choukambha Surbharati Prakashana, Re- print Edition, 2013; 964.
 21. Kashyapa Samhita or VridhaJeevaka Tantra” (Text with English commentary) By Prof. (km.) Sidhi sthana Nasya karma by P. V. Tewari, 1st edition Published by Chau- khambha Vishwa Bharathi Varanasi, 135.
 22. Shrinidhi Acharya: Panchakarma in pediatrics. AAMJ, 2016; 5: 948 – 952.
 23. KashyapaSamhita or VridhaJeevakaTantra” sutra stana snehana, swedana, vamana, virechana adhyaya (Text with English commentary) By Prof. (km.) P.V.Tewari, 1st edition Published by Chaukhambha Vishwa Bharathi Varanasi.



REVIEW ARTICLE

A Literary Review of Paapkarm / Sinful Deeds with Special Reference to Ayurveda

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Abstract: Immoral acts conducted by humans are considered to be Paapkarma / Sinful deeds). Pradhnyaparadh causes Paapkarma. Paapkarma is said to be a Adrushtahetu for various disorders. If human beings conduct is unrighteous, it affects the environment. This leads to seasonal disturbances which causes the deformation of medicine, water and air, and causes various diseases. It spreads negativity in the environment which has a harmful impact on human body. This is an example of 'Lok Purush Samya Siddhant'. Paapkarma or sinful deeds lead to reduction of immunity, increase in diseases and shortening of average life expectancy. To avoid this, it is necessary to understand Paapkarma which is described in Ayurveda. Satvavajayachikitsa is the main chikitsa to prevent Paapkarma as well as to cure diseases occurred by it. This article provides information and solution about Paapkarma.

Keywords: Paapkarma, Pradhnyaparadh, Satvavajayachikitsa.

Article Received: 22 Jan. 2021

Revised: 11 Feb. 2021

Accepted: 24 Feb. 2021

Introduction

According to Acharya Sushrut, a person is called a healthy person or Swastha in whom dos has must be in equilibrium, Agni must be in a balanced state, Dhatu-Malamust work in a normal state, the Indriya (sensory and motor organs), mind and Atma must be in a pleasant state [1] It is essential to protect health for staying healthy which is the first purpose of Ayurveda. There are many measures described in Ayurveda for the protection of health as well as to cure the diseases when they occurred.

For Example

- To follow Dincharya (Daily regimen)
- To follow Rutucharya (Seasonal Regimen)
- To follow Achar Rasayan

- To follow Rasayanchikitsa
- To follow Sadvrutta
- To follow Aahar vidhi vidhan
- Panchakarma chikitsa (Yuktivavyapashraychikitsa)
- Daivavyapashraychikitsa etc.

While describing the Dincharya, Acharya Vagbhata has mentioned ten Paapkarma (Immoral Acts or sinful deeds) occurred by the body, speech and mind. These Paapkarma are troublesome. Therefore, it is said that they should be renounced from body, speech and mind [2]. Actions that are against Dharma are called Adharma. Dharma produces virtue and Adharma produces sins. Both are related to body, speech and mind [3].

Undesirable deeds cause Paapkarma. Therefore, intellect and thoughts are also corrupted. As a result, bad deeds and various ailments also arise. While mentioning Dharaniya Vega, Acharya Charak says that, one desirous of his wellbeing during his lifetime and after should suppress urges relating to rashness and evil deeds mentally, orally and physically [4].

The threefold alternative of Karma (i.e. Ayog, Atiyog and mithyayog) is called Pradhnyaparadh (Intellectual error) [5]. Dashvidha Paapkarma described by Acharya Vagbhata and wrong utilisation with regards to body, mind and speech (i.e. Mithyayog of body, mind and speech) described by Acharya Charak seems to be similar. At present, the entire world is living under the threat of Covid-19 pandemic. This situation is emerging and spreading due to Pradhnyaparadh.

To eradicate it, one has to follow the code of conduct along with medical plans mentioned in Ayurveda. Pradhnyaparadh is the root cause of sharirik, manasik and agantuj disorders. Therefore, it is necessary to study Pradhnyaparadh, Paapkarma and the line of treatment for diseases occurred due to them.

Aim

To review Paapkarma from Ayurvedic samhitas.

Material and Methods

- Charak, Sushrut and Vagbhat Samhitas have been reviewed.
- Online references have been reviewed.

Review of Literature

Review of Paap/Paapkarma

Etymology (Nirukti)

पातिरक्षति अस्मादात्मानमिति (इत्यमरः)

Sin is what we want to protect ourselves from. Paapakarma means behaviour that produces evil karma, action that results in misery, conduct that is harmful to the individual and society. Misconduct, iniquity means Paapkarma (sinful deeds). The Karma that degrades spiritual and social values as well as destroys economic and natural resources is Paap/ sinful Karma.

A person who commits in is called a Sinner or a criminal. Just as it is also a sin to do irresponsible deeds, it is also a sin not to do obligatory deeds [6].

Synonyms (Paryaya)

पडकम्, पाप्मा, किल्बिषम्, कलुषम्, दुष्कृतम् (इत्यमरः)

पातकम्, पापकम्, शल्यम् (शब्दरत्नावली)

Acharya Vagbhata has described ten *Paapkarma*.

हिंसास्तेयान्यथाकामं पैशुन्यं परुषानृते॥

सम्भिन्नालापं व्यापादमभिध्यां दृग्विपर्ययम्॥

पापं कर्मेति दशधा कायवाङ्मनसैस्त्यजेत्॥A.H.s.a.2

21,22 ; A.S.s.a.3/54

Hinsa, Steya, Anyathakama, Paishunya, Parush, Anrut, Sambhinnalap, Vyapad, Abhidhya and Drukviparyay are the ten Paapkarma. One should avoid these physically, orally and mentally. Acharya Arundatta in his 'Sarvanga Sundara' commentary mentioned that, out of ten Paapkarma Hinsa, Steya and Anyathakama are Kayik Paapkarma (physical sinful deeds) Paishunya, Parush, Anrut, Sambhinnalap are Vachik Paapkarma (sinful deeds by speech), Vyapad, Abhidhya and Drukviparyaya are Manasik Paapkarma (sinful deeds by mind) [7]. Acharya Gangadhar Roy in his 'Jalpakaalpataru' commentary also mentioned Vachik, Kayik and Manasik Paapkarma [8]. References of Paapkarma are also found in some ancient texts.

कायेनत्रिविधं कर्मवाचाचपिचतुर्विधम्॥

मनसात्रिविधं चैव दशकर्मपथांत्यजेत्॥

ये पापानि न कुर्वन्ति मनोवाक्कर्मबुद्धिभिः॥

ते तपन्ति महात्मानो न शरीरस्य शोषणम्॥

E. g., in Mahabharat Explanation about Dashvidha Paapkarma is stated [9].

Hinsa

It means violence, causing injury to others, killing, hurting or torturing animals, and human beings against the law, hurting others through body, speech and mind.

Steya

It means stealing, robbing, taking or abducting another's substances.

Anyathakam

It means unlawful sex activity. Desire of perceiving objects of senses by improper way is also anyathakam.

Paishunya vachan

It means to slander another person or to say bad things about another person.

Parushavachan

It means to speak harsh or unpleasant word.

Anrut vachan

Lying is anrut Vachan.

Sambhinnalap

It means irrelevant, inadequate speech or speaking at improper time.

Vyapad

Thinking of someone's evil is Vyapad.

Abhidhya

It means not tolerating the good things of others or wishing to grab money etc. of others.

Dhrukviparyay

It means non-belief in the Aptavakya or non-belief in principles stated in the treaties.

Table 1: Meaning of all Paap Karma by some commentators

S.N.	Name of paap karma	Arundatta	Hemadri	Indu	Chakrapani	Dalhan	Gangadharai
1	hinsa	हिंसा- प्राण्युपघात [10]	हिंसा- प्राणिवधः [11]	प्राणातिपातः [12]	विधिरहिताप्राणिपीडा [13]	--	--
2	steya	स्तेयचौर्यम् [10]	स्तेयचौर्यम् [11]	परद्रव्यापहारः [12]	परद्रव्यग्रहणम् [13]	--	--
3	anyat haka m	अन्यथाकामोनिषिद्ध कामसेवा/पशुस्त्रीगुरु दारगमनादि [10]	अन्यथाकामोऽन्या गमनम् [11]	अगम्यागमनमति [12]	स्त्रीभोगः परस्त्रीभोगः [13]	--	--
4	paish unya vachan	पैशुन्यं परेषां भेदकृदवचनम् [10]	पैशुन्यं परस्याऽप्रत्यक्षतद्वेषकिर्तनम् [11]	परेषां भेदकृदवचनम् [12]	सूचकम् – परानिष्टजनकाभिधायकम् [14]	पैशुन्यं सूचकता, [16] पैशुन्यं सूचकता, दौर्जन्यमितियावत् [17]	सूचकस्यातिशयेन परेषामनिष्टजनकाभिधायकस्य वाक्यस्य [23] सूचकम्- खलोकित [24]
5	parush vachan	परुषममृदुवचनम् [10]	पैशुन्यं परस्याऽप्रत्यक्षतद्वेषकिर्तनम्। प्रत्यक्षंतु परुषम् [11]	परुषवचनम् [12]	परोद्वेजकं वचनम् [14]	उद्वेजनं परुषवचनैः [18] परुषः कर्कशः [19] परुषवाक्यकर्कशवचनम् [20]	परुषस्य परद्वेजकस्य कर्कशात्मकस्य वाक्यस्य [25] परुषवचनं कर्कशोक्तिः [26]
6	anrut vachan	अनृतसत्यवचनम् [10]	अनृतमसत्यम् [11]	असत्यवचनम् [12]	अपार्थक्यम् [14]	असत्यम् [21]	मिथ्यात्मकस्य वाक्यस्य [27]
7	sambhinnalap	सम्भिन्नालापः सम्बद्धप्रलपनम् [10]	सम्भिन्नालापः सत्प्रलापः [11]	असम्बद्धप्रलापः [12]	अकालयुक्तमप्रशस्तावागतम् [14]	--	अकालवचनं यस्मिन्काले यद्वक्तव्यं तन्नोक्त्वा तदितरकाले वचनम्। कलहवचनं स्फूर्तम्। अप्रियवचनं कटुकितः। अबद्धवचनं सम्बन्धवचनम् [28]
8	vyapad	व्यापादः प्राण्युपघातचिन्ता [10]	व्यापादः परानिष्टचिन्तनम् [11]	व्यापादः सत्त्वविद्वेष [12]	--	--	द्वेषो वैरं परापकारं मनः प्रवृत्तिः [29]
9	abhid	अभिध्यापरगुणादयस	अभिध्यापरस्वापहर	परस्वापहरच्छा [12]	मनसा पराभिद्रोहचि	ईर्ष्यापरस	परस्वविषयकस्पृ

	hya	हिष्णुताविषयस्पृहावा [10]	जेच्छा [11]		न्तनं,यदिवापरद्रव्य विषयेस्पृहा [15] समानेद्रव्येपरसम्बन्धप्रतिषेधेच्छाई ष्या ¹⁵	म्पत्तावस हिष्णुता [22]	हायाश्चवेगानित्य न्वयः [30]
10	drukvi paryaya	दृग्विपर्ययंशास्त्रदृष्टि वैपरित्यनास्तिकत्वा दि [10]	दृग्विपर्ययःआप्तवा क्येष्वप्रमाणबुद्धिः [11]	दृक्शब्देनाप्तदृष्टोऽर्थ उच्यते।मिथ्यादृष्टिश्चादृ ग्विपर्ययःशास्त्रदृष्टिवैप रीत्यम्नास्तिकत्वमिति यावत् [12]	--	--	मिथ्यादर्शनास्ति क्यबुद्धिः [31]

Review of Dharaniya Vega (Suppressible Urges)

Acharya Charak has described Dharaniya Vega in SutrasthanaAdhyay 7/26. One desirous of his wellbeing during his lifetime and after, should suppress urges relating to rashness and evil deeds mentally, orally and physically.

Manasik Dharaniya Vega (Suppressible Urges Related to Mind)

A wise person should refrain from satisfying the urges relating to greed, grief, fear, vanity, shamelessness, jealousy, too much of attachment and malice [32].

Vachik Dharaniya Vega (Suppressible Urges Related to Speech)

One should also refrain from letting loose the urges of speaking extremely harsh words,back-biting, lying and use of untimely words [33].

Kayik Dharniya Vega (Suppressible Urges Related to Body)

Violence to others whatsoever, urges related to such physical actions including adultery, theft and persecution are to be restrained [34]. The physical restraint prescribed in the present verse also includes such careless insulting acts like stretching the legs before superiors, etc [35]. Acharya Vagbhata has stated Dharniyavega in Sutrasthan Adhyay 4. For the wellbeing and happiness in both the worlds (Ihalok- in this life and paraloka-life in the other world) one should always control the senses(mind and the five sense organs) and also should suppress the urges like greed, jealousy, hatred, envy, anger etc [36].

Review of Karma

Vocal, mental and physical action is the Karma. Acharya Charak has described

excessive utilisation (Atiyog), non-utilisation (Ayog) and wrong utilisation (Mithyayog) of Karma [37]. Suppression of natural urges, their artificial manifestation, unbalanced slipping, falling and posture, excessive itching etc. of the body, bodily assault, excessive massage, excessive holding of breath and exposing oneself to excessive torture are the examples of wrong utilisation of the body [37]. Examples of wrong utilisation of the body with regard to speech are back-biting, lying, useless quarrels, unpleasant utterance, irrelevant unfavourable talks and harsh talk [37].

Wrong utilisation relating to mind are fear, anxiety, anger, greed, confusion, vanity, envy and misconceptions [37]. Apart from the non-utilisation and excessive utilisation of speech, mind and body, such as their actions which are not conducive to the maintenance of good health in this life nor even to happiness in the life beyond are all to be treated as cases of wrong utilisation. This shows those sinful deeds/Paapkarma are also the causes of diseases. Such sinful deeds are products of wrong utilisation of speech, mind and body and are in their turn causes of diseases [38].

Such wretched human beings, who are of sinful conduct, speech and mind, back-biters, those who are quarrelsome by nature, those who indulge in sarcastic remarks about others, the greedy, those who envy the prosperity of others, the cruel, those who indulge in defaming others, the fickle minded, those who serve the enemy, those devoid of compassion and those who do not follow the virtuous course of life are to be boycotted [39].The virtuous one, who is free from all vices relating to mind, speech and physical actions, is indeed happy and he alone enjoys the fruits of virtue, wealth and desire [40].

Review of Pradhnyaparadh: (Intellectual Error)

The unwholesome action performed by one whose intellect, restraint and memory are deranged is known as Pradhnyaparadh. It vitiates all the doshas Sharirik as well as Manasik [41]. Three fold actions i.e. relating to speech, mind and body further divided into three categories in the form of non-utilisation, excessive utilisation and wrong utilisation constitute intellectual errors. (Pradhnyaparadh).

Forcible stimulation of natural urges and suppression of manifested ones, exhibition of undue strength, over indulgence in sexual act, negligence of the time of treatment, initiation of action in improper time (i.e. non-utilisation, excessive utilisation and impaired utilisation of therapies), loss of modesty and good conduct, disrespect for respectable ones, enjoyment of harmful objects, resorting to the factors which are responsible for the causation of Madness, moments without any regard for temporal or local propriety, friendship with persons of bad actions, avoidance of the healthy activities (described in su.10/19-28), malice, vanity, fear anger, greed, ignorance, intoxication and be wild erment or bad actions arising out of any of them or other physical evil acts arising out of rajas and tamas constitute intellectual blasphemy/error leading to the causation of various ailments [42].

Intellectual pseudo- conception and improper conduct represent intellectual blasphemy / error. All this falls under the purview of the mind [43].

The sense faculties (Indriya) are capable of perceiving their respective objects (Arth) only when they are motivated by the mind [44].

Principle of Psycho Pathogenesis

The sense faculties get vitiated due to the excessive utilisation, non-utilisation, and wrong utilisation of their respective objects. The vitiated sense faculties, in their turn also vitiate the mind. However, they come to normalcy if the objects are properly utilised and then the perception of various objects are properly regulated [45]. Thinking constitutes the object of the mind. So, the proper utilisation or excessive, on and wrong utilisation of mind or mental faculty is responsible for normal or abnormal mental conditions respectively [46].

It is essential to have a healthy mind for a healthy and happy life. For that Sharirik and Manasik both doshas should be in balanced state. Balanced manasik doshas means backing of raja and tama and increase of satvaguna. In short vitiation of Manasdosha causes Kama, Krodh, Lobha, Irsha etc. which result into Paapkarma.

Review of Disorders Caused By Non-Suppression of Dharaniya Vega/Paapkarma

In Charak Samhita, Acharya Charak described Kayik, Vachik and Manasikdharaniya Vega. He didn't describe ill effects caused by non-suppression of dharaniya Vega in detail. After referring the Samhita, it is observed that Dharniya Vega is the hetus for various disorders.

Table 2: Showing Dharniya Vega and disorders caused by non-suppression of Dharaniya Vega/ Paapkarma

S. n.	Dharniya Vega	Disorders caused by non-suppression of Dharaniya Vega/ Paapkarma
1	Bhaya (Fear)	Raktadushti, Udakvahsrotodushti, [47], pittajvikar, Swedovahsrotodushti [48], Vatavyadhi, Unmad, [49] Apsmar, Hrudrog, Klaibya, Trushna, Pandu, Shukra&Ojakshay [50], VatajChhardi, [51] Urustambha, Arochak, Atisar [52] etc.
2	Chinta (Anxiety)	Rasvahsrotodushti [53], Klaibya, Hrudrog, Vatvyadhi, Pandu, [54] Stanyarog [55], Ojakshay etc.
3	Krodh (Anger)	Raktadushti, pittajvikar, Swedovahsrotodushti, Pratishyay, Vatavyadhi, [56] Trushna [57], Twak dosh, Karshya, Vatarakta, Pandu, PittajKaas, Atisar, Shukra-Ojakshay, Stanyarog, Arochak [58] etc.
4	Shok (Grief)	Raktadushti, Swedovahsrotodushti, vaataj and pittajvikar, VatajGulma [59], Apsmar, Vatavyadhi, Trushna, Pandu, VatajChhardi, Shukra-Ojakshay, Arochak, Karshya, VatajPrameh, VatajJwar [60], Trushna, Atisar, Mudhagarbha [61], Tandra [62], etc.
5	Lobha (Greed)	Raktadushti, Mansasheithilya, Shukra-, Ojakshay, Arochak, Unmad, Apsmar [63], Aampradoshak [64], tridoshajvikar [65], etc.
6	Irsha (Jealousy)	Vatajvikar, Shukra-Ojakshay, Atisar, Klaibya [66], etc.
7	Maan (Vanity)	Klaibya, vaat- pittajvikar
8	Dvesha (Hatred)	DwishtharthajChhardi [67], vaatajvikar

9	Vadha(Hurt)	Agantuj Shotha [68],Aganuj Vrana [69],Mudhagarbha, Arsha
10	Anyathakaam (Unlawful sex activity)	Raktadushti, Yonivyapad [70],tridoshajvikar,Guhyarog [71], Shukravahsrotodushti [72],Kushtha,Pratishyay,Shwas,Kaas,Hikka,Udavart [73],Urahkshat , Pratishyay,Arsha,Shukrashmari,Mudhagarbha
11	Mithyacharan/Paapkarma (Sinful deeds)	Kushtha [74], Udar [75], Prameh,Shvitra
12	Sahas (Rash behavior)	Rajyakshma [76],urakhshat [77], vaatajvikar

Review of Paapkarma Chikitsa

Pradhnyaparadhis the main cause of Paapkarma/ Sinful deeds. The actions created by thepradhnyaparadh aggravate the shaririktridosha as well as Manasik raja and tamadosha to create sharirikandmanasikvyadhies respectively.

Preventive and Curative Measures for the Paapkarma are as Follows

Nidan Parivarjan (Avoidance of Causative Factors)

Paapkarma should be avoided by body, speech and mind. It means pradhnyaparadh should be avoided. For that one should follow the principles mentioned in the texts regarding Dincharya, Rutucharya, Aahar-Vihar, Aachar rasayan, Sadvritta, Yoga, Satvavajay chikitsa, Daivavyapashray-Yuktivyapashraychikitsa, Dharniya vega.

These also help to prevent from Paapkarma and to cure the diseases occurred due to them. Mental disorders occurred if one become a victim of impulses like greed, grief, fear, anger, jealousy etc. To prevent and to protect mental health one has to follow the above principles regarding Dincharya etc.

To Follow Sadvritta

Sad means 'good' and Vritta means 'behaviour' or 'conduct'. Sadvrittameans good behaviour or code of right behaviour.Sadvritta mentioned in Ayurveda classical texts highlights the importance of socio-cultural factors in the maintenance of mental and social health [78].

To maintain health and to prevent disease one should follow Sadvritta. Asatmendriyarthanyog and Pradhnyaparadh cause various physical and mental diseases and also some sinful deeds.

To avoid these, in classical textsSadvritta is mentioned. In Charak Samhita Sutrasthana Adhyay 8 Acharya Charak stated many types of Sadvritta e.g. sharirik, mansik, Samajik, Dharmik, vyavaharik Sadvrittaetc. Sushrutacharya explained Sadvritta in

chikitsa sthanaadhyay24. In Dincharya adhyay of sutrasthan, Acharya Vagbhata described Sadvritta. All the activities of the human beings are meant for happiness only. Such happiness will not be happened without Dharma i.e. right conduct. Therefore, one must always pursue right conduct [79].

To Follow Achar Rasayana

Acharammeans the ethical and moral activities described in Shastra. Achar Rasayan is the means to acquire rasayan effect through social and personal conducts [80]. It provides excellent mental, physical, social and spiritual health without having any medicine. Acharya Charak has mentioned it in Chikitsa Sthana adhyay1.

To Follow Satvavajayachikitsa

The word 'Satva' refers to Mana i.e. mind and 'Avajay'refers to conquering or win over [54]Hence Satvavajay means to have control over the mind and thus abstaining from things that are not good for the health. Satvavajaychikitsa not only prevents the impairments of Dhee, Dhriti and Smriti but also brings them back to the normal state, playing a significant role in the maintenance of harmonious state between these three factors ultimately leading to happy, healthy state of individual [81].

Satvavajaychikitsa specially described by Acharya Charak for the Manas Vikar. The best approaches to achieve the goal of satvavajayis by developing the Jnana, Vigyana, Dhairya, Smriti and Samadhi (meditation). Acharya Charak and Vagbhata stated that manasikdoshacan be reconciled only by taking recourse to spiritual and scriptural knowledge, patience, memory and meditation [82-83].

Satvavajayachikitsa (psychotherapy) is aimed at regaining the normal mental activity by conducting practice of Yama, Niyam, Asan and Pranayam. These remedies ensure free circulation of PranVayu (oxygen) throughout the body resulting in removal of

blockage of channels of circulation linked to mind [84].

Yuktivyapashraychikitsa

If physical ailments occur by sinful deeds, then Yuktivyapashraychikitsa should do accordingly. Shirodhara, shirobasti help to lower down stress and strain of the person.

Daivavyapashraychikitsa

Prayachitta is a part of Daivavyapashraychikitsa. It means cleansing of thoughts through chanting of divine mantras, fasting, and manidharan etc. Daivavyapashraya methods create confidence and remove the fear and negative thoughts. It works at the level of mind and thereby influences the body [85].

Yogabhyas

Happiness and miseries are felt due to the contact of soul, the sense organs, mind and object of senses. Both these types of sensations disappear when the mind is concentrated and contained in the soul and the supernatural power in the mind and the body is attained. This state is known as Yoga [86]. Those who are practicing yoga, attained eight supernatural powers (entering others body, thought reading, doing things at will, supernatural vision, supernatural audition, miraculous memory, uncommon brilliance and invisibility when so desired).

All these are achieved through the purity of the mind that means free from rajas and tamas [87]. According to Patanjali yoga Sutra, yoga is the restraint of the mind. To remain free from physical and mental ailments one should follow Ashtang yoga i.e., Yam, Niyam, Asan, Pranayam, Pratyahar, Dharna, Dhyana and Samadhi described in Patanjali yoga Sutra.

Discussion

Hinsa

Physical, verbal and mental misconduct is Hinsa (violence). According to Acharya Arundattahinsa comes under Kayikpaapkarmaphysical (sinful deeds). There are different types of violence. It can include bullying, child maltreatment, community violence, domestic violence, sexual violence, psychological violence etc. To hurt someone verbally is also violence and to have bad thoughts about someone in one's mind is also considered as violence.

Suicidal tendencies increase due to stress, strain, frustration.

It is a kind of Hinsa. Violent tendency is based on mind filled with greed, anger, jealousy, frustration, stress-strain etc. This is why violence is on the rise all over the world and it arises under the influence of raja and tamaguna of mind.

Due to anger Pitta get aggravated and many pittajvyadhisare also occur. Non-violence i.e. Ahinsa is possible under the influence of satvaguna. One should adopt the path of nonviolence so the feelings of greed, anger and hatred etc. do not arise. Non-violence means not committing violence, not hurting any living being physically, mentally and verbally. Non-violence is the supreme religion.

Dharma means Punya (good deeds). Only by good deeds keep the mind remain pure. Ahinsa is mentioned in Acharrasayan by Acharya Charak [88]. Adopting ahinsa brings benefits of rasayana. Even though Hinsa is a sinful deed, it is not so in all cases. In the treatment of many diseases, Ayurvedic texts have described the use of Mansa ras, Mansa. E.g. Rajyakshma, Raktapitta [89]. As per the disease, Ayurveda stated the benefits and drawbacks of consuming meat.

It does not state violence as its result. When a person cannot survive without the use of meat and is committing violence for the same then he should do whatever it takes to protect his life. According to the Vedic verse "सर्वत्र आत्मानं गोपायीतम्" | if violence is conducted in order to protect one's life, it is not considered asin. However, if violence is conducted despite availability of other means of survival, it is considered a sin [90].

Although violence in Ayurveda is directed towards health (life protection) and disease alleviation, it is still wrong. According to Acharya Chakrapani, the rituals described in Ayurveda do not only teach the rituals of Dharma Sadhana but also the rituals of Arogya Sadhana. Therefore the principle of Ayurveda is that all creatures should be friendly when there is no special purpose. To give another example, the Killing of terrorists or people with evil tendencies, enemies of the country is not violence. It cannot be a sin as it protects the country from undesirable things [91].

These should be considered as good deeds. Satvavajayachikitsa should be practiced for becoming free from anger, greed, jealousy etc. Yama is a part of Ashtang yoga [92]. It means detachment, restraint of body and mind. In order to increase Satvaguna in the mind, Yama describes us how to deal with society and other creatures. Ahinsa comes under Yama.

Following this keeps one away from diseases. Anger is the root cause of hinsa and various pittaj diseases. So to avoid this, Ahimsa should be practiced.

Steya

Steya means to steal. To take thing which belongs to someone else and is not one's own through mind, speech and body is known as stealing. This Paapkarma is committed out of jealousy and greed. Today looting/ stealing is rampant in our society. We came across many thefts like theft of money, theft of various materials, theft of organs, theft of literature etc. A thing earned in an unjust manner is theft.

This not only lowers a person's mental state but also creates fear in his mind which can lead to many mental disorders. Therefore one should follow Asteya. Asteya means no stealing. Instead of stealing things, make a sincere effort to earn them. To stay away from Steya, one should follow satvavajayachikitsa (psychological therapy) which is restraint of mind from the unwholesome objects and follow the principles of Sadvruttamentioned in Ayurveda texts.

Anyathakam

Due to Intense libido, sometimes unlawful sex activity happens. Its side effects are seen on body as well as on mind. It causes illusion, mental fatigue, and saptadhatukshayandindriyakshay.

Nowadays this type of sexual activity is becoming more and more prevalent in the world which has led to increased incidence of incurable diseases like AIDS as well as other mental disorders, diseases of Vata.

This way Anyathakam is a Paapkarma. Brahmacharya must be practiced to avoid Anyathakam. Brahmacharya means restraint of the senses and acceptance of good feelings [93]. Adherence to proper brahmacharya brings memory, intellect,

health, strength, protection of Shukra Dhatu, symptoms of aging are slowed down and immunity increases.

The other meaning of Anyathakam is desire of perceiving objects of senses by improper way. It affects one's mind and causes many mental and physical ailments. Wrong utilisation of all sense organs i.e. indriyascauses disorders of the senses, e.g. Visual impairment, deafness, indigestion, acidity etc. In such cases if mind is controlled by Satvavajaychikitsa, the senses can be controlled. Following of Sadvrutta also helps to control senses.

Paishunya Vachan

Paishunya means to slander another person or to say bad things about another person related to him due to jealousy, hatred, fear, and feeling of insecurity. This creates distance between individuals. The relationship between them deteriorates. Slandering words are used in politics. Divorce rate in society seems to be on the rise often because of this type of use of Paishunyavachan.

So this is a kind of sin/Paapkarma. One should avoid such words for one's own momentary pleasure. Bitter words are like weapons. Just as a weapon strikes the body and harms it, in the same way the mind is wounded by bitter words. So avoid bitter language. Control the mind by following Sadvrutta and Satvavajayachikitsa.

Parush Vachan

Due to anger, hatred, jealousy, ego etc. one uses harsh or unpleasant word to hurt someone. This creates dissatisfaction in individuals. Sharirik and manasikdoshas get vitiated and cause various diseases. The words one speaks to others can leave a huge impact and create a lasting memory either good or bad. The Parushvachan creates bad lasting memory. So always be careful when speaking or handling the words. Parushvachanis the wrong utilisation of shrotrendriya. Thus it is a Paapkarm. So avoid it by following Sadvrutta.

Anrut Vachan

Lying is Anrutvachan. If one is constantly lying for one's own interest then it becomes a habit to lie. One lie creates a chain of many lies. Lies are used because of false knowledge as well as due to anger and hatred despite

having proper knowledge. Untruth are also spoken because of the feelings of desire of having something which is not possible, anger and greed that arise in the mind.

Today, we often see examples of people lying to achieve things they can't achieve on their own. This causes injustice to other people. So lying is a Paapkarma. By speaking untruth,

raja, tamadosha of mana become strong and Satvaguna decreases. Due to false knowledge, anger and hatred only when the said word is free from raja-tama and the satvaguna flourishes, there is proper knowledge. Speaking the truth purifies the mind. Truth is the worshipper of Dharma, so it is acceptable but untruth is the worshipper of Adharma, so it is unacceptable.

Truth alone wins, not untruth. The one who is truthful gets the benefits of Rasayanchikitsa. According to Acharya Chakrapani, telling a lie is prohibited only when this causes some harm to otherwise if one can save the life of another living being by telling a lie, this cannot be treated as a sinful deed [94].

Sambhinnalap

It means irrelevant speech or speaking at inappropriate time. Speaking irrelevantly and at inappropriate time does not achieve the desired work of the person, instead it is a loss. Others also suffer. If there is such a constant irrelevant talk, Udanvayu gets vitiated and does not work properly. Tendency to speak is not proper, produces weakness, immunity decreases and various physical and mental disorders occur.

E.g. Urdhwajatrugatvyadhi, Unmad, Apsmar. Sambhinnalap can occur due to stress and strain. To become free from stress and strain, activities should be planned to increase satvaguna and quality of life. These include observance of silence, God providence, chanting of Mantra etc. By adopting these methods mind becomes pure, while the voice also becomes pure. One must speak at appropriate time with descent words and in brief true and in a pleasing manner.

Vyapad

Comparing and competing with the person cause jealousy and temptation. As a result

enmity arises and out of it undesirable thoughts of others are created. This is called Vyapad. Feelings of insecurity also lead to criticism out of which again undesirable thoughts of others are created.

If jealousy, attachment, prevails, it has an adverse effect on the mind. Vitiating of raja, tamaguna occurs. So avoid comparing yourself to others. Accompany a good person. Follow the code of conduct. Definitely mind will free from jealousy, Attachment etc.

Abhidhya

Intolerance of another's virtues due to jealousy, greed, hatred etc. or the desire to seize another's property means Abhidhya. This is happening due to sensual greed. So it is important to have control on mind. This is possible by practising Sadvrutta, Acharrasayan and by refraining dharniyavega.

Drukviparyay

It means non-belief in the Aptavakya or non-belief in the principles stated in the classical texts by respectable Acharya. This happens due to ego, hatred, thoughtlessness etc. Principles of Ayurveda are eternal. To fulfil the purpose of Ayurveda, it is necessary to have faith on these principles. One should follow the principles stated by Acharya regarding dinacharya, ritucharya, Roganutpadan, Annapanvidhi in the Ayurveda classic texts. It will promote physical as well as mental health and prevent physical and mental disorders.

Otherwise, if drukviparyaya is observed then many Lifestyle disorders like Prameh, Sthaulya, Unmad, Apsmar, Twakvicar will occur. So, ego, hatred, thoughtlessness etc. should be abandoned from the mind by practicing the principles stated by authoritative persons. These all Paapkarma are Adharma. It affects the environment causing seasonal disturbances. Due to this there will be deformation of water, medicine, air. These cause various diseases or pandemic condition.

Conclusion

Evil deeds by body, mind and speech are the Paapkarma/sinful deeds. The root cause of Paapkarma is pradhnyaparadh. It causes vitiating of Sharirik and Manasikdoshas

which are responsible for doing Paapkarma. It can be prevented and cured by adopting following measures.

- Nidanparivarjan
- Refrain from suppressible natural urges
- Sadvrutta and Achar Rasayan
- Satvavajayachikitsa
- Daiva and Yuktivyapashraya chikitsa
- Aptopdesha
- Ashtang yoga

Doing so, leads to detachment from sinful deeds, attains health and senses are conquered through restraint of mind.

References

1. Sushruta, Kaviraj Ambika Datta Shastri, Sushruta samhita (2005) Sutrasthana Adhyaya 15, Shloka 48, Chaukhambha Sanskrit Sansthan Varanasi, Reprint Edition, 64.
2. Vagbhata, Dr. R. Vidyanath (2013) Ashtang Hridaya of Vagbhaa, Sutrasthana Adhyaya 2, Shloka 21-22, Chaukhambha Surbharati Prakashan, Varanasi, First Edition, 37.
3. Acharya Dalhan, Vaidya Jadavji Trikamji Acharya, Nibandhsangraha Tika, Sushrut samhita, Sutrasthana Adhyaya 6, Shloka 19, Chaukhambha Sanskrit Sansthan Varanasi, 28.
4. Caraka, RK Sharma, Bhagwan Dash, Carak samhita (2009) Sutrasthan Adhyaya 7, Shloka no.26, Chaukhambha Sanskrit Series office, Varanasi, Reprint, 150.
5. Caraka, RK Sharma, Bhagwan Dash, Carak samhita (2009) Sutrasthan Adhyaya 11, Shloka, 41, Chaukhambha Sanskrit Series office, Varanasi, Reprint, 225 hi.m. Wiktionary.Org/wiki (Shabda sagar).
6. Acharya Arundatta, Dr. Anna Kunte, Krishna Shastri Navare, Pandit Hari Paradkara, Ashtang Hridaya, Sarvang Sunder Tita, Sutrasthana Adhyaya 2, Shloka 21-22, Chaukhambha Orientaliya Varanasi, 29.
7. Shri. Gangadhar, Kaviraj Shree Narendranath Sengupta, Kaviraj Shree Balaichandra Sengupta, Carak samhita (2002) Sutrashana Adhyaya 11, Shloka 19, Chaukhambha publishers Varanasi, Second Edition, 561 Mahabharat Anushasan Parva Adhyaya 13.
8. Acharya Arundatta, Dr. Anna Kunte, Krishna Shastri Navare, Pandit Hari Paradkara, Ashtang Hridaya, Sarvang Sunder Tita, Sutrasthana Adhyaya 2, Shloka, 21-22, Chaukhambha Orientaliya Varanasi, 29.
9. Acharya Hemadri, Dr. Anna Kunte, Krishna Shastri Navare, Pandit Hari Paradkara, Ashtang Hridaya, Ayurved Rasayan, Sutrasthana Adhyaya 2, Shloka, 21-22, Chaukhambha Orientaliya Varanasi, 29.
10. Acharya Indu, Dr. Jyotirmitra Acharya, Ashtang Hridaya (2016) Shashilekha commentary, Sutrasthana Adhyaya 3, Shloka, 55-56, Chaukhambha Sanskrit Series office Varanasi, Reprint, 24.
11. Acharya Chakrapani, Vaidya Jadavji Trikamji Acharya, Carak samhita, Ayurved Dipika Tika, Sutrasthana Adhyaya 7, Shloka 29, Chaukhambha Surbharati Publication Varanasi, 50.
12. Acharya Chakrapani, Vaidya Jadavji Trikamji Acharya, Carak samhita, Ayurved Dipika Tika, Sutrasthana Adhyaya 7, Shloka 28, Chaukhambha Surbharati Publication Varanasi, 50.
13. Acharya Chakrapani, Vaidya Jadavji Trikamji Acharya, Carak samhita, Ayurved Dipika Tika, Sutrasthana Adhyaya 7, Shloka no.27, Chaukhambha Surbharati Publication Varanasi, 50.
14. Acharya Dalhan, Vaidya Jadavji Trikamji Acharya, Nibandhsangraha Tika, Sushrut samhita, Sutrasthana Adhyaya 2, Shloka 6, Chaukhambha Sanskrit Sansthan Varanasi, Reprint, 11.
15. Acharya Dalhan, Vaidya Jadavji Trikamji Acharya, Nibandhsangraha Tika, Sushrut samhita, Chikitsa sthana Adhyaya 24, Shloka 90, Chaukhambha Sanskrit Sansthan Varanasi, Reprint, 491.

16. Acharya Dalhan ,Vaidya Jadavji Trikamji Acharya, Nibandhsangraha Tika, Sushrut samhita (2015) Uttartantra Adhyay 50, Shloka 16, Chaukhambha Sanskrit Sansthan Varanasi, Reprint, 759.
17. Acharya Dalhan ,Vaidya Jadavji Trikamji Acharya, Nibandhsangraha Tika, Sushrut samhita (2015) Uttartantra ,Adhyay 60, Shloka 15, Chaukhambha Sanskrit Sansthan Varanasi, Reprint,795.
18. Acharya Dalhan ,Vaidya Jadavji Trikamji Acharya, Nibandhsangraha Tika, Sushrut samhita (2015) Uttartantra Adhyay 62, Shloka 8, Chaukhambha Sanskrit Sansthan Varanasi, Reprint,803.
19. Acharya Dalhan, Vaidya Jadavji Trikamji Acharya, Nibandhsangraha Tika, Sushrut samhita (2015) Sutrasthana Adhyay 2, Shloka 6, Chaukhambha Sanskrit Sansthan Varanasi, Reprint,11.
20. Acharya Dalhan ,Vaidya Jadavji Trikamji Acharya, Nibandhsangraha Tika, Sushrut samhita (2015) Sutrasthana Adhyay 1, Shloka 25(3), Chaukhambha Sanskrit Sansthan Varanasi, Reprint,6.
21. Shri. Gangadhar,Kaviraj Shree Narendranath Sengupta, Kaviraj Shree Balaichandra Sengupta, Carak samhita (2002) Sutrashana Adhyaya 7, Shloka 17, Chaukhambha publishers Varanasi, Second Edition, 359.
22. Shri. Gangadhar, Kaviraj Shree Narendranath Sengupta, Kaviraj Shree Balaichandra Sengupta, Carak samhita (2002) Sutrashana Adhyaya 11, Shloka 19, Chaukhambha publishers Varanasi, Second Edition ,561.
23. Shri. Gangadhar,Kaviraj Shree Narendranath Sengupta, Kaviraj Shree Balaichandra Sengupta, Carak samhita (2002) Sutrashana Adhyaya 7, Shloka 17, Chaukhambha publishers Varanasi, Second Edition,359.
24. Shri. Gangadhar,Kaviraj Shree Narendranath Sengupta, Kaviraj Shree Balaichandra Sengupta, Carak samhita (2002) Sutrashana Adhyaya 11, Shloka 19, Chaukhambha publishers Varanasi, Second Edition,562.
25. Shri. Gangadhar,Kaviraj Shree Narendranath Sengupta, Kaviraj Shree Balaichandra Sengupta, Carak samhita (2002) Sutrashana Adhyaya 7, Shloka 17, Chaukhambha publishers Varanasi, Second Edition,359.
26. Shri. Gangadhar,Kaviraj Shree Narendranath Sengupta, Kaviraj Shree Balaichandra Sengupta, Carak samhita (2002) Sutrashana Adhyaya 11, Shloka 19, Chaukhambha publishers Varanasi, Second Edition, 561.
27. Shri. Gangadhar,Kaviraj Shree Narendranath Sengupta, Kaviraj Shree Balaichandra Sengupta, Carak samhita (2002) Sutrashana Adhyaya 7, Shloka 17 Chaukhambha publishers Varanasi, Second Edition, 358.
28. Shri. Gangadhar,Kaviraj Shree Narendranath Sengupta, Kaviraj Shree Balaichandra Sengupta, Carak samhita (2002) Sutrashana Adhyaya 7, Shloka 17, Chaukhambha publishers Varanasi, Second Edition, 359.
29. Shri. Gangadhar,Kaviraj Shree Narendranath Sengupta, Kaviraj Shree Balaichandra Sengupta, Carak samhita (2002) Sutrashana Adhyaya 11, Shloka 19, Chaukhambha publishers Varanasi, Second Edition, 562.
30. Caraka, RK Sharma, Bhagwan Dash, Carak samhita (2009) Sutrasthan Adhyaya 7, Shloka 27,Chaukhambha Sanskrit Series office, Varanasi, Reprint, 151.
31. Caraka, RK Sharma, Bhagwan Dash, Carak samhita (2009) Sutrasthan Adhyaya 7, Shloka no.28,Chaukhambha Sanskrit Series office, Varanasi, Reprint, 151.
32. Caraka, RK Sharma, Bhagwan Dash, Carak samhita (2009) Sutrasthan Adhyaya 7, Shloka 29,Chaukhambha Sanskrit Series office, Varanasi, Reprint, 151.
33. Caraka, RK Sharma, Bhagwan Dash, Carak samhita (2009) Sutrasthan Adhyaya 7, Shloka 29, Chakrapani Tika, Chaukhambha Sanskrit Series office, Varanasi, Reprint, 151.
34. Vagbhata, Dr. R Vidyath (2013) Ashtang Hridaya of Vagbhaa, Sutrasthana Adhyaya 4, Shloka 24,Chaukhambha

- Surbharati Prakashan, Varanasi, First Edition, 60.
35. Caraka, RK Sharma, Bhagwan Dash, Carak samhita (2009) Sutrasthan Adhyaya 11, Shloka 39, Chaukhambha Sanskrit Series office, Varanasi, Reprint, 224.
36. Caraka, RK Sharma, Bhagwan Dash, Carak samhita (2009) Sutrasthan Adhyaya 11, Shloka 40, Chakrapani Tika, Chaukhambha Sanskrit Series office, Varanasi, Reprint, 225.
37. Caraka, RK Sharma, Bhagwan Dash, Carak samhita (2009) Sutrasthan Adhyaya 7, Shloka 56-57, Chaukhambha Sanskrit Series office, Varanasi, Reprint, 160.
38. Caraka, RK Sharma, Bhagwan Dash, Carak samhita (2009) Sutrasthan Adhyaya 7, Shloka 30, Chaukhambha Sanskrit Series office, Varanasi, Reprint, 151.
39. Caraka, Acharya Priyavat Sharma, Carak samhita (2010) Sharirsthan Adhyaya 1, Shloka 102, Chaukhambha Orientalia Varanasi, Reprint, 406.
40. Caraka, RK Sharma, Bhagwan Dash, Carak samhita (2009) Sharirsthana Adhyaya 1, Shloka 103-108, Chaukhambha Sanskrit Series office, Varanasi, Reprint, 337.
41. Caraka, RK. Sharma, Bhagwan Dash, Carak samhita (2009) Sharirsthana Adhyaya 1, Shloka 109, Chaukhambha Sanskrit Series office, Varanasi, Reprint, 338.
42. Caraka, RK Sharma, Bhagwan Dash, Carak samhita (2009) Sutrasthan Adhyaya 8, Shloka 7, Chaukhambha Sanskrit Series office, Varanasi, Reprint, 166.
43. Caraka, RK Sharma, Bhagwan Dash, Carak samhita (2009) Sutrasthan Adhyaya 8, Shloka 15, Chakrapani Tika, Chaukhambha Sanskrit Series office, Varanasi, Reprint, 170.
44. Caraka, RK Sharma, Bhagwan Dash, Carak samhita (2009) Sutrasthan Adhyaya 8, Shloka 16, Chaukhambha Sanskrit Series office, Varanasi, Reprint, 151.
45. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Vimansthana Adhyaya 5, Shloka 11, Chowkhamba Krishnadas Academy, Varanasi, 832.
46. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Vimansthana Adhyaya 5, Shloka 22, Chowkhamba Krishnadas Academy, Varanasi, 833.
47. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya 9, Shloka 4, Chowkhamba Krishnadas Academy, Varanasi, 343.
48. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya 8, Shloka 24, Chowkhamba Krishnadas Academy, Varanasi, 314.
49. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya 20, Shloka 7, Chowkhamba Krishnadas Academy, Varanasi, 675.
50. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya 19, Shloka 11, Chowkhamba Krishnadas Academy, Varanasi, 652.
51. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Vimana sthana Adhyaya 5, Shloka 13, Chowkhamba Krishnadas Academy, Varanasi, 832.
52. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya 16, Shloka 9, Chowkhamba Krishnadas Academy, Varanasi, 564.
53. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya 30, Shloka 233, Chowkhamba Krishnadas Academy, Varanasi, 1021.
54. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya

- 28, Shloka 17, Chowkhamba Krishnadas Academy, Varanasi, 913.
55. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Nidan sthana Adhyaya 22, Shloka 4, Chowkhamba Krishnadas Academy, Varanasi, 717.
56. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya 26, Shloka 124, Chowkhamba Krishnadas Academy, Varanasi, 866.
57. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya 5, Shloka 9, Chowkhamba Krishnadas Academy, Varanasi, 225.
58. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Nidan sthana Adhyaya 1, Shloka 19, Chowkhamba Krishnadas Academy, Varanasi, 659.
59. Sushruta, Kaviraj Ambika Datta Shastri, Sushruta samhita (2005) Nidan sthana Adhyaya 8, Shloka 3. Chaukhambha Sanskrit Sansthan Varanasi, Reprint Edition, 259.
60. Caraka, Acharya Siddhinandan Mishra, Vd, Harish Kushwaha (2012) Caraka samhita Second part, Siddhi sthana Adhyaya 9, Shloka 21, Chowkhamba Orientaliya, Varanasi, Reprint, 1073.
61. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Nidan sthana Adhyaya 8, Shloka 4, Chowkhamba Krishnadas Academy, Varanasi, 746.
62. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Vimana sthana Adhyaya 2, Shloka 8, Chowkhamba Krishnadas Academy, Varanasi, 786.
63. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya 1/2, Shloka 3, Chowkhamba Krishnadas Academy, Varanasi, 20.
64. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya 30, Shloka 182, Chowkhamba Krishnadas Academy, Varanasi, 1015.
65. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya 20, Shloka 18, Chowkhamba Krishnadas Academy, Varanasi, 678.
66. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Sutra sthana Adhyaya 18, Shloka 4, Chowkhamba Krishnadas Academy, Varanasi, 370.
67. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya 25, Shloka 7, Chowkhamba Krishnadas Academy, Varanasi, 818.
68. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya 30, Shloka 8, Chowkhamba Krishnadas Academy, Varanasi, 988.
69. Vagbhata, Kaviraj Atrideva Gupta, Ashtang sangrah (2005) Uttar sthana 38, Shloka 2, Chaukhambha Krishnadas Academy Varanasi, Reprint, 329.
70. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Viman sthana Adhyaya 5, Shloka 19, Chowkhamba Krishnadas Academy, Varanasi, 833.
71. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya 26, Shloka 5, Chowkhamba Krishnadas Academy, Varanasi, 839.
72. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya 7, Shloka 8, Chowkhamba Krishnadas Academy, Varanasi, 277.
73. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya 13, Shloka 15, Chowkhamba Krishnadas Academy, Varanasi, 434.
74. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya

- 8, Shloka 1, Chowkhamba Krishnadas Academy, Varanasi, 313.
75. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya 11, Shloka 4-7, Chowkhamba Krishnadas Academy, Varanasi, 387.
76. www.wjpr.net (2019) Ayurvedic Management of Manasik Roga W.S.R. to Achar rasayan, 8:6- 1399.
77. Vagbhata, Dr. R Vidyanath (2013) Ashtang Hridaya of Vagbhaa, Sutrasthana Adhyaya 2, Shloka no. 20 Chaukhamba Surbharati Prakashan, Varanasi, First Edition, 37.
78. www.jbsoweb.com, Achar rasayana: A novel perspective, 2:5-316.
79. www.jaims.in (2016) Concept of Satvavajay chikitsa, 1:1-56
80. Caraka, RK Sharma, Bhagwan Dash, Carak samhita (2009) Sutrasthan Adhyaya 1, Shloka no.58, Chaukhamba Sanskrit Series office, Varanasi, Reprint, 43.
81. Vagbhata, Dr. R Vidyanath, Ashtang Hridaya (2013) Sutrasthana Adhyaya 1, Shloka no. 26, Chaukhamba Surbharati Prakashan, Varanasi, First Edition, 20.
82. www.wjpps.com (2018) Satvavajay and Daivyapashray chikitsa: Boon yo manas vikaras, 7:7-1458.
83. www.wjpps.com (2018) Satvavajay and Daivyapashray chikitsa: Boon yo manas vikaras, 7:7-1456.
84. Caraka, RK Sharma, Bhagwan Dash, Carak samhita (2009) Sharir sthan Adhyaya 1, Shloka 138-139, Chaukhamba Sanskrit Series office, Varanasi, Reprint, 346.
85. Caraka, RK Sharma, Bhagwan Dash, Carak samhita (2009) Sharir sthan Adhyaya 1, Shloka 140-141, Chaukhamba Sanskrit Series office, Varanasi, Reprint, 346.
86. Caraka, Late Dr. Lakshmidhar Dwivedi, Dr. BK Dwivedi, Dr. PK Goswami, Caraka samhita (2014) Chikitsa sthana Adhyaya 1/4, Shloka 30, Chowkhamba Krishnadas Academy, Varanasi, 52.
87. Vagbhata, Kaviraj Atrideva Gupta, Ashtang Hridaya, Chikitsa sthana Adhyaya 2, Shloka 19-20, Chaukhamba prakashan Varanasi, 410.
88. Caraka, RK Sharma, Bhagwan Dash, Carak samhita (2009) Sutra Sthana Adhyaya 8, Shloka 29 Chakrapani Tika, Chaukhamba Sanskrit Series office, Varanasi, Reprint, 181.
89. Vagbhata, VD Gadgil, DPVD Kulkarni Sachin, VD Joshi (2010) Yashashree, Ashtang Hridaya (Sutrasthana), Adhyaya 2, Shloka 21-22, Mankarnika Publication, 44.
90. Yoga, Ayurveda, Shivcharan Dhyani (2002) Chaukhamba orientalia, Second Edition, 21.
91. Caraka, RK Sharma, Bhagwan Dash, Carak samhita (2009) Ayurved Dipika Tika, Sthana Adhyaya 11, Shloka 35, Chaukhamba Sanskrit Series office, Varanasi, Reprint, 220.
92. Caraka, RK Sharma, Bhagwan Dash, Carak samhita, Ayurved Dipika Tika (2009) Sthana Adhyaya 8, Shloka 19, Chaukhamba Sanskrit Series office, Varanasi, Reprint, 174.
93. Vagbhata, Dr. R Vidyanath (2013) Ashtang Hridaya of Vagbhaa, Sutrasthana Adhyaya 2, Shloka 26, Chaukhamba Surbharati Prakashan, Varanasi, First Edition, 38.
94. Sushruta, Kaviraj Ambika Datta Shastri, Sushruta samhita (2015) Sutrasthana Adhyaya 6, Shloka 18, Chaukhamba Sanskrit Sansthan Varanasi, Reprint Edition, 22.



CONCEPTUAL STUDY OF KSHEERPAKA KALPANA FROM ASHTANGA HRIDAYA

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Article Received on
07 Jan. 2021,

Revised on 28 Jan. 2021,
Accepted on 18 Feb. 2021

DOI: 10.20959/wjpps20213-18477

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ABSTRACT

In Ayurveda there is various methods of preparation of *Aushadhi* (medicine) like – *Sneha kalpana Kalka, Kwath, Swarasa, Hima, Fanta kalpana. Ksheerpaka kalpana* is unique dosage of Ayurveda which is an *upakalpana* of *Kwath kalpana*. *Upakalpana* are based on *Panchavidha kashay kalpana*. *Acharya Vagbhata* used the word *Shrutam payah, Sidhha payah* (medicated milk) which is nothing but *Ksheerpaka*. *Acharya Sharangadhara* explained the process of preparation of *Ksheerpaka*. *Ksheerpaka kalpana* is decoction of milk. In this medicinal *Dravya*, milk & water are boiled together so that the medicinal values are extracted into milk. Milk have nutritious as well as medicament values. *Ksheerpaka kalpana* is palatable and advisable to children as well as elder. *Ksheerpaka kalpana* have been mentioned by *Acharya* in various *Vyadhi* (disease) like *Vatrakta, Vatvyadhi,*

Slipada, Jwar, Raktapitta, Kasa, Vran. This article contain various *Ksheerpaka* with their role in various *Vyadhi* according to *Acharya Vagbhata*. Conceptual reviewing of all *ksheerpaka* from *Ashtanga Hridaya* is the main aim of this article.

KEYWORD: *Ksheerpaka, Vyadhi, Lakshana, Sidhha ksheer.*

INTRODUCTION

Ksheer is easily available *Dravya*. *Acharya* explained its *Gundharma* (properties) as *Madhura paka, Madhura rasa, Dhatu vardhaka* (anabolic nature), *Shleshmakar*, reduces *Vata*

Pitta dosha, Vrushya, Guru- Snigdha Guna yukta.^[1] *Ksheera* is very helpful in certain *Vyadhi* like- *Jirna Jwara, Mutrakruchha, Raktapitta* etc.

Ksheerpaka preparation method

According to *Acharya sharangadhara* - one part of *Aushadhi dravya*, eight parts of *ksheer*, four parts of water are to be boiled on *Mruduagni* (mild flame). Mixture is heated till *Ksheer* remains in the pot. In this *Siddhaksheer* – all the *Gundharma* of medicinal *Dravya* (drug) get extracted into the milk.^[2]

Aacharya have mentioned various *Ksheerpaka* in treatment of different *Rogas* (disease). A milk is colloidal solution. It is most efficient media for extraction of medicinal value from herb and easily absorbed through the body cells. The Compilation and conceptual reviewing of all *Ksheerpaka kalpa* in *Ashtanga Hridaya samhita* have been done.

Table- *Ksheerpaka (Siddha Payah)* mentioned in *Ashtanga Hridaya*.

Sr. no.	Aadhyaya Name	<i>Ksheerpaka(Sidha Ksheer)</i> content-	<i>Vyadhi/ Avashta</i>
1	<i>Garbhavyapada</i> ^[3]	<i>Priyangu, Kamala, Nilotpala, Umbar.</i>	<i>Garbhavyapada, Garbhasrava, Raktasthambak.</i>
2	<i>Garbhavyapada</i> ^[4]	<i>Shalimula, kakoli, bala, atibala, jeshthamadha, ekshu mula.</i>	<i>Shool, bruhana, Garbhasrava.</i>
3	<i>Jwar</i> ^[5]	<i>Sunth, kharjur, mrudwika, sita, gruta, chandan, pipali, madhu.</i>	<i>Trushna, daha, jwar.</i>
5	<i>Jwar</i> ^[6]	<i>Panchamula.</i>	<i>Kasa, shwasa, shirah-kukshi-shool, jwar.</i>
6	<i>Jwar</i> ^[7]	<i>Earanda mula.</i>	<i>Raktatisara, pravahika, Trushna, vibandha shula.</i>
7	<i>Jwar</i> ^[8]	<i>Bala bilva.</i>	<i>Raktatisara, pravahika, trushna, vibandha shula.</i>
8	<i>Jwar</i> ^[9]	<i>Sunthi, bala, vyaghri, gokshur, guda</i>	<i>Shoth, jwar, kasa, vibandha vata.</i>
9	<i>Jwar</i> ^[10]	<i>Vrushchika, vrushabhu, Bilva.</i>	<i>Shoth, jwar.</i>
10	<i>Jwar</i> ^[11]	<i>Shinshipa sara.</i>	<i>Jwar.</i>
11	<i>Raktapitta</i> ^[12]	<i>Panchamula, sita.</i>	<i>Vata adhika raktapitta.</i>
12	<i>Raktapitta</i> ^[13]	<i>Jivaka, hrushabhaka, draksha, bala, gokshur, nagar.</i>	<i>Vata adhika raktapitta.</i>
13	<i>Raktapitta</i> ^[14]	<i>Gokshura, shatavari, mudgaparni, mashaparni, shaliparni.</i>	<i>Mutra margagat saruja raktasrava.</i>

14	Raktapitta ^[15]	Mocharasa/vat praroh, shrunga/suntha, vala, kamala.	Gudagat raktasrava.
15	Kasa ^[16]	Laksha.	Urah kshath.
16	Kasa ^[17]	Ekshwarika, bisa, padmakesara, chandan, madhu.	Urah kshata.
17	Rajyakshama ^[18]	Jivaniya gana, madhu, sita	Swara sada.
18	Atisara ^[19]	Earandamula/bala bilva.	Vatvibandha, pravahika, shula, sarakta pichha mala.
19	Mutraghata ^[20]	Bramhimula/punarnava/haritaki.	Mutrashmari vedana.
20	Mutraghata ^[21]	Bruhatyadigana, gokshura.	Mutra vikarajit.
21	Vatavyadhi ^[22]	Haritaki(sthira).	Hrudayashrita vata.
22	Vatvyadhi ^[23]	Kashmari, jeshthamadha, sita.	Shushka garbha.
23	Vatrakta ^[24]	Guduchi swaras, sita.	Vatrakta.
24	Vatrakta ^[25]	Bala, shatavari, rasna, dashmula, pilu, earanda, hirda, nishottar.	Shulaghna-vatrakta.
25	Balopacharniya ^[26]	Laghupanchamula, hirda, paya, sita.	Stanya abhava.
26	Sadyovrana ^[27]	Earandamula, laksha, gokshura, jeshthamadha, sita.	Udarvrana, vedana, daha.
27	Granthi-arbuda-shlipad-apachi-nadi-pratishedha ^[28]	Suntha.	Vataj shleepada.
28	Vjekarana ^[29]	Aatmagupta.	Vajikara.
29	Vjekarana ^[30]	Kshirakakoli.	Vajikara.

Garbhavyapada - In *Garbha srava* like intensive condition Acharya explained *Ksheerpaka* of *Dravya* having *Guna Shita*(cold), *Madhur*(sweet), *Tarpak* (rejuvenation), *Ruja nashak* (pain killer), *Raktapitta nashak*. *Ksheerpaka kalpana* is recommended to enhance the action of *Dravya*. Here the *Sara* (attribute) of milk contributing to combact *Garbhasrava* (abortion). *Garbhavyapada*- Milk enhance the properties of *Bala*, *Kakoli* like *Jivaniya* and *Vataghna Dravya* to cure the condition like *Shool* (pain) and to do nourishment in *Garbhasrava* disease.

Jwar- In *Jirna jwar*(chronic fever) Acharya explained variety of *Ksheerpaka kalpas* to overcome various *Avastha*(situation) of *Jwar* like *Dipana*(appetizer), *Pachan*(digestive), *Shita*, *Trushna nashak*, *Pittaghna Dravya Ksheerapaka* to reduce *Trushna*, *Daha* (burning

sensation). *Panchamula* like *Vataghna Dravya Kseerapaka* for *Shool, Kasa, Shwas Avastha. Erandamula, Bal Bilva* like purgative, *Anulomak, Vataghna Dravya Ksheerapaka to Vataibandha, Pravahika* (diarrhea) *Avastha* in *Jwar* milk help to improve palatability, reduce weakness, and soothing effect.

Raktapitta - milk have *Raktapittaghna, Shita, Snigha* property which help to enhance the *Guna* of *Dravya* to cure *Raktapitta* condition.

Kasa – *Sandhaniya* property of milk and *laksha Dravya* combinely work in *Urah kshata* condition.

Mutraghata –with *Mutrala Dravya* milk help to *Vatanuloman* which lead to *Vedana nashan* (pain relief).

Vatvyadhi- In *Shushka Garbha* condition *Jivaniya Dravya Ksheerapaka* used where *Garbha Bruhana, Poshan* is the aim of treatment. *Jivaniya Dravya* and milk combinely act as *Garbha Poshak, Bruhan* with help of *Snigdha, Balya, Guru, Dipan, Jivaniya guna*.

Vatrakta- milk is instant nourishing medicament.its effective in *Rasa, Rakta Dhatu* with *Vataghna, Raktashudhikar Dravya* it increase the speed of recovery of disease condition by fast absorbing property.

Hrudaya ashrita vata- *Haritaki* is *hrudya dravya* (cardioprotective), purgative, *Dipana Ruksha Guna Yukta. Anulomak, Mrudu Virechak, Aampachak, Snigha guna* of Milk help to *Vatanulomana* and also overcome *Ruksha Guna* of *Haritaki*.

Balopacharniya – in *Sthanyaabhava* condition *Aja* (goat) milk is used with *laghupanchamula, Hirda* like *Virechak, Vataghna, Pachak, Dipak guna yukta Dravya, Sita* to get better taste here milk act as medicament as well as food of child.

Vataj Shleepada- *Suntha* (*Zingiber officinale*) is *Katu rasa, Guru, Tikshna, Ushna Virya, Madhurpaka*. due to *Ushna, Tikshna, Katu guna* It can cause bleeding, swelling, abdominal distension if taken continuesly. Milk help in overcoming these toxicity of *dravya* and provide an excellent carrier which retail its useful attribute.

Vajikaran – *Aasti, Majja, Shukra dhatu* have the similar properties (*guna*) as of *ksheer*. The milk is also called as *Sadyashukrakara*, that which instantly nourishes the *Shukra Dhatu*. In

this condition milk provide excellent fast acting medium (*shighragamitwa*) to *vajikara dravya*.

DISCUSSION

Ksheerpaka Kalpana is in practice since *Vedic* period. *Ksheerpaka* is medicated milk.

According to Ayurveda this type of formulation has cooling and anabolic properties. *Ksheerpaka* extract does therapeutic action of drug as well as nourishes tissues. *Ksheerpaka* includes better palatability. It is suitable for all *rugna* (patients) with all age group. In *Ashtanga Hridaya* total 29 no. of *Ksheerpaka* has been described. Maximum number of *Ksheerpaka* have been explained in *Chikitsa Sthana*. *Aacharya* explained *Ksheerpaka kalpana* as *Vajikara dravya* to various *vyadhi avastha* such as, *Garbhasrava*, *Jwar*, *Raktapitta*, *Kasa*, *Rajyakshma*, *Atisara*, *Mutraghata*, *Vatvyadhi*, *Vatraktaj shool avastha*, *Vrana*, *Shlipada*(filariasis). This versatility have been mentioned. Multipurpose use of *ksheerpaka kalpana* have been found. Milk is used as food as well as medicament in *Grantha*. According to modern science milk contain water fatty acid, lipid, minerals, vitamins, immunomodulatory, enzymes, antioxidant property. *Ksheer* is *Aajanma satmya* and *Rasayana guna yukta*. *Ksheer* reduce the *tikshan ushna* like toxic property of *dravya* and improve absorption of drug into body also improve palatability of drug.

CONCLUSION

We may thus conclude that *Ksheerpaka Kalpana* is unique formulation, which helpful to promote health as well as treat *Vyadhi*. *Ksheer* is *Aajanma Satmya Dravya*. Easily palatable by the children & elders.

Quality of milk has been potentially used as a medicine by combining it with different herbs as in *ksheerpaka*. *Ksheerpaka kalpa* with variety of *Dravya* combination in various *Vyadhi Avastha* have been found in *Ashtanga Hridaya samhita*. This specific formulation are easily preparable with using huge range of herbs, indeed has a great scope for therapeutic application in daily practice.

ACKNOWLEDGMENT

I sincerely acknowledge my guide and HOD Dr. Smita Dhurade madam, all staff of Department of Samhita Siddhanta, Academic In charge and Principal of CSMSS Ayurved Mahavidyalaya.

REFERENCES

1. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Sutrasthana, 5/20, page no.-66.
2. Prof.R.R. shrikantha Murthy, Sharangadhara Samhita, Madhyam khanda, Chaukhamba o ririentalia, Varanasi, 2009, shloka-2/161, pp-75.
3. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Sharirasthana, 2/5, page no.-387.
4. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Sharirasthana, 2/3-5, page no. -387.
5. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Chikitsasthana, 1/108-109, page no.-565.
6. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Chikitsasthana, 1/110, page no.-565.
7. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Chikitsasthana, 1/111, page no.-566.

8. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Chikitsasthana, 1/112, page no.-566.
9. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar,Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014 Chikitsasthana, 1/112, page no.- 566.
10. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Chikitsasthana, 1/114, page no.-566.
11. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Chikitsasthana, 1/115, page no.-566.
12. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Chikitsasthana, 2/35-36, page no.- 581.
13. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Chikitsasthana, 2/35-36, page no.-581.
14. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri,

- Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Chikitsasthana, 2/38, page no.-581.
15. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar,Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Chikitsasthana, 2/39, page no.-581.
 16. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Chikitsasthana, 3/75, page no.-592.
 17. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Chikitsasthana, 3/76, page no.-592.
 18. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Chikitsasthana, 5/46, page no.-615.
 19. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Chikitsasthana, 11/38, page no.-658.
 20. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Chikitsasthana, 11/33, page no.-657.
 21. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with

- commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Chikitsasthana, 11/34, page no.-657.
22. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Chikitsasthana, 21/17, page no.-723.
23. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Chikitsasthana, 21/21, page no.-724.
24. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Chikitsasthana, 22/7, page no.-729.
25. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Uttartantra, 22/8-9, page no.-729.
26. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Uttartantra, 1/20, page no.-732.
27. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Uttartantra, 26/53, page no.-873.

28. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Uttartantra, 30/10, page no.-884.
29. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar,Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Uttartantra, 40/30, page no.-941.
30. Ashtanga hridaya, annotated by Dr.Annamoreshwar Kunte and Ramchandra shasri Nrve, edited by pt.Hari.Sadashivshasri Paradakar, Ashtanga hridaya vagbhata with commenteries- Sarvangasundar of Arundatta and Ayurveda rasayana of Hemadri, Varanasi, published by – Chaukhamba surbharti prakashan, 2014, Uttartantra, 40/30, page no.-942.

Role of Vamana Karma in The Management of Sheetapitta A Case Study

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Nowadays sheetapitta is common skin condition. In vasanata rutu,there are more patients of sheetapitta.In this,tridosha dusti occurs.

Due to asatmya aahara vihara,it triggers the doshas.Vitiated kapha or vata due to sheeta marutadi hetu get mixed with pitta.Then kapha and vata along with pitta spreads all over the body.This condition includes Mandalotpatti, Kandu and Daah.

Madhavakara quoted that sheetapitta having vatika dominancy while udarda having kaphaja dominancy⁽¹⁾.

Here,Vamana karma is to be preferred for above condition⁽²⁾.As shodhana plays more role than shaman.

Keywords- Sheetpitta,Asatmya aahar-vihara,Mandalotpatti,Daah.

Introduction

In today's era,Sheetapitta became very common skin condition.

In modern science,it is correlated with urticaria.But there is not any permanent solution.Continuous intake of medicines can cause any side effects.

According to Ayurveda,Life style and food habit that is aahara-vihara causes vitiation of vata and kapha doshas along with pitta dushti.It also causes rakta dushti.

Madhava nidankara describes the causative factors which includes kandu,daah,mandala. Sheetapitta treatment is described in Yogaratnakara, Bhaishajya ratnavali.

Here,along with the sheetapitta,kandu occurs dominantly.Hence it is considered as Udard.

Madhavakara has explained the symptoms of udard as Utsed, Aaraktavarnata,Kanduyukta mandala⁽³⁾. This condition increases in winter season. Therefore in this condition,Vamana therapy has planned.Vamana karma will expel dusta pitta and kapha doshas.

Then shaman chikitsa given.It shows marked effect in sheetapitta.

Materials And Materials

Case Study :

A 35 years female patient came to panchakarma opd with the complaints of mandlotpatti over the hands face,thighs region.

On examination, lessions were redish in colour, spreading over the limbs with irregular shape and margins.

Itching doesn't disappear till medication taken.

All routine examinations done.ECG and chest X-ray done before vamana therapy.

Assessment Criteria

1) Mandalotpatti-

- 0 – Absent
- 1 – Locally present
- 2 – Present on all body parts
- 3 – Present all over body parts

2) Kandu

- 0 – Absent
- 1 – Occasionally kandu
- 2 – Disturbance in daily activity
- 3 – Diturbance in daily activity and sleep

3) Daah

- 0 – Absent
- 1 – Occasionally daah
- 2 – Disturbance in daily activity
- 3 – Disturbance in daily activity and sleep

Treatment

The procedure of vamana karma explained to patient and written consent is taken.

The procedure is done as follows.

1	Deepana pachana	Panchakola choorna for 3 days with leukewarm water
2	Snehapana	Mahatikta ghrita in vardhman matra in morning with empty stomach
3	Snehan swedana	Abhyang taila for 2 days
4	Vamana karma	Yastimadhu phant (Madanphal+pippali+vacha+saindhava+madhu)
5	Kaval	Koshna jala
6	Dhoompana	Haridra+Tulasi+karpooora+ghruta vartina
7	Samsarjana krama	7 days

Assessment Criteria-

Sr.No	Parameters	Before treatment	After treatment
1	Mandala	2	1
2	Kandu	2	0
3	Daah	2	0

Result

After vamana karma,improvement in above lakshans are seen.

Discussion

Sheetapitta is tridoshaj vyadhi in which vitited kapha merges with pitta and due to vata dosha ,it spreads all over the body.

According to yogaratnakar,sheetapitta can be treated with vamana karma.

So that vitited kapha can be moved outside the body.

Vaman karma is carried out in three steps –

- 1) Purva karma – Pachana,snehana swedana
- 2) Pradhan karma-Vamana karma
- 3) Paschat karma-Samsarjana krama

The assessment is done after shodhana.There is marked relief achived.

In next follow up ,patient had given Haridrakhanda⁽⁴⁾ for 7 days. Advice to follow up pathya apathya.

Conclusion

- 1) The vamana karma is effective in sheetapitta
- 2) Efficacy of vamana karma is proved.

References

- 1)Srivijayarakshita and srikanthadatta,Shree madhavakara, Madhavanidana, Sanskrit teeka, chaukhambha prakashana,Varanasi,Reprint 2018,volume 2,P.200.
- 2)Vaidya shrilakshmi patishastri,Yogaratnakara,Vidyotini hindi teeka,chaukhambha Sanskrit sansthana,Varanasi,5th edition,1993,Page no.235.
- 3)Srivijayarakshita and srikanthadatta,Shree madhavakara, Madhavanidana, Sanskrit teeka,chaukhambha prakashana, Varanasi, Reprint 2018,volume 2,P.200.
- 4)Prof.Siddhinandan Mishra,Kaviraja govinda sen, Bhaishajya ratnavali,Siddhiprada hindi commentary, Chaukhambha surbharati prakashana,Varanasi,edition-2018, vol 2,P-898.



MISCONCEPTION OF WATER DRINKING IN THE LIGHT OF AYURVEDA CLASSICAL TEXTS - A REVIEW.

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Received on: 11/02/2021; Revised on: 14/03/2021; Accepted on: 15/03/2021

ABSTRACT

Water has at most important in the human life. It constitutes 60 to 74 % of total weight of human body. Water plays very important role in many physiological processes by maintaining hydration in body. But question is that, is everyone need 8 glass of water every day? People have very little scientific knowledge about consuming the quantity of the water. Thirst is natural urge which plays an important role in determining the quantity of the water that the humans and every other animal should drink. Animals don't know science, but they have thirst and they follow natural urge, and almost remain hydrated without major related illness, but few of the human beings have developed the mathematical models to drink the water and that is being spread into the society. Many time people drink more and more water, without thirsty felling, only under belief that, drinking excessive water detoxify body. Many people thought that their behavior have Ayurveda basis. Ayurveda does not approve any of such claims and that comes to the notice by in some references made in the Ayurveda.

Keywords: Excessive Water drinking, Ayurveda, Misconception, Thirst.

1. INRODUCTION

Sometimes few things are bombarded on human minds in a way that those things are accepted by the humans even if they are incorrect. Health related misinformation is not exception to this tendency. Everyone is not interested to check that the source of information is authentic or not. As we observe majority carries the law, people blindly follow incorrect practices. In such instances, even if someone tries their hard to put the true side of those things they do not get accepted. Water has at most important in the human life. It constitutes 60 to 74 % of total weight of human body.¹ While investigating the history of the patients, it has been observed in multiple instances that they drink a lot amount of water in the morning and they tend to believe that they are drinking

this amount of water as they are too much conscious about their health. Few of them drink the water before brushing their teeth, few drink warm water and few drink the mix of water and honey.

Never mind, all of them believe that these rituals are very helpful for their health (e.g. getting rid from the constipation, feels fresh etc.). We seem that, people start their morning with drinking too much water at 7 a.m. onward. Many times, these people claim that these advices are mentioned in the Ayurveda and they ask others to follow the same. When we ask people about how they started excessive water drinking (*Atyambupan*) or what influence them to do that, we found three main sources of information to most people, first one is health

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tips by non-medico personalities from any newspapers, second one is some spiritual masters who claim to have in depth Ayurveda knowledge. And main reason of this spread of false belief are naturopathic trainer. Naturopathic supporters are claiming and spreading this as a detoxification method. Most of time people get confuse between naturopathy and Ayurveda thought to have no difference between these two strains. All of these circumstances result into misleading common people about water consumption. However, this habit of drinking the water in the morning may invite a lot of health issues. Hence, it is important to check what has actually been mentioned in the Ayurveda about the same.

2. CONCEPT REVIEW

Most of the times the root cause analysis of the health issues of the patients points to their habit of drinking the water. Most of the patients who have fallen for this habit have the complaints regarding the swelling on the body, asthma, cold, acidity, cold-acidity, constipation, etc. When the references made regarding the water are checked, it has been found that the Ayurveda has never advised to drink a lot of water.

Acharya Vagbhat stated that, the people with the health issues mentioned next, should not drink a lot of water – Weak, *Agnimandya*, *Gulma*, *Pandurog*, Diarrhea, Piles, *Grahani*, *Rajayakshma*, swelling (important to note the diarrhea here).² Normal human beings should also not drink a lot of water except in the *Sharada* and *Grishma rutu*. As per *Acharya Sushruta*, the person having *arochak*, *pratishtyay*, *mandagni*, *shwayathu*, *kshaya*, *mukhprasek*, *jathar rog*, *kushtha*, *netrarog*, *jwara*, *vrana*, *madhumeha* should drink little water.³ Here *mandagni* is very important condition and most of the disease caused due to *mandagni* as per Ayurveda. Therefore, every sick person should drink water cautiously. Simple way to overcome this confusion is to follow thirst. As per *Bhavprakash* water also need time to digest. As we feel hunger after digestion of

food, by same way thirst feel after digestion of water. Normal water takes 6 hrs. to get digest, water which is first boiled and then cool down to normal temperature take 3 hrs. to get digested and water which is first boiled and then cool down to turn Luke-warm is get digested within 1 and half hour.⁴ It is clear that, water needs to get digested. Indigestion of it may result into *aam* formation. There are various multiple conditions in which quantity of water drinking has restriction. Heavy water drinking is not that much safe that normally considered.

3. RESULTS AND DISCUSSION

There is reference to drink water at early morning. *Ushapan* is mentioned by *Bhavprakash*.⁵ Drinking the water is advised on the *brahma-muhurta* (*Ushahpan*). But *brahma muhurta* is specific time and not whole morning. 144 minutes (approximately 2 and half hour) to 96 minutes (approximately 1 and half hour) before sunrise is termed as *brahma-muhurta* period i.e., 3.30 am to 4.30 am approximately. This is the time when excretory system is active. And after that body induce *mal-utsarjana*. And results into natural *vegpravartan*. However, when people drink a lot of water after the sunrise, it causes health issues as the *mala-vega* is created artificially in such instances. This is called as '*Vega Udiran*' and this causes a lot of problems (e.g., *Agnimandya*, *vaata*, swelling, etc.).

Sadly, the self-proclaimed campaigners of the Ayurveda are always giving the false advice to drink huge quantity of water in the morning. In reality, Ayurveda has never claimed anywhere that drinking more water is useful. Drinking more water never helps in any way, nevertheless there are bad implications to the health due to this. Drinking water in the morning causes the '*Jirna Agnimandya*' which leads to multiple health issues. In long term, drinking the water in this way causes to increase in such issues. Then what is the correct thing to do? How much quantity of the water should be consumed? The answer is, one should only drink the water according to their thirst.

Thirst is generated naturally. It is the one *Vega* of the 13.⁶ The *vega* are neither supposed to be stopped forcefully nor it should forcefully produce.⁷ With this rule, the water that should be consumed is must be equal to the thirst the person has. Extra water reduces the *Jatharagni*, it also weakens the digestion. Drinking more water accumulate in the body causing reduction in *dhatvagni* and increases *dhatumala* i.e. *kleda* in the body. *Dosha* and *Dhatu*s also get contaminated due to this and tends to liquefy comparably. According to the Charaka, melted and watery cough leads to the *Prameha* i.e., diabetes.⁸ This shows that, drinking more water can also cause the diabetes.

Some modern studies reveal that excess water may harm. Too much consumption of water can lead to fluid overload in the body and imbalance in the body. Due to excessive water intake amount of salt and other electrolyte in your body become too diluted. This condition leads to hyponatremia in which sodium level become dangerously low.⁹ So, it is very important that people do not fall for the false claims which advice to drink a lot of water. Drinking the water according to the thirst is always helpful.

All Acharyas have put forth the advisable daily routine i.e., *dincharya*, however none of them have advised to drink more water as part of the daily routine.¹⁰ If there were any benefits of drinking more water, they would have surely mentioned about it in their *granthas*. But practically this is difficult to convince all people to follow their need of water and do not get divert from true science. The clinical study must be carried out to find out the effect of excess water intake in above mention diseases as well as normal people.

4. CONCLUSION

Water is for sure the life. However, if more water is given to the crop, it leads them to turn yellow and get destroyed. The rule, 'An excess of something invites to the issues' is applicable to the water consumption as well, and it was known to the society. However, the true

Ayurveda is being ignored now a days and many people blindly drinking excess amount of water which is leading to multiple health issues. On the basis of Ayurvedic text, there is obsolete no benefits of excessive water drinking (*Atyambupan*). Same is supported by many modern studies. So, conclusion is that, excesses water drinking habit i.e., *Atyambupan* is hazardous to health. Hence, it is very important for everyone reading this, that they should spread this correct information which will help the society to get rid of the unnecessary troubles caused by drinking more water.

REFERENCES

1. James Roland, J. Keith, Fisher MD. What is the average (and ideal) percentage of water in your body? July 10, 2019. www.healthline.com.
2. Dr. Bramhananda Tripathi Editor (1st ed.). Ashtang Hridaya of Vagbhat, Sutrasthan: Dravadravyavidnyaniya adhyay; Chapter 5, Verse 13. Delhi: Chaukhamba Sanskrit pratishthan, 2010; p. 67.
3. Vd. Atridev, Editor (5th ed.). Sushruta Samhita of Sushruta, Sutrasthan: Chapter 45, Verse 45-46. Delhi: Motilal Banarasisdas, Delhi, 1975.
4. Dr. K.C. Chunekar Editor (Reprint ed.). Bhavprakash Nighantu of Bhavamishra, Toya Varga, Verse 86. Varanasi: Chaukhamba Bharati Academy, 2006; p. 758.
5. Bulusu Sitaram Editor (1st ed.). Bhavaprakash of Bhavamishra, Purvakhand: Chapter 5, Verse: 303-304. Varanasi: Chaukhamba Orientalia, 2006; p. 95.
6. Ibidem 2, Sutrasthan: Roganutpadaniya adhyay; Chapter 5, Verse 13. p. 54.
7. Ibidem 2, Sutrasthan: Roganutpadaniya adhyay; Chapter 5, Verse 22. p. 56.
8. Acharya Vidyadhar Shukla, Prof. Ravidutt Tripathi Editors (Reprint ed.). Vaidyamano-rama Hindi Commentary on Charak Samhita of Agnivesa (Part 1), Nidansthan: Chapter 4, Verse 6. Varanasi: Chaukhamba San-



skrit Pratisthan, 2002; p. 502.

www.medicalnewstoday.com.

9. Arlene Semeco, MS Author. What happen if you drink too much water. May 14, 2020.

10. Ibidem 8, Sutrasthan: Chapter 5, Verse 1-104. p. 81 to 105.

Cite this article as:

Divekar UM, Pokale SD. Misconception of water drinking in the light of Ayurveda Classical Texts - A Review. International Journal of Research in Ayurveda and Medical Sciences 2021; 4 (2): 52-55. DOI: <http://dx.doi.org/10.51446/IJRAMS.2021.4203>

Source of Support: Nil; Conflict of Interest: None declared.





AYURVEDIC MANAGEMENT OF KASHTARTAVA (PRIMARY DYSMENORRHOEA) – A CASE STUDY

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Article Received on
20 Jan. 2021,
Revised on 10 Feb. 2021,
Accepted on 02 March 2021
DOI: 10.20959/wjpps20214-18601

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ABSTRACT

Kashtartava is the condition where the artava discharge with great difficulty & pain. Dysmenorrhoea is the most common gynaecological problem faced by women during their adolescence which causes significant discomfort and anxiety for the women. It may create the emotional distress brought on by the pain and may result in missing work or school, inability to participate in sports and other activities. Kashtartava is a Vata dominant Tridoshaja Vyadhi and Dashmoola Taila also Tridoshaghna and considered as best Vatahara. So, it cures the disease by samprapty vighatana as vitiation of Vata dosha is responsible for this disease. So, that the treatment Dashmoola Taila Matrabasti is selected for the present study. A 23 year old female patient complaints of pain during menstruation associated with

nausea, constipation suffering from primary dysmenorrhoea since 4 cycles without the involvement of any secondary disease. 60 ml Dashmoola Taila Matrabasti for 7 days in midcycle given to the patient for 3 cycles. There was substantial relief of symptoms. So. Dashmoola tail Matrabasti is safe & effective in the management of Kashtartava.

KEYWORDS: Kashtartava, Primary Dysmenorrhoea, Vata dosha, Dashmoola Taila, Matrabasti.

INTRODUCTION

Kashtartava (Primary Dysmenorrhoea) is the most common gynecological problem faced by women during their adolescence which causes significant discomfort & anxiety for the woman as well as family. A systematic review of studies in developing countries performed by Harlow and Campbell (2002) has revealed that about 25-50% of adult women and about 75% of adolescents experience pain during menstruation, with 05-20% reporting severe dysmenorrhea or pain that prevent them from ensuing day-to-day activities.^[1] Primary Dysmenorrhoea refers to menstrual pain without pelvic pathology.^[2]

In Ayurvedic texts, though various conditions are described in which menstruation occurs with pain but Kashtartava is not mentioned specifically. It is a symptom of various Yonivyapadas specially Udavarta, Vatala, Sannipatika etc. Acharya Charak has mentioned that Yoniroga can't occur without vitiation of Vata. As Vata is main causative factor it should be treated first.^[3] According to Ayurveda, pain is an indication of Vata Vikriti – Vatadrite Nasti Ruja.^[4] Pain is the main feature of Kashtartava, so it has strong relation with Vata dosha. In classical text it is explained that due to Vega Dharana of Vata, Mutra & Purisha the Apana Vata get vitiated and it gets Udhravagami i, e normal Anulomak Gati of Apana Vayu changes to Pratiloma Gati and this vitiated Vata lifts the Yoni upward. And causes obstruction to flow of Raja. And then Raja comes out with great difficulty with severe shoola.^[5]

In Ayurveda, Basti karma is the best choice of treatment for Vata dosha. All the Acharya has appreciated Basti as a unique form of treatment modality. Basti is said to Ardha Chikitsa Or Complete Chikitsa by Charakacharya.^[6] And Dashmoola Taila is also Tridoshaghna & considered as best Vatahara. So, Dashmoola Taila Matrabasti is safe & effective in the management of Kashtartav.^[7]

MATERIALS AND METHODSTUDY TYPE

A single case study of Kashtartava.

Study design

A single case study of patient was taken from OPD of our Ayurved Rugnalya. Informed & written valid consent was taken.

Case presentation

A case study of 23 years old unmarried female patient, Hindu by religion, Student by occupation presented with chief complaints of painful menses, associated with nausea & constipation suffering from primary dysmenorrhoea more than 4 cycles without the involvement of any secondary disease.

Prakriti – Pitta vata B.P- 120 / 70 mm Hg

Pulse – 78 / min Patient was not obese.

Menstruation was painful. She cannot do even her normal routine work and has to absent from outdoor work during menses had to take analgesics & antispasmodics but poor effect.

Menarche – at the age of 13 years

M/H – Pain continues for 12 – 24 hours She used 4- 5 pads/cycle

Duration of menses – 3-5 days / 28- 30 days Nausea & constipation was present.

Fatigue by normal daily routine

For this, patient took allopathic treat for long time but disease recurrence was seen.

Sonography (U.S.G) was done for uterine & adnexal study to rule out secondary dysmenorrhea.

Sonography and all blood tests (routine test) were within normal range. Past History-not significant.

Treatment protocol

60 ml Dashmoola Taila Matrabasti for 7 days in midcycle given to the patient for 3 cycles.^[6,7]

Advice given to the patient

Ahara: To take fruits, green vegetables, simple foods. To avoid spicy food, fried food, fermented food, non-veg. on and around menstruation.

Vihara: To take rest, do Pranayama for 10 minutes. To avoid heavy weight lifting, journey, heavy strenuous work, tension.

RESULT

Improvement in symptoms of patient. Relief was found in painful menses, nausea & constipation. Matra Basti is found to be efficacious in the whole symptom complex of

Kashtartava. Dashmool Tail Matrabasti is effective in Artav vikara. Menstruation cycle became regular and at normal interval without any complaints.

DISCUSSION

Primary dysmenorrhea is described as the condition of pain during menstruation with no apparent pathology. Due to indulgence of Vata vitiating Ahara Vihara, Dhatu Kshaya and Margavrodha Vata gets aggravated leading to further Dhatu Kshaya starting from Rasa then Rakta leading to Aparipurna Upadhatu Nirmana i.e Artava will be produced in less quantity than normal. This will further vitiate Vata Dosha which further will produce Kshobha in Garbhashya. This will lead to Toda and Vedana. Due to vitiation of Vyana and Apana Vayu Akunchana and Prasarana Kriya of Garbhashaya does not take place properly. This state exactly as that of dysrhythmia of uterine muscles which will hinder proper flow of menstrual blood leading to Kashtartava.

Probable mode of action of dashmoola taila matrabasti

According to the concept of Viryasamkranti (transformation of potency) described by Acharya Charaka,^[8] the potency of Dashamoola is already transferred in Dashamoola Kwatha, and the potency of Dashamoola in the Kalka form, on processing with oil, further causes the Viryasamkranti into the Taila. Thus, the Taila carries the whole potency of the drug in it. Madhura, Tikta, Kashaya Rasa, Guru, Snighda Guna, Ushna Veerya, Madhura Katu, Vipaka, and Tridoshanashaka Karma of Dashamoola Taila acts on Kashtartava by its Dravya, Guna, and Prabhava. It has been proven that Dashamoola has anti-inflammatory, analgesic, and antipyretic actions.^[9]

Matrabasti on Kashtartava deals mainly with the Apana Vayu as the organs situated nearby are its seat. Snehana and Svedana prior to Matrabasti does its Anulomana and thus Matrabasti becomes more efficacious. Modern science too has recognized that local heat has a good effect on primarydysmenorrhea.^[10]

CONCLUSION

Kashtartava is a Vata and Kapha Pradhan Vyadhi and the main culprit Dosha is Vata. Due to Kapha Prakopa the Srotas gets obstructed by Kapha and this leads to the Prakopa along with Pratiloma Gati of Apana Vayu leading Kashtartava. Matrabasti has both local & systemic effects. It causes Vatanuloman there by normalizing Apana Vata. Matrabasti is found to be efficacious in the whole symptom complex of Kashtartava. Dashamoola Taila Matrabasti are

highly effective in Kashtartava. Dashamoola Taila Matrabasti also helps to prevent recurrence of dysmenorrhea.

REFERENCES

1. Rao, K.A., Textbook of Gynaecology, Elsevier, a division of Reed Elsevier India Pvt. Limited, India, 2008; 37.
2. Berek & Novak's Gynecology Fifteenth edition, Edited by Jonathan S. Berek, Lippincott William & Wilkins Publishers, 481.
3. Agnivesha, Charaka Samhita, eds R.K.Sharma, Bhagwan Dash, Chowkhamba Sanskrit Series Office, Varanasi, 2004; 5(36): 30-115.
4. Sushruta, Sutrasthana explanatory notes by Kaviraj Dr. Ambikadutt Shastri, Edition Reprint publishers chaukhamba Sanskrit Sansthan Varanasi part, 2013; 1(94): 17-12.
5. Charakasamhita of agnivesha, volume 2, chikitsa sthanas, chapter edition By acharyavidyadharshukla and prof raviduttripathi, chaukhamba Sanskrit pratishthan, Delhi, 2007; 757: 30, 25-26.
6. Dr. Bramhanand tripathi, Charak Samhita of Agnivesha, Vol 2 siddhithana adhyayan 1, Shloka no. Varanasi, Chowkhambha surbharati prakashan, 2009; 1169: 39.
7. Dr Brahmasanker Shastri, Bhavprakash Samhita, Purvardha, Bhavprakash Nighantu, Guduchyadi varga, shloka no. Varanasi, chaukhambha Sanskrit Sansthan, page no, 264: 41.
8. Sharma RK, Dash B, editors. Varanasi: Chowkhamba Sanskrit Series Office; Agnivesha. Charaka Samhita, 2002; 1: 83. [Google Scholar]
9. Gupta RA. International Conference on Traditional Medicine, Madras, 1986; 23-25. [Google Scholar]
10. Akin MD, Weingand KW, Hengehold DA, Goodale MB, Hinkle RT, Smith RP. Continuous low-level topical heat in the treatment of dysmenorrhea. *Obstet Gynecol*, 2001; 97: 343-9. [PubMed] [Google Scholar]



Codes of Conduct of Life-Sadvritta

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Editorial

Volume 5 Issue 2

Received Date: May 09, 2021

Published Date: May 17, 2021

DOI: 10.23880/jonam-16000304

For Mental Health

Ayurved is an ancient science, working on curative and mainly on preventive aspect. In accordance to that, health has two aspects-one is physical health and another is mental health. In COVID scenario everybody is bound to keep once health in order. Moreover psychological health (Manaswsthya) is such a complicated part which is not yet completely understood. We can sort out more than 50% of our problems only by changing our behavioural pattern. That's the reason to practice codes of conduct (Sadvritta) for betterment of mental and spiritual health. Sadvritta comprises of two words-SAT meaning good and Vritta meaning behaviour. In 25th chapter of Charak Samhita codes of conduct of life are very beautifully depicted by Achary Carak. Today even after such a big time lapse concept of Sadvritta still stands at its own.

Here some of the sutras from *Charak Samhita* are discussed-

➤ Harshah Preenananam

Harsh means pleasure, joy and preenan is the thing that makes a person happy. The feeling of being happy is the ecstasy of utmost pleasure. Happiness is the ultimate nourishing and soothing thing for human soul and mind.

➤ Vishado Rogvardhananam

Vishad means disappointment. In this pandemic

situation one encounters with Vishad in day to day life. Lot of psychosomatic diseases is found in people worldwide. Pessimistic view regarding any condition related to health will definitely lead to disease. Its resultant of Vishad so be optimistic and happy ever.

➤ Nivritti Pushtikaranam

Nivritti means detachment and pushtikar is nourishing / nurturing. Detachment from any greed leads to self-satisfaction. Satisfaction itself is health building factor. It enables a person to live healthy and get sound body and sound mind as well.

➤ Loulyam Kleshkaranam

Laulya means desire or longing. Klesh is agony, pain and trouble. Excessive desire of any thing is the baseline cause of agony and pain. Everybody knows the story of a greedy person and his which lays a golden egg every day. In order to get all the eggs at a time he kills his hen and gets nothing. The moral of the story is greed leads to nothing and only gives rise to trouble. These are only few sutras (quotes), depicted in *Charak Samhita*. One must practice these all in everyday life especially in such life threatening conditions of COVID-19 Scenario.



JANAPADODHVAMSA IN AYURVEDA: A LITERARY REVIEW

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Article Received on 03/04/2021

Article Revised on 24/04/2021

Article Accepted on 14/05/2021

ABSTRACT

Ayurveda is one of the greatest gifts of the sages of ancient India to the mankind. Ayurveda is not only a system of medicine in the conventional sense of curing disease. It is also a way of life that teaches us how to maintain and protect mental and physical health and achieve longevity. Ayurveda does not have a specific text as Epidemiology, but the principles described are compiled, analyzed and interpreted in the light of modern theories of epidemiology. Ayurveda is the ancient system of Medicine in the world. It has two aims; i.e. prevention and promotion of health and secondly cure from the disease.^[1] According to Ayurveda Covid -19 may included under the headings of 'Aagantuja Vyadhi' or 'Vishamajwara'. Also it is included in 'Janpadodhvasa vyadhi'. It is included under the concept of 'Epidemiology' in modern science.

KEYWORDS: Janapadodhvasa, Ayurveda, Literary review.

INTRODUCTION

Acharya Charaka, who is credited as the father of Indian Medicine. He has explained a very unique concept of epidemiology as 'Janapadodhvasa' in Vimanasthana of Charaka Samhita.^[2] It resembles to Epidemiological diseases / Samsargajanya Vyadhi / Upasargaja Vyadhi / Janapadodhvasajanya Vyadhi. Acharya Sushruta described about the Sansargaja and Aupasargika Vyadhi.^[3] Acharya Sushruta, one of the proponents of Ayurveda, has depicted different modes of communicable disease transmission in his classical treatise Sushruta Samhita. He says by physical contact, expired air, eating with others in same plate, sharing a bed, using clothes, garlands, and paste infectious diseases spread from person to person. These concepts are very much relevant today. Moreover, the modern texts

of communicable disease epidemiology describe similar modes of disease transmission.

METHODOLOGY

As we know the famous Proverb that 'As you sow, so shall you reap', Now many of us predicts that what we done with the Nature, it comes back to us with a various different and new diseases like SARS virus, Ebola virus, Nipah virus and recently Corona virus. WHO declares it is an 'Pandemic disease' (Janpadodhvasa Vyadhi), as well as 'Endemic disease' (Samsargajanya Vyadhi).

'Epidemiology' means - 'Epi' = Among; 'Demi' = People; 'Logy' = Study.

It is the scientific study of the spread and control of diseases. The Study of diseases as.

A) Distribution

- Time
- Place
- Person

B) Determinates

- Causes

C) Frequency

- Incidence
- Prevalence

The word 'Janapadodhvasa' comprises of two words.

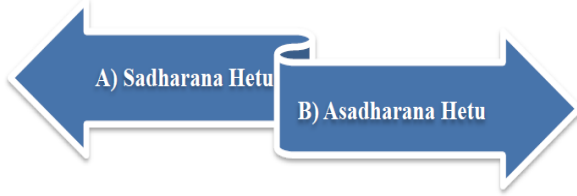
- **Janapada** = Large population
- **Udhvasa** = Destruction

'जनपदानां जनसमुहानां उध्वंसनं इति जनपदोध्वंसनम् ।..... (जल्पकल्पतरु)

It means Destruction of Large population and the formation of diseases are known as 'Janapadodhvasajanya Vyadhis'.

Vyadhi Hetu (Causes of Diseases)

Chakrapani stated that there are 2 types of Vyadhi hetu.



A) Asadharana Hetu

‘तत्र असाधारणं प्रतिपुरुषनियतं वातादिजनक्रमाहारादयभिदाय |... (चक्रपाणि टिका: च.वि.3/1-2)^[4]

The Asadharana Hetu is Pertaining to individuals or Causing Vatadi doshaja vyadhis. It is develop due to the Mithya Aahara – Vihara (Inappropriate lifestyle) and Pradnyaparadha which is causative factor for all the dosha prokopa (vitiation).

B) Sadharana Hetu

‘बहुजनसाधारणं वातजलदेशकालरूपं साधारणरोग कारणमभिधातुं जनपदोद्ध्वंसनियोअभिधीयते।’ (चक्रपाणि टिका च.वि.3/1-2)

Sadharana Hetus are factors relating to Community like vitiation of Vata (Air), Jala (Water), Desha (Land), Kala (Season). It affects all population at the same time and causesdestruction.

Ex. From vitiated Jala (Water) all community causes Gastro-intestinal disorders or Annavaaha Stroto dushti. Therefore it is known as ‘Janapadodhvamsa Vyadhi’.

Root Cause for Janapadodhvamsa (Epidemics)

‘तस्य मूलमधर्मः वाअसत्कर्म पूर्वकृतः तयोगनिः प्रज्ञापराध एव । (च.वि.3/20)^[5]

Lord Atreya mention the root cause of vitiation of Vayu, Jala, Desha & Kala are Adharma or misdeeds of past performed by ‘Pragnyaparadha’(Intellectual errors). Sinful acts may be inthe form of.

- Shastraprabhava (Wars) – it occurs due to more Lobha, Krodha, Moha.
- Affliction by attacks of Rakshas. (भूतसङ्गैः स्तमधर्मः).
- Abhishapa – disrespect of Guru, Vriddha, Siddha, Rishi, etc.
- Pragnyaparadha causes Raja and Tamas predominance resulting in greed, selfishness, tendency to harm people, jealousy and anger.

In the present day sinful act can be correlated to different activities like.

- Antinational elements indulging in bomb blast.
- Crime deforestation.
- Not obeying government rules in the industries.
- Discharge of untreated polluted water in to the river.

- Disposal of waste water in an improper method on land leads to pollution of soil.

All this factors not only influence the individual, but also the society leading toJanapadodhvamsa.

Etiological factors

- A) नियतातंकपर्यायहेतु (Inevitable factors): Inevitable disastrous factors, Harmful effects of sun, moon, stars & planets, irregular season, floods, cyclones, landslides, earthquakes, tsunami, etc.
- B) अनियतातंकपर्यायहेतु (Evitable factors): Man made evitable disastrous factors, Wars, Terrorism, etc.

Janapadodhvamsakara Bhava (Factors Responsible for Epidemics)

‘ते तु खल्विमे भावाः सामान्या जनपदेषु भवन्तिः तद्यथा- वायुः उदकं देशः काल इति... (च.वि.3/6)^[6]



Characteristics of Vitiation of 4 Bhavas

1. Vayu (Air)

‘तत्र वातमेवंविधमनारोण्यकरं विद्यात्।’....(च.वि.3/6)

- यथर्तुविषमम्: Not in accordance with Season or absence of characteristic features of particular Ritu.
- अतिस्तिमितम्: Excessive Calmness or moist.
- अतिचलम्: Excess speedy / violent blowing wind.
- अतिपरुषम्: Excess Harsh.
- अतिशीतत्युष्णमतिरुक्षम्: Excessively cold, hot, dry air.
- अत्यभिष्यन्दिनमतिभैरवारावं: Excess Humid, Air sounding terribly.
- अतिप्रतिहतपरस्परगतिमतिकुण्डलिनं: Excessively Clashing, Forming Cyclones.
- असात्म्यगन्धबाष्पसिकतापान्शुधूमोपहतमिति: Unsuitable Smell, Vapour, Gravel, Dust, Smoke.

Effects of Vitiated Vayu (Air) on Environment: (च.सु.12/8)

The following are aggravated functions of Vata.

- Breaking of peak of Mountains, Uprooting of trees, disturbing of ocean, overflowing of lakes, changing of course of rivers, bringing about earthquakes, causing thunders, storms, disturbance of six seasons, non productivity of plant, spread of epidemics among living beings, doing away with the positive features of creation, bringing about cloud, sun, fire and wind which would destroy all the four ages.

1. Jala (Water)

- अत्यर्थविकृतगन्धवर्णरसस्पर्शः Excessively deranged in Smell, Colour, Taste and Touch.
- वलेदबहुलः Excessive Stickiness / Too Slimy.
- अपक्रान्तजलचरविहङ्गमः Devoid of Aquatic birds.
- अपक्षीणजलेशयमः Reduced no. of Aquatic animals.
- अप्रितिकरमपगतगुणः Absence of Aquatic birds, Loosing its qualities.

2. Desha (Land / Location)

- प्रकृतिविकृतवर्णगन्धरसस्पर्शः Normal Colour, Smell, Taste & Touch of the land affected.
- वलेदबहुलः Excess Moisture.
- उपसृष्टं सरीसृपव्यालमशकशलभमक्षिका मूषको लुकशमा शानिकशकुनिजम्बुकादिभिः Inhabited by reptiles, wild animals, mosquitoes, locusts, files, rats, owls, vultures, jackal, etc.
- तृणोनुपोपवनवन्तं प्रतानादिबहुलः Having excess of grass & weeds.
- अपूर्ववदवपतितशुष्कनष्टशस्यं धुम्रपवनः Land has fallen, dried & damaged, Smoky winds.
- उदभ्रान्तव्यथितविविधमृगपक्षिसंघः Panic & Painful conditions of various animals, birds.
- उत्सृष्टनष्टधर्मसत्यलज्जाचारशीलगुणजनपदः Community devoid of virtue, truthfulness, modesty, conduct, behavior.
- श्ववक्षुभितोदीर्णसलिलाशयः Constantly agitated and over flooded water bodies.
- प्रततोल्कापातनिर्घातभूमिकम्पमतिभयारवरूपः Frequent fall of Meteor, Earthquakes, fierce appearance.
- रूक्षताम्रजरुणसिताअवजालसंवृत्तार्कचन्द्रतारकंभिक्षणः Sun, moon & Stars with rough, coppery, reddish white, cloudy appearance.

3. Kala (Season)

- कालं तु खलु यथर्तुलिङ्गात्विपरीतलिङ्गमतिलिङ्गहिनलिङ्ग चाहितं व्यवस्येत्... (च.वि. 3/6)

Having signs contrary, excessive or deficient to those of the seasons. Ex. Rituviparita Lakshanas – Varsha in Grishma Ritu.

Prevention

‘विगुणेष्वपि खल्वेतेषु जनपदोर्ध्वंसकरेषु भावेषु भेषजेनोपाद्यमानानामभयं भवति रोगेभ्यइति... (च.वि. 3/8)^[7]

‘Prevention is better than cure’ is the basic concept of Ayurveda. Curing a diseased person and redefining his healthy status, is the primary goal of a physician. It is the science which laid emphasis on the preventive aspect. So

therefore as a preventive therapy we have to boost immunity of the persons against the diseases. It can be boost through the various Ayurveda Modalities & principles like.

- Implementation of Dinacharya (daily regimen), Ritucharya (Seasonal regimen), Ratricharya (Night regimen).
- Rasayana therapy, Regulation of Aachara rasayana.
- Follows proper and regular Sadvritta.
- Shodhana as per Ritu and Dosha vitiation.
- Chyavanprasha, Pippali rasayana, Kshira + Ghrita sevana (‘क्षीरघृताभ्यासो रसायनानाम्’).
- Proper Aahara & Vihara sevana.
- Drugs for the treatment and prevention of Janapadodhvamsakara Vyadhi should be collect before the loss of its Rasa, Virya, Vipaka, Prabhava etc.
- Dhoopana Chikitsa

Naturally, vitiation of season is most difficult to rectify. Similarly vitiated air, water & land are progressively difficult to purify.

Chikitsa of Janapadodhvamsa Vyadhi :

‘कर्म पञ्चविधं तेषां भेषजं परमुच्यते | रसायनानां विधिवज्जोपयोगः प्रशस्यते ॥ (च.वि. 3 / 13-14)^[8]

- **Panchakarma:** it is one of the important & Detoxification therapy which is done according to the correlation of dosha vitiation and its related Ritu.
- **Rasayana therapy (Rejuvenation)^[9]:** it helps to enhance Immunity power and restores physical health.
- **Satyavachana:** Truthfulness about every work and situation.
- **Bhute Daya:** Compassion for living beings.
- **Danam:** Donation, Charity.
- **Bali:** Sacrifices. It all comes under the Treatment part of Daivavyapashraya Chikitsa.
- **Devatarchana:** Prayer to the gods.
- **Sadvritta^[10]:** Code of good conduct. It helps to enhance Positivity, Consciousness of Mind & increases Satva guna in body. One Conscious mind can helps to make or alters the consciousness in whole words.
- **Observance of Brahmacharya:** It includes in Trayopasthabha, which are important to build health of both Mind & Body.
- **Sankatha Dharmashastranam:** Reading, listening of Religious stories & Books.
- In the present scenario following rules & regulation laid by the government, not involving with antisocial elements & activities which destroy the society. In other words enhancing Satva guna leads to prevention of Janapadodhvamsa.
- Relief operations during natural calamities like floods, cyclones, land slides, earthquakes in the form

supply of food, medicine, cloth shelter etc are needed.

- For the prevention of Janapadodhvamsa in the form of pollution of air, water, land and season, the strict implementation of legislation is necessary. Department of Health & Welfare has a key role in prevention.

CONCLUSION

Now a days we all are going through the most important duration of epidemiology. For that in Ayurveda a many years ago Acharya explained about Janapadodhvamsa and its pathology, Nidanana & Chikitsa. Today we are facing a very huge problem all around the world. The world is under the threat of COVID – 19. According to Ayurveda Covid - 19 may included under the headings of ‘Aagantuja Vyadhi’ or ‘Vishamajwara¹’. Also it is included in ‘Janpadodhvamsa vyadhi. In Ayurveda, the management of Janapadodhvamsa janya vyadhis are mentioned. If we regulate our lifestyle as per nature, then nature will also help to cure us.

REFERENCES

1. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Sutrasthana, adhyaya 30th, Shlok no. 26, Chaukhambha Publications, New Delhi, Reprint, 2017; 187.
2. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Vimanasthana, adhyaya 3rd, Shlok no.1, Chaukhambha Publications, New Delhi, Reprint, 2017; 240.
3. Sushruta, Ambika datta Shastri, Sushruta Samhita, Nidana sthana, adhyaya 5th, Shlok no.32-33, Vol.1, Chaukhambha Sanskrit Sansthana, Varanasi, Reprint, 2015; 325.
4. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Vimanasthana, adhyaya 3rd, Shlok no.1-2, Chaukhambha Publications, New Delhi, Reprint, 2017; 240.
5. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Vimanasthana, adhyaya 3rd, Shlok no.20, Chaukhambha Publications, New Delhi, Reprint, 2017; 242.
6. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Vimanasthana, adhyaya 3rd, Shlok no.6, Chaukhambha Publications, New Delhi, Reprint, 2017; 241.
7. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Vimanasthana, adhyaya 3rd, Shlok no.8, Chaukhambha Publications, New Delhi, Reprint, 2017; 241.
8. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Vimanasthana, adhyaya 3rd, Shlok no.13-14, Chaukhambha Publications, New Delhi, Reprint, 2017; 241.
9. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Chikitsa sthana, adhyaya 1st (1st Pada), Shlok no. 7-8, Chaukhambha Publications, New Delhi, Reprint, 2017; 376.
10. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Sutrasthana, adhyaya 8th, Shlok no.18, Chaukhambha Publications, New Delhi, Reprint, 2017; 58.

CONCEPT OF SWARNAPRASHANA IN AYURVEDA – A REVIEW ARTICLE

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Article Received on
20 April 2021,

Revised on 10 May 2021,
Accepted on 31 May 2021

DOI: 10.20959/wjpr20216-20694

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ABSTRACT

Ayurveda is the science which mentioned various principles for prevention and treatment of disease. 'Prevention is better than cure' is the basic concept of Ayurveda. Ayurveda has adopted holistic approach to maintain healthy and long life.^[1] In Ayurveda there are various principles described for maintaining healthy life. Ayurveda has many unique and important concepts are mentioned. In which in Ashtanga Ayurveda^[2]; there is description about 'Balaroga and its Chikitsa'; which is mentioned as 'Kaumarbhritya'. In Balaroga or Kaumarbhritya 'Swarnaprashana' is one of the important concept described. Which is very useful and important in children's. administration of processed Gold in children is a unique practice mentioned in Ayurveda as 'Swarna prashana'. It improves digestion, metabolism, physical strength, immunity, life span and improving

intellectual power.

KEYWORDS: Swarnaprashana, Ayurveda, Kaumarbhritya.

INTRODUCTION

Ayurveda is a science of life. In Ayurveda has explained various different and important treatment modalities for healthy life. Administration of processed gold in children is a unique practice mentioned in Ayurveda as "Swarna prashana^[3]" by Acharya Kashyapa thousands of years back. Kashyapa mentioned the 'Swarana prashana' under the heading of Lehana. It is one of the important feature of Kashyapa Samhita. Swarna prashana is considered as 'Medha vardhaka'.

Acharya Kashyapa, Sushruta & Vagbhata^[4] has mentioned the concept of Swarna prashana in Jatakarma Sanskara of children. Ideally, Swarna prashana is explained as an activity which has to be done immediately after birth i.e. Jatakarma sanskara. It is meant for development of intellectual of the child. Acharya Sushruta explained Jatakarma sanskara^[5]; means administration of Swarna with ghrita and madhu. A strong foundation for proper growth and development of the body has to be set during the prenatal stage as well as during the Balya Avastha. Swarna prashana hence has to be started at 0 years i.e. immediately after birth and can be continued up to the age of 16 years.

METHODOLOGY

In Children's Swarnaparshana is the important concept mentioned in Ayurveda. Swarna prashana is unique method of immunization which helps the children to boost up the intellectual power and produces non specific immunity in body to fight against general disorders. It is also helpful even to the special children with Autism, Learning difficulties, Attention deficit, Hyper activity, Delayed milestones, etc.

Period of Swarna prashana

- Monthly once for 30 months, given on Pushya nakshatra.
- Daily dose of Swarna bindu prashana should be given for minimum for 1 month and maximum for 3 months.

Dose of Swarna prashana: 2-4 drops.

Age of children for Swarna prashana^[6]: From birth up to the age of 16 years.

Time of Swarna prashana^[6]

The best suitable time to give Swarna prashana to children is early morning before sunrise.

Ingredients of Swarna prashana: Ash of Gold, Vacha, Shankha pushpin, Brahmi, Guduchi satva, Yashtimadhu, Ashwagandha, Honey.

Benefits of Swarna prashana^[7]

1. Medha vardhaka – Regular dose of Swarna prashana improves child's intellectual power, Grasping power etc.
2. Agni vardhaka – Increases Digestive power & helps to reduce digestive complaints.

3. Bala vardhaka – Increases physical strength, General growth of the baby (Height & weight).
4. Ayushya – It helps to boosts immune system and make baby healthier & stronger.
5. Mangalam – It gives long, spiritual life.
6. Punyam.
7. Vrushyam.
8. Varnya – Tones up skin colour and texture.
9. Graham badha nshaka.
10. Masat Param Medhavi – Improves span of attention, concentration & memory in 1 month.
11. Shadabhirnase Shrutadhare - Enhances a child's learning ability and grasping power if taken for 6 months.
12. Prevents from various allergies and infections.

Mode of action of Swarna prashana

- Swarna is precious in Ayurveda as described. Swarna is converted into Swarna bhasma; which has moisturizing & unctuous effect on body.
- It is Madhura, Rejuvenative and Immune booster.
- Improves growth and complexion of the body.
- It causes detoxification of the body.
- It has been proved that Swarna bhasma possesses Anti-oxidants, Anti-bacterial, Anti-rheumatoid, Anti-depressive property.
- Swarna bhasma is accelerate the growth of brain and boosts up its utilization capacity.

Swarna kalpa according to Sushruta^[9]

He has describes four Swarna kalpa, which enhance immunity, helpful in proper development and growth and enhances the intellectual activity. Which are.

- ❖ Swarna bhasma, Kushtha, Vacha, Brahmi, Honey, Ghrita.
- ❖ Swarna bhasma, Shankhapushpi, Brahmi, Honey, Ghrita.
- ❖ Swarna bhasma, Arka pushpa, Vacha, Honey, Ghrita.
- ❖ Swarna bhasma, Kaidarya, Durva, Honey, Ghita.

Lehana karma in Ayurveda^[9]

In ayurveda the essence of all dhatus is known as 'Ojas' and it is responsible for the defence of human body against diseases. In modern medical science, vaccination is done to produce immunity against a disease. Acharya Sushruta, Vagbhata and Kashayapa described Lehana for this purpose which ultimately enhances immunity. Lehana karma and Rasayana are done to enhance growth and development by providing sufficient nutrition and promoting health with improving intellect and speech. Rasayana are rejuvenating agents which produce resistant against disease. Different types of herbs and formulations are described in Ayurveda for boosting immunity.

CONCLUSION

Ayurveda helps to promote the health and prevention from various diseases. The main aim of Ayurveda is to prevent from diseases and helps to maintain proper health. Kaumarbhritya is one of the important part of the Ayurveda. In this various concepts are described for boosting immunity. Swarna parshana is one of the important and unique concept mentioned in Ayurveda. It helps to improve physical as well as mental health of the child. It has many benefits. Now a days it is very important for every children to improve his or her intellectual power, mental health and helps to boosts immunity. Mainly it is done during the Jatakarma sanskaras but can be given up to the age of 16 years. It has benefits like improving memory, helps to improve growth of the brain and body. In this era, it is important for every children.

REFERENCES

1. Chakrapani, Charaka Samhita by Agnivesa, edited by Vaidya Jadavaji Trikamji Acharya, Sutrasthana, adhyaya 30th, Shlok no. 26, Chaukhambha Publications, New Delhi, Reprint, 2017; 187.
2. Vagbhatta, Dr. Brahmanand Tripathi, Ashtanga Hridaya, Sutrasthana, adhyaya 1st, Shlok no.5, Chaukhamba Sanskrit Pratishthana, Delhi, Reprint, 2014; 5.
3. Vriddha Jivaka, Shri Satyapal Bhisagacharya, Kashyapa samhita, Sutrasthana, Lehana adhyaya, Chaukhambha Sanskrit Sansthana, Varanasi, 10th edition, 2005.
4. Vagbhatta, Dr. Brahmanand Tripathi, Ashtanga Hridaya, Uttartantra, adhyaya 1st, Shlok no.9, Chaukhamba Sanskrit Pratishthana, Delhi, Reprint, 2014; 876.
5. Sushruta, Kaviraj Ambika datta Shastri, Sushruta Samhita, Sharira sthana, adhyaya 10th, Shlok no.14, Vol.1, Chaukhambha Sanskrit Sansthana, Varanasi, Reprint, 2015; 102.

6. Kiran P. Nandeshwar, Dr. Prashant L. Patil, Contribution of Swarna prashana sanskara in Healthy nation w.s.r. to Immunization: A Review article.
7. Vriddha Jivaka, Shri Satyapal Bhisagacharya, Kashyapa samhita, Sutrasthana, Lehana adhyaya, shlok no. 4-5, Chaukhambha Sanskrit Sansthana, Varanasi, 10th edition, 2005.
8. Sushruta, Kaviraj Ambika datta Shastri, Sushruta Samhita, Sharira sthana, adhyaya 10th, Shlok no.15, Vol.1, Chaukhambha Sanskrit Sansthana, Varanasi, Reprint, 2015; 102.
9. www.lehankarmainayurvedaccras.com.

Study of The Vishaghna Property of Nirgundi on Pesticide Sprayed Cauliflower

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Abstract :

Vegetables are important part of a healthy diet. Cauliflower is a vegetable which is rich in nutrients and is commonly consumed in Indian household. It is also frequently sprayed with pesticides. And even after washing with tap water, most of the residue remains on the vegetable. So there is need to wash the vegetable with solution like Nirgundi Kwatha which may reduce toxic residues.

Keywords : Cauliflower, Nirgundi Kwatha, Pesticide residues

Introduction:

Agad Tantra is the branch of Ayurveda which deals with the diagnosis, symptoms and treatment of poison and the methods of detecting them. In this new era, it also deals with the study of variety of chemicals such as pesticides, preservatives etc. and their hazardous effects on human health.

Now days, the crops are sprayed with pesticides. But its indiscriminate use leads to problems such as toxic residues in food materials. When human beings consume this toxified food materials, they become victim of their poisonous effects. So there is need of washing and cleaning the fruits and vegetables with such solution which may nullify or reduce toxic residues.

Charakacharya has mentioned Vishaghna Gana. Sindhuvaar i.e. Nirgundi is one of them. It is also mentioned as Krimihara. Cauliflower is commonly consumed in Indian household. It is generally attacked by Diamond back Moth Insect, so it is usually sprayed with Chlorpyrifos pesticide. So a study was planned to observe whether the toxic residues are nullified or reduced after the Dhavana of Cauliflower with Nirgundi Kwatha.

Aim and Objectives:

Aim:

To study the Vishaghna property of Nirgundi on Pesticide sprayed Cauliflower.

Objectives:

1. To study the Vishaghna property of Nirgundi on Pesticide sprayed Cauliflower.

2. To analyse the pesticide residues sprayed on Cauliflower before and after Dhavana with Nirgundi Kwatha.

Material and Methods:

Type of study – Observational Analytical study

Material:

The following materials selected and authenticated for the study.

Vegetable : Cauliflower

Dhavan dravya : Nirgundi Kwatha

Methodology :

Nirgundi collected and authenticated and cauliflower personally collected from one farm source.

- They were divided into 3 groups each containing 10 samples of Cauliflower
- Group A: 10 samples of Cauliflower were analysed as it i.e. without Dhavana.
- Group B: 10 samples of Cauliflower were analysed after Dhavana with Tap water.
- Group C: 10 samples of Cauliflower were analysed after Dhavana with Nirgundi Kwatha.

Preparation of Kwatha :

The preparation of Nirgundi Kwatha was done as per the procedure mentioned in Sharangdhara Samhita madhyam khanda adhyay 2.

Analytical test :

Multi residue method for pesticide analysis – Gas Chromatography-Mass Spectrometry were performed.

Observation:

Observations of Pesticide residue analysis

Sample nos	Sample A (mg/kg)	Sample B (mg/kg)	Sample C (mg/kg)
1	0.014	0.006	BLQ i.e.0.001
2	0.012	0.008	BLQ
3	0.014	0.006	BLQ
4	0.013	0.007	BLQ
5	0.013	0.008	BLQ
6	0.015	0.006	BLQ
7	0.012	0.008	BLQ
8	0.013	0.007	BLQ
9	0.014	0.007	BLQ
10	0.012	0.006	BLQ
Mean	0.0132	0.0069	BLQ

References:

1. Dr. Bramhanand Tripathi ;Charaka Samhita, Chawkhambha Surbharti Prakashan, Reprint 2006.
2. Shri bhavamisra; Bhavprakash Nighantu , Chawkhambha Bharati Academy, 9th edition 1993.
3. K.M. Nadkarni; Indian Materia Medica Volume 1&2, Bombay popular prakashan, 3rd edition reprint 2000.
4. K.P. Srivastava; A Textbook of Applied Entomology; Kalyani publishers, 2nd revised edition 1996.
5. <https://en.m.wikipedia.org/wiki/cauliflower>

Conclusion :

1. The study was analytical observational study
2. The mean values of cauliflower before Dhavana were found to be 0.0132
3. The mean values of cauliflower after Dhavana with Tap water were found to be 0.0069
4. The mean values of cauliflower after Dhavana with Nirgundi Kwatha were found to be BLQ. BLQ means below the level of quantification i.e. 0.001.
5. After Dhavana of pesticide sprayed Cauliflower in Nirgundi Kwatha, it was observed that the residue levels were decreased to such extent that it was not even detected.
6. So it can be stated that Nirgundi possesses Vishaghna property which reduces concentration of pesticides.

AYURVEDIC MANAGEMENT OF ANKYLOSING SPONDYLITIS-A CASE STUDY.

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Article Received on 10/05/2021

Article Revised on 31/05/2021

Article Accepted on 20/06/2021

ABSTRACT

Ankylosing spondylitis (AS) is a rheumatic disease with various skeletal and extra skeletal manifestations which belongs to a group of rheumatic diseases known as the spondylo arthropathies (SpA), which show a strong association with the genetic marker HLA-B27. Ankylosing spondylitis (AS) is a chronic, systemic, inflammatory disease which affects primarily sacro- iliac joints and spine. Inflammatory back pain and stiffness are prominent early in the disease, whereas chronic, aggressive disease may produce pain and marked axial immobility or deformity. From the Ayurvedic perspective, the disease can fall under Asthi majjagata vata, which may be effectively managed when intervention is started in its early stages. No satisfactory treatment is available in modern medicine for this disorder. Various Panchakarma procedures and Ayurvedic drugs have been proved useful for these manifestations. We present a case of AS, which was treated for two months with a combination of Panchakarma procedures and Ayurvedic drugs. Ayurvedic treatments, in this case, were directed toward alleviating symptoms and to reduce severe disability. The patient was considered suffering from Asthimajja gata vata.

KEYWORDS: Ankylosing spondylitis, Asthimajja Gata Vata, HLA B27.**INTRODUCTION**

Greatest number of vyadhi in ayurveda is vatavyadhi, so almost all vyadhi contains the main vata dosha. Pitta & Kapha has inert property without the vata dosha, so all vyadhi nidan some parts have vata dosha. In asthi-majjagata vata forms asthi-majja kshay. Dhatukshayatmak samprapti is done with nirupstambhit vata in Asthi majjagata vata.^[1] Ankylosing Spondylitis is classified along with the Seronegative Spondyloarthritis disease. Ankylosing Spondylitis is a chronic, systemic, inflammatory disease that affects primarily the sacroiliac joints and spine. Certain peripheral joints and tendons can also be affected, and extra-articular manifestations may be present. It typically affects young adults and male-to-female ratio is closer to 3:1. The median age of onset is 23 years. The aetiology of Ankylosing Spondylitis remains unclear.^[2] Around 0.25% population in India is estimated to be affected by these diseases. Early diagnosis is the key to successful management. The pathogenesis of Ankylosing Spondylitis remains unclear to date. It is assumed to be immune mediated. There is an obvious cytokine role, because patients show improvement with anti tumour necrosis factor α (anti TNF α) agents.^[3] Non-steroidal anti- inflammatory drugs (NSAID), corticosteroids and various disease modifying antirheumatic drugs (DMARDs) are used to treat/manage AS. However, these treatments are of limited benefit. Corticosteroids are associated with numerous side effects, especially when given systemically over long

periods of time. No effective disease modifying treatment has been established for AS.^[4] Various panchakama procedures and internal Ayurvedic medicines have been proved beneficial in the management of AS.^[5]

CASE STUDY

A 18-year-old Indian, unmarried, nonsmoking, nonalcoholic male patient consulted in Out-Patient Department for a complaint of gradually progressive lower back pain along with stiffening and deformity of the spine and hip from 7 months. The pain was insidious in onset which aggravates during night, early mornings and after exposure to cold or in cold seasons. Morning stiffness lasts for few hours and gradually improves with activity.

Clinical findings

The patient had several episodes of lower back pain, followed by spinal stiffness in the morning. The patient also had pain in Right leg while having difficulty in walking. Neck movements were restricted, and both upper limbs had a movement range up to 45°. On examination, the patient was found to be anxious with disturbed sleep, had a moderate appetite, Vishmagni (unstable digestive functions), Krura Kosta (bowel hard to purgare) with normal micturition. The tongue was clean, the voice was clear, and skin roughness was prominent. Patient had Vatapitta prakriti with Madhyam

(medium) Sara (purest body tissue), Madhyam Samhanana (medium body built), Sama Pramana (normal body proportion), Madhyam Satmya (homologation), Madhyam Satva (mental strength), Avara Vyayamshakti (least capability to carry on physical activities), Madhyam Aharshakti and Jaranshakti (medium food intake and digestive power). Asthivaha Srotodusti (pathology in bone) and Majjavaha srotodusti (pathology in bone marrow) were more prominent.

Past history

There is no any past history of HTN, DM, TB, Peptic ulcer or any endocrinedisorder.

Investigation

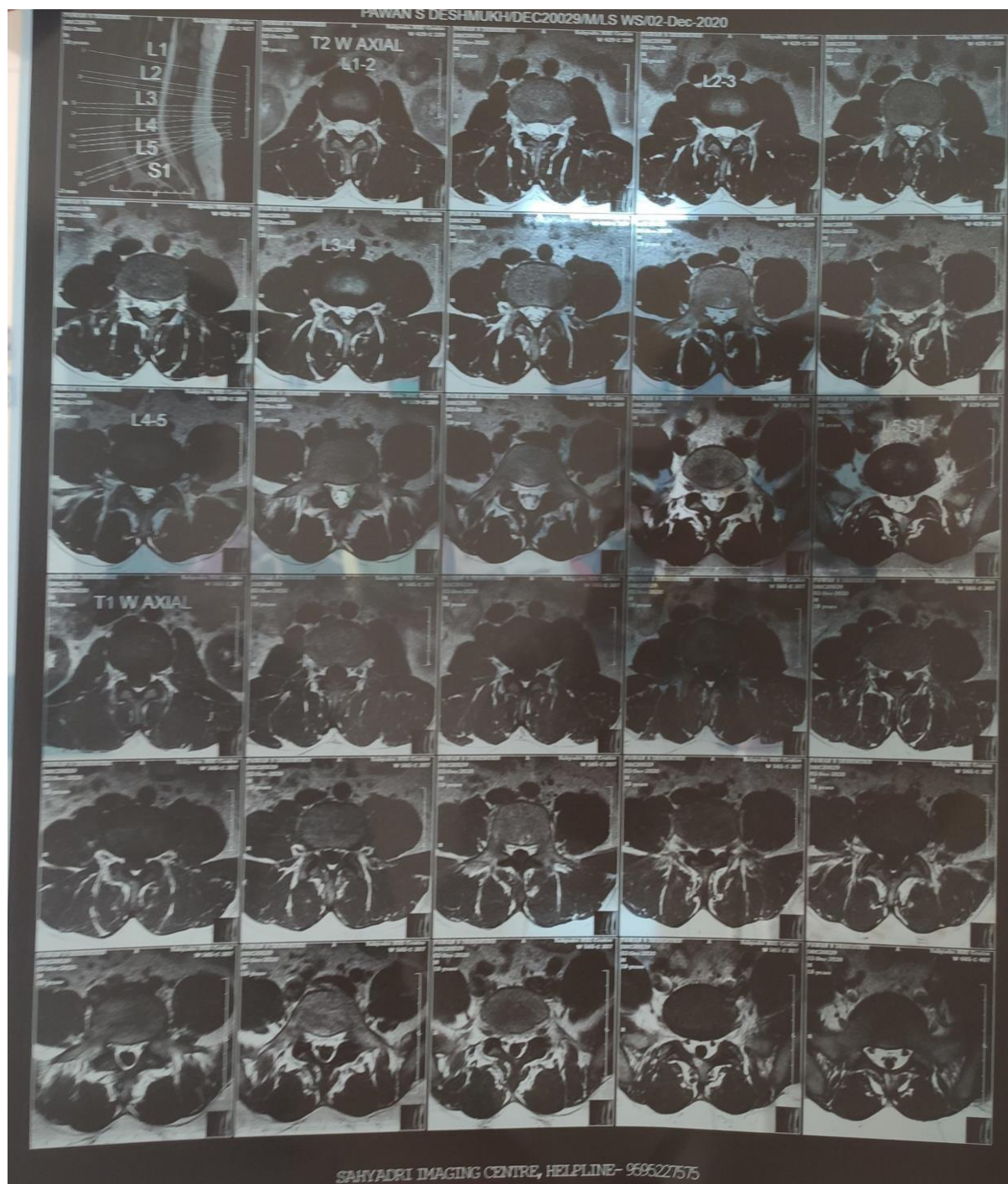
MRI Lumbo sacral scan screening shows

- Mild antero listhesis of L5 over S1 vertebra with bilateral spondylosis.
- Partial disc desiccation, mild bulge a4_5 &L5-S1 levels causing Effasement over thecal sac.

Screening MRI cervical dorso spinal reveals partial disc desiccation at C5-6 level.

Screening MRI PBH reveals- Hyper intense signal Intensity in bilateral sacro-iliac joint suggest bilateral acute sacro-illitis more on right side.





Lab investigation

HLA-B27 associated with ankylosing spondylosis shows positive.

Treatment

The patient was first explained the need of Shodhan therapy. Pathyapathyais followed completely. The details of Treatment protocol are as follows.

Shodhan

- 1) Avagahan swedan (Dashmoola + Nirgundi kwath).
- 2) Vaitaran Basti – Anuvasan Basti – Brhat saindhavadi tail

Niruh Basti – Vaitaran Basti.

For 14 days

Shamana

- 1) Simhnaad guggulu 2 tab BD.
 - 2) Rasnasaphak kashaya 20ml BD.
 - 3) Shad dharan choorna 3gm BD with luke warm water.
 - 4) Ashwagandha +Guduchi +Rasna + Shatavari + Shunthi – kadha 1spoon each BD
 - 5) Musta Ghana vati 2 tab BD.
 - 6) Mansadi kwath 40ml BD.
- Advise Physiotherapy.

- Lumbar Traction 25kg OD.
This treatment is given for 15 days.

OBSERVATION

In the treatment period, the patient had not taken anything except these medicines. Assessment criteria were based on the cardinal symptoms as.

Observation	Before treatment	After Treatment
Kati shoola	+++	+
Prustha shoola	+++	+
Sakashtha chakraman	++	+
Dakshin paad shoola	++	+

DISCUSSION

Consequently treatment was planned first to remove the Ama (undigested matter) by improving digestion with Deepana and digesting the Ama with Pachana ones. Basti is mentioned in vitiation of all the Vata, Pitta, Kapha, and Rakta Dosh.^[6] It is specially indicated for Vatika disorders.^[7]

Simhanada guggulu augments the Agni and is indicated in Amavata. Rasna is indicated in Kati graha, shoola and Prustha shoola. Rashna Saptak is Vata Shamana (pacifying) in action and also acts as Analgesic. Guduchi and mixture helps in Ama Pachana due to presence of Tikta Rasa and act as Rasayana.

CONCLUSION

The Ayurvedic diagnosis of 'Asthi-majja gata vata' is made for 'Ankylosing spondylitis' in present case. Various Ayurvedic panchakarma procedures and internal medicines have provided promising results especially in reducing the pain, decreasing the severity of deformities and also improving quality of life within short time and without causing any adverse effects in present case.

REFERENCE

1. https://ayurlog.com/Archive/january_march/issue_2015/20150301article_16.pdf.
2. Davidson's Principles and Practice of Medicine, Editors Nicki R. College, Brian R. walker, Stuart H. Ralston, 20th edition, 2010; Chapter 25, Pp: 1360, Pg: 1104.
3. Davidson's Principles and Practice of Medicine Editors Nicki R. College, Brian R. walker, Stuart H. Ralston, 20th edition, 2010; Chapter 25, Pp: 1360, Pg: 1105.
4. <https://www.ncbi.nlm.nih.gov/pubmed/12381506>
5. <https://www.ncbi.nlm.nih.gov/pubmed/27297511/>.
6. Ambikadatta shastri., Hindi Commentator of Ayurveda-Tattva- Sandipika of sushruta samhita; Vol. chaukhamba Sanskrit Sansthan, Varanasi, 2005; P.248, (Chikistasthana Netrabasti Praman Pravibhag Chikitsitam adhyaya), Ch.35, Shlok no.6.

7. Arunadatta Edited by Pt.Hari Sadasiva Sastri Paradakara Astangahradaya samhita of Vagbhata, chaukhamba Sanskrit Sansthan, Varanasi: 2012 Page no.16 (Sutrasthana Ayushkamiya Adhyaya), ch.1 Shlok no. 26.

An Ayurvedic Review on Management of Tamaka Shwasa**Dr. Amol M. Badarkhe**[BAMS; MD, MPH, PhD Scholar] Assistant professor,
Kayachikitsa department; CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad.**Dr. Ankita A. Sulkekar**[BAMS; MS] Assistant professor,
Shalyatantra department; CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad.**Abstract –**

Respiration is the evident feature of life which is carried out by Prana vayu. This sole sign of life is affected in this disease Tamaka Shwasa, causing an impediment to the Respiratory function. Shwasa word indicates both physiological and pathological state of respiration. Ayurvedic texts have mentioned Tamaka Shwasa under the various types of Shwasa roga. Disease Tamaka Shwasa can be correlated with the disease Bronchial Asthma on the basis of its features & etiopathogenesis. Tamaka Shwasa is considered as Yapya (palliable) because this type of Shwasa roga is not only difficult to treat but also has a repetitive nature. Bronchial Asthma calls the attention of Medical world due to significant burden in terms of health care costs as well as lost productivity and reduced participation in family life. The Science of Life – Ayurveda is the best way to effectively & safely manage the condition without inducing any drug dependency where various Shodhana procedures and use of internal medication not only detoxifies the body but also provides nutrition & increases the elasticity of lung tissue & develops natural immunity of the body thus decreasing episodic recurrence of the disease and providing long term relief to the patient.

Keywords: Tamaka Shwasa, Bronchial Asthma, Shwasa roga.

Introduction -

Tamaka Shwasa is one of the five types of disease Shwasa. The signs, symptoms and etiopathogenesis of Bronchial Asthma explained in modern science have a lot of similarities with the disease entity Tamaka Shwasa. The main features of Bronchial Asthma are breathlessness, chest tightness, wheezing and cough. Bronchial Asthma is a major global health problem, which can affect the population irrespective of age, sex, economic status, etc. It is very common at all ages but predominantly in early life. The prevalence of Bronchial Asthma is increasing alarmingly now a days due to excessive pollution, overcrowding, occupational conditions, stress and poor hygiene etc. Both Ayurveda and modern medical Science agree regarding the Nidana of the disease as host factors (Nija Hetus-Dosha dushti and Ama) and Environmental factors (Agantuj Hetus – Raja, Dhuma, Pragvata, etc). It can be easily correlated with allergic condition. Nidana Parivarjan hence plays a key role in the management strategy in both sciences.

The current management of Tamaka Shwasa (Bronchial Asthma) by modern medicine is only providing short term symptomatic relief but does not provide any long term relief to the patient. On the other hand prolonged use of these drugs are not safe, as it has many adverse effect with systemic manifestation and as the chronicity increases drug dose dependency increases & dilates the lung tissue to such an extent that at last it leads to respiratory failure. In present scenario Ayurveda is the best way to effectively & safely manage the condition without inducing any drug dependency where use of various shodhana procedures and use of internal medication not only detoxifies the body but also provides nutrition & increases the elasticity of lung tissue & develops natural immunity of the body. Thus decreasing episodic recurrence of the disease and providing long term relief to the patient.

Ayurvedic Aspect of Tamaka Shwasa-

Tamaka Shwasa comprises of two words i.e. Tamaka and Shwasa. The word 'Tamaka' is derived from the Dhatu "Tamglanou" which means Sadness (Panini). According to Vachaspatyam the word Shwasa is derived from the root word 'Shwas' Dhatu by applying Ghanj Pratyaya. It implies for both

Vayu Vyapara & Roga Bheda. It represents both physiological as well as pathological respiration and used for expression of word.

The disease is called Tamaka as attack of the disease precipitate during night and during the state of attack dyspnoea becomes so severe that patient feels entering into the darkness. Main causative factors responsible for Tamaka Shwasa are Dhuma (smoke), Raja (dust), Ativyayama (excessive exercise/work), Sheeta sthananivasa (residing in cold areas), Guru bhojana (heavy diet) and Sheeta bhojana (cold food/drinks). These factors lead to the vitiation of Vata which in turn vitiates Kapha leading to vitiation of Rasa and impeding the function of Pranavata. According to our Ayurvedic literature vata is captured by the Aavrana of kapha in this disease. Acharya Charaka has mentioned that Tamaka Shwasa is kapha-vataja vikar and site of its origin is pitta sthana. In Sushruta Samhita, Madhava Nidana and Yogratnakar it is mentioned that Tamaka Shwasa is Kapha predominant disorder. When going through the lakshnas of Tamaka Shwasa in our Ayurvedic literature our Acharayas has told Gurghurkam (audible wheezing), Pinasa (coryza), Shirogaurava (heaviness in head region), kricchat bhashitum (difficulty in speaking) etc. all the Lakshnas showing Kapha predominancy. Tamaka Shwasa in general is described as yapy (palliable) disease. However in individual with recent origin of disease, person of pravara or both said to be sadhya.

Maharshi Charaka has mentioned two-allied stages of Tamaka Shwasa known as two types or further complication of disease proper i.e. Pratomaka and Santamaka. Sushruta and Vagbhata have only mentioned the name as Pratomaka, which includes clinical manifestation of Santamaka. Patients suffering from Tamaka Shwasa when gets afflicted with fever and fainting, the condition is called as Pratomaka Shwasa. It is suggestive of involvement of Pittadosha in Pratomaka Shwasa. It is aggravated by Udavarta, dust, indigestion, humidity (Kleda), suppression of natural urges, Tamoguna, darkness and gets alleviated instantaneously by cooling regimens. When the patients of Pratomaka Shwasa feels submerged in darkness, the condition is called as Santamaka Shwasa. While describing the management Acharya Charaka has clearly

mentioned the importance of Nidana parivarjana along with Shodhana and Shamana chikitsa as mentioned below.

Management Of Tamaka Shwasa-

NIDANA PARIVARJANAM: Chikitsa is defined As Nidanparivarjana avoidance of causative factors.

Ayurveda basically being emphatic about Swasth rakshanam give priority to prophylactic management. This is very much applicable in the case of Tamaka Shwasa. The aagantuk hetu have to be avoided in the first place. Being a yapy roga avoidance of triggering factors and providing quality of life with minimum medication is the aim of Asthma management. Charaka says, the primary importance in Shwasa Chikitsa is the avoidance of causative factors. Both Ayurveda and Modern scientist agree to this fact.

The management of Tamaka Shwasa has two aspects:

1. Management of Vegavastha of Tamaka Shwasa; i.e. acute exacerbations, and
2. Chronic management of the Avegavastha, where the frequency, duration and intensity of the attacks are minimized / totally cured to give a quality life to the patient.

1. VEGAVASTHA:

In Vegavastha Charaka, Sushruta, Vagbhata, all the Acharyas have emphasized on the Shodhana therapy in the starting of Chikitsa and after that use of Shamana yogas. Patient who is in Vegavastha should be first anointed with salted oil and then subjected to sudation either by methods of steam (Nadi Sweda), hot bed sudation (Prastara) or mixed sudation. This is a specific condition where Sneha with Lavana is indicated. In Snehadhaya Charaka has mentioned properties of Salavana Sneha. It supervenes within short period of time because both of them are having Sukshma property hence having greater penetration power. It is also having Doshasanghata Vicchedakara property. Taila is having Ushna property, and thus alleviates Vata, and does not increase Kapha, therefore it is better for Abhyanga. In Shwasa Grathita Kapha (Mucous plug) is present; and Salavana Sneha is useful in Vilayana of this Grathitha Kapha, thereby removing

the Sanga (Obstruction of airway). Once the Kapha is removed from airways, it flows back to its base in Amashaya from where it is expelled out by Vamana. After a classical Vamana therapy, the left out Dosha has to be eliminated by fumigation therapy or Dhupana.

2. AVEGAVASTHA:

In Avegavastha due consideration should be given to avoid pathogenesis which further leads to exacerbations. However, Acharya Charaka has divided the patients of Shwasa into two categories.

1. Those who are strong and with predominance of Kapha.
2. Those who are weak and with predominance of Vata and who are un-unctuous.

The choice of management of Shwasa in Alapabala patient is Tarpana and Shamana. Shodhana therapy should be administered only if extremely essential, if the patient is having good Dehabala and Satwabala, and when all other measures fail. In the last shloka of Shwasa chikitsa, Acharya Charaka says Brimhana is considered the best option compared to shamana and karshana when treating Tamaka Shwasa patient.

In the Shamana Chikitsa the used drugs should be Vatakaphaghna, Ushna and Vatanulomana. Also he said that, any remedy which aggravates vata and pacify kapha or which pacify vata and aggravates kapha or which pacifies both vata and kapha or which pacifies only vata should be used for the management of Tamaka Shwasa.

Sushruta has described different medicated ghrita-kalpana for Shamana Chikitsa. Acharya Sushruta has advised to do both Vamana, Virechana in Shwasa management while Acharya Charaka has described first Vamana in Shwasa may be as an emergency and after that Virechana with Vata-shleshmahara dravya especially for Tamaka Shwasa in between the two attacks or avegavastha. Virechana is best for Srotoshodhan and Pitta Shamaka Chikitsa and the Pitta sthana Samudbhava of Shwasa Roga can be explained in the terms of the importance of Ama in the Samprapti, which is produced in Adho-Amashaya, may be duodenum- the main site of digestion, which is explained as the Pitta Sthana by Chakrapani-datta. Hence, the specific management of Tamaka Shwasa according

to Charaka is Virechana. Keeping in mind the Samprapti of Tamaka Shwasa, the ultimate aim of treatment should be to clear out the Pranavaha Srotasa, pacify Vata and remove the blockage due to Kapha.

According to Vagbhata following is main principle of treatment:

1. Balvana -kaphadhika - Karshana chikitsa
2. Durbala- bala- Brimhana
3. Vriddha - Shamana Chikitsa

The author of Yogaratnakar has mentioned that except Snehavasti, all other methods of Shodhana Chikitsa should be adopted in Tamaka Swasa. (Yoga Ratnakar. Swa.chi.1)

Shamana Yoga

For the management of Shwasa, Acharya Charaka has given 10 drugs under Shwasahara Mahakashaya: Kachur, Pushkarmoola, Amlavetas, Choti-ela, Hingu, Agar, Tulsi, Bhumyalaki, Chanda (Chorpushpi) and Jeevanti and 10 drugs in Kasahara Mahakashay: Pippali, Kasamarda, Kantakari, Brihati, Agastya, Karkatshringi, Tulsi, Vasa, Vanshlochana, Dalchini, Talispatra Acharya Sushruta has described various kind of drugs under Vidarigandhadi varga, Sursadi gana and Dashmul gana for the management of Shwasa roga.

Different forms of commonly used preparations, given in different Ayurvedic samhitas, for the management of Tamaka Shwasa can be summarised as follows:

Churna: Sitopaladi Churna, Talisadi Churna, Muktadya Churna, Sauvarchaladi churna, Shatyadi Churna, Krishnadi Churna, Paushkaradi Churna, Shunthyadi Churna etc.

Kwatha: Dashmuladi Kwatha, Bharangyadi Kwatha, Vasadi Kwatha, Sheerishadi Kwatha, Amritadi Kwatha etc.

Vati: Vyoshadi Vati, Marichyadi Vati, Khadiradi Vati, Lavangadi Vati etc.

Awaleha & Leha: Kantakari avaleha, Chyavanprasha, Vasa haritakya leha, Chitraka – haritaki avaleha, Haridradi leha etc.

Ghrita: Manahshiladi Ghrita, Vasa Ghrita, Shatpala Ghrita, Tejovatyadi Ghrita, Dashmuladi Ghrita.

Kshara: Arka Kshara, Apamarga Kshara, Ashvagandha Kshara etc.

Aasava-Arishta: Kanakasava, Pathadyasava, Somasava etc.

Bhasma-Rasa: Abhraka bhasma, Shringa bhasma, Shwasa kuthar rasa, Shwasa-kasa-chintamadi rasa, Laxmivilas rasa etc.

Yavagu & Yusha: Dashmuladi Yavagu, Hingvadi Yavagu, Pushkaradi Yavagu, Rasnadi Yusha, Kasmarda Yusha.

Dhumpana & Nasya: Chandana dhumpana, Guggulu dhumpana, Haridradi dhumpana, Lashunadi nasya.

**PATHYA –APATHYA in Tamaka Shwasa -
PATHYA:**

Annavarga: Mudaga, Yava, Kullatha, Purana Shashtik, Rakta shalidhanya, Wheat.

Shakavarga: Paraval, Jivanti, Chaulai

Phalavarga: Bimbiphala, Jamberiphala, Nimbu, Draksha, Amalaki, Amlavetas, Bilva, Amlarasa, Pakva- kushmanda.

Dugdhavarga: Ajadugdha, Ghrita, Puranghrita.

Mamsavarga: Jangala maans rasa, maans of tittar, lava, deer, shooka, rabbit. Peya: Ushna jal, madhu, arishta, go mutra, sauviraka.

Vihara: Diwaswapna, Pranayama, Ushnajala Snana, Avagha- swedana, Abhyanga, medicated dhoompana.

APATHYA:

Annavarga: Rukshanna, Guru and vishtambhi Aahara, nishpava, masha, kaphavata vardhak aahara. Phalavarga: kela, Apakvakushmanda.

Dugdhavarga: Dadhi, Unboiled milk. Maansavarga: Matsya, Anuo maans. Peya: Sheetjal, Dushita jal Shakavarga: Kadwa Shaka, Surasava

Vihara: Exposure to cold, dust, pollution, atibharkarshan, vyayama, excess indulgence in sexual activities, tension and suppression of natural urges.

Conclusion-

Prevalence of Bronchial Asthma is increasing alarmingly due to excessive pollution, overcrowding, occupational conditions, stress and poor hygiene etc. These etiological factors acts as aggravating factors in developing acute attacks of asthma mostly in atopic individuals. Therefore, Nidana parivarjana has got a significant role to play in the management of the disease Tamaka Shwasa. Also, various principles of Ayurveda and many a

formulations can be used according to Roga & Rogi bala, during Vegavastha & Avegavastha and as per palatability of the patient for free flow of prana vayu so that srothorodha is removed and free flow of prana vayu may occur thereby curing the attack of disease Tamaka Shwasa.

References-

1. Vachaspatyam page-5/59 part-6
2. Acharya Agnivesha, Charaka Samhita, edited by Vaidya Yadavaji Trikamji, Chaukhambha Subharati Prakashan, Varanasi reprint 2011, Chikitsasthana 17/8; page no.509 .
3. Acharya Agnivesha, Charaka Samhita, edited by Vaidya Yadavaji Trikamji, Chaukhambha Subharati Prakashan, Varanasi reprint 2011, Chikitsasthana 17/62; page no. 516.
4. Jadavaji Trikamji Acharya, ed. Dalhana commentary on Sushruta Samhita Uttarantra 1/25, edition reprint 2010 by Ambikadattashastri, Chaukhamba Sanskrit Sansthan, Varanasi. pp-11
5. Acharya Agnivesha, Charaka Samhita, edited by Vaidya Yadavaji Trikamji, Chaukhambha Subharati Prakashan, Varanasi reprint 2011, Chikitsasthana 17/138; page no. 528.
6. Acharya Agnivesha, Charaka Samhita, edited by Vaidya Yadavaji Trikamji, Chaukhambha Subharati Prakashan, Varanasi reprint 2011, Chikitsasthana 17/23; page no. 511.
7. Acharya Agnivesha, Charaka Samhita, edited by Vaidya Yadavaji Trikamji, Chaukhambha Subharati Prakashan, Varanasi reprint 2011, Sutrasthana 13/98; page no. 280.
8. Acharya Agnivesha, Charaka Samhita, edited by Vaidya Yadavaji Trikamji, Chaukhambha Subharati Prakashan, Varanasi reprint 2011, Sutrasthana 13/15; page no.258 .
9. Acharya Agnivesha, Charaka Samhita, edited by Vaidya Yadavaji Trikamji, Chaukhambha Subharati Prakashan, Varanasi reprint 2011, Chikitsasthana 17/30; page no. 512.
10. Acharya Agnivesha, Charaka Samhita, edited by Vaidya Yadavaji Trikamji, Chaukhambha Subharati Prakashan, Varanasi reprint 2011, Chikitsasthana 17/90; page no. 521.
11. Acharya Agnivesha, Charaka Samhita, edited by Vaidya Yadavaji Trikamji, Chaukhambha Subharati Prakashan, Varanasi reprint 2011, Chikitsasthana 17/89; page no. 521.
12. Acharya Agnivesha, Charaka Samhita, edited by Vaidya Yadavaji Trikamji, Chaukhambha

- Subharati Prakashan, Varanasi reprint 2011, Chikitsasthana 17/149; page no. 530.
13. Acharya Agnivesha, Charaka Samhita, edited by Vaidya Yadavaji Trikamji, Chaukhambha Subharati Prakashan, Varanasi reprint 2011, Chikitsasthana 17/147; page no. 529.
14. Acharya Agnivesha, Charaka Samhita, edited by Vaidya Yadavaji Trikamji, Chaukhambha Subharati Prakashan, Varanasi reprint 2011, Chikitsasthana 17/148; page no. 529.
15. Jadavaji Trikamji Acharya , ed. Dalhana commentary on SushrutaSamhitaUttaratantra 51/15, edition reprint 2010 by Ambikadattashastri,Chaukhamba Sanskrit Sansthana ,Varanasi.pp-378
16. Acharya Agnivesha, Charaka Samhita, edited by Vaidya Yadavaji Trikamji, Chaukhambha Subharati Prakashan, Varanasi reprint 2011, Chikitsasthana 17/121; page no.525 .
17. Vagbhatta, Ashtanga Hridaya, Arundatta Tika by Dr. Anna Moreswar Kunte & Krishna Ramchandrashastri Navre, Chaukhambha Subharati Prakashan, Varanasi 2011, Chikitsa sthana 4/58-59, page no.436.
18. Acharya Agnivesha, Charaka Samhita, edited by Vaidya Yadavaji Trikamji, Chaukhambha Subharati Prakashan, Varanasi reprint 2011, Sutrasthana 4/37; page no.90.
19. Acharya Agnivesha, Charaka Samhita, edited by Vaidya Yadavaji Trikamji, Chaukhambha Subharati Prakashan, Varanasi reprint 2011, Sutrasthana 4/36; page no.90.
20. Sushruta Samhita edited by Vaidya Yadavaji Trikamji, Chaukhambha Subharati Prakashan, Varanasi print 2010, Sutra sthana 38/4; page no.141.
21. Sushruta Samhita edited by Vaidya Yadavaji Trikamji, Chaukhambha Subharati Prakashan, Varanasi print 2010, Sutra sthana 38/18- 19; page no.143.
22. Sushruta Samhita edited by Vaidya Yadavaji Trikamji, Chaukhambha Subharati Prakashan, Varanasi print 2010, Sutra sthana 38/68- 72; page no. 146.



Efficacy of Sahacharadi Taila Matra Basti in Management of Neurogenic Bladder: A Case Study

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Abstract-

Brain, spinal cord and peripheral nerves control the process of micturition by exerting control over muscles and sphincters of urinary bladder. Neurogenic bladder is a type of dysfunction caused by damage to this control mechanism due to myelopathies, injuries, diseases of the brain, diabetes, alcoholism, vitamin B12 deficiency, post operative complications etc. The symptoms range from detrusor under-activity to over-activity, which includes but not limited to dribbling stream and inability to fully empty the bladder. As per Ayurveda, Apana vayu dushti (~dysfunction in the Apana vata i.e. located in lower abdomen parts and governs their function) is responsible in retention of urine and it can be correlated as Basti kundala explained under the thirteen types of Mutra ghata (~urine obstruction). A 45 years old female patient presented with chief complaints of increased frequency of urination, uncontrolled urine associated with dribbling of urine at the end of micturition, no satisfaction after urination she feel fullness of bladder after micturation. She also complained of abdominal distension throughout the day. She was treated with Tila taila anuwasan and Dashmula kwatha niruha Yoga basti (~rectal enema), administered for 8 days, after that sahacharadi taila matra basti (~rectal enema) after which the symptoms were reduced.

Key Word- Basti Kundal, Apanavayu, mutra ghata

Introduction-

Neurogenic bladder is a term applied to urinary bladder malfunction due to neurological damage to the nerves that governs the urinary tract emanating from internal or external trauma, disease or injury. Normal micturition involves proper function of both the bladder and urethra. A detrusor of normal compliance and a physiologically competent urethral sphincter are both necessary to maintain urinary continence. Normal micturition involves passive, low pressure filling of the bladder during the urine storage phase while voiding requires coordination of detrusor contraction with internal and external urinary sphincter relaxation. The spinal cord controls micturition reflex by the sympathetic and parasympathetic nervous system; brain controls normal micturition with urinary continence by holding urine through pontine storage center and facilitate urination by pontine micturition center. There are two types of neurogenic bladder viz. spastic (hyper reflexive) and flaccid (hypotonic). In

case of lower motor neuron lesion or any sacral injury or spinal shock, signals do not reach up to brain due to disruption of sensory fiber, hence urine occurs drop by drop known as overflow incontinence. While in upper motor neuron lesion detrusor hyperreflexia occurs which results into urge incontinence. In Ayurveda, a similar condition, Basti kundala is described under thirteen types of Mutra ghata. This condition is characterized by retention of urine in the bladder, leading to its distension. When Apana vata is associated with Pitta dosha, it causes burning sensation and distress on passing urine with yellow discoloration and when associated with Kapha dosha, it causes bladder distension with turbid urine. In contemporary science, for most types of neurogenic bladder, treatment essentially involves use of indwelling catheters, which certainly increases the risk of urinary tract infections, ascending pyelonephritis and bladder injuries. Those cases requiring surgery are further exposed to risk of recurrence and trauma. Even those on medication are subjected to side effects, which are unavoidable. Moreover, a definitive treatment is not guaranteed by any mode of management. A better management

protocol can be introduced through Ayurveda in terms of lower risk of complications due to treatment and advantage of targeting the root pathology through Ayurvedic principles of management. A general line of treatment mentioned in all types of Mutra vikara (urinary disorders) is Basti and Uttar basti.

Case report-

A 45 years old female patient presented with chief complaints of frequent urination (15-20 times in 24 hours) associated with dribbling at the end of micturition, fullness of bladder after micturition, with feeling of abdominal distension since four months. Patient was apparently asymptomatic till one year back when she developed slow onset of low backache. she was diagnosed to be a case of neurogenic bladder and was on allopathic treatment for his symptoms with partial relief and recurrences. After four months, she further developed increased frequency of urination along with turbid urine and smell in urine. Her hysterectomy operative done before 18 yrs back. she comes with above symptoms.

Personal history-

Appetite and thirst were normal. She was presented with constipated bowels, turbid micturition, smell of urine and disturbed sleep. The patient found to be Vata kapha prakriti with Krura koshtha, Madhyambala and Madhyama satva.

Per abdomen examination-

On palpation, mild tenderness was present in hypogastrium, left and right lumbar regions. Cardiovascular, Respiratory, Central nervous systems were found normal. Patient was well oriented to person, place and time. Gait was antalgic (pain avoiding gait), painful range of movement of legs was presented and mild kyphosis was present. Blood sugar [fasting (90 mg/dl), PP (106 mg/dl)], blood urea (36 mg/dl), serum creatinine (0.8 mg/dl) were in limits. Albumin (traces), pus cells (2-4 HPF), epithelial cells (++) were found. Mild changes of cystitis noted, pre void urine volume 164cc and post void urine volume 110 cc in USG report.

Treatment protocol-

The patient was admitted in the shalyatantra IPD and treatment was planned considering involved

Dosha and Dushya. Yog basti started to patient for 8 days. Niruha basti- Dashmula kwath was administered for 3 days, anuwasan basti - Tila taila was administered for 5 days. prior to basti for balancing Agni (~digestive fire) to counter Ama (~undigested food) presented in the body Hingwaashtak churna one teaspoon first bite of food is given in BD and also given Amapachak vati 250 one tablet in TDS. After that Matra basti (50 ml) with sahacharadi taila was planned for one month through anal route. The retention time of oil was found to be 4-5 hrs during the 1st week, which was gradually increased up to 20 hrs. Patient was advised to avoid Vata dosha vitiating diet like cold water and meals, rotten food, curd, cold drinks etc. and lifestyle like vigorous exercise and exertional work.

Drugs	Dose	Time	Duration	Purpose
1).Hingwashtak churna	2gm(one tea spoon)	Twice in a day first bite of food	7 days	For good digestion and Deepan-Pachan
2).Aampachak vati	500gm	Thrice a day one tablet after meal	7 days	Deepan-Pachan
3).Yog Basti A) Anuwasan basti- Tila taila B) Niruha Basti- Dashmula Kwath	50ml 50ml	At morning Before breakfast After breakfast	Alternate days anuwasan (5) and niruha(3) basti for 8days	Shodhan and vata alleviation
4).Matra basti- Sahacharadi taila (followed by yog basti)	50ml	After breakfast	1 month	Vata alleviation and neurological disorders.

PLAN OF MATRA BASTI-

Time	Dose(ml)	Retention time(hrs)	Complications	Frequency of micturition in 24hrs
1 st wee	50ml	Around 4-5hrs	No	15-20 times

k				
2 nd week	50ml	Around 10	No	12-14 times
3 rd week	50ml	Around 15	No	10-12 times
4 th week	50ml	Around 18	No	8-9 times

Outcome-

Frequency of micturition was decreased to 8-9 times from 15-20 times in 24 hrs along with relief in abdominal distension with a feeling of lightness. Improvement was also found in uroflowmetry.

Uroflowmetry-

Parameters	Before treatment	After 15 days of treatment	After treatment
Voided volume (ml)	164	190	210
Max flow rate(ml/s)	10	12	14
Average flow rate(ml/s)	4	6	9
Flow rate(sec)	30	26	20
Time to max flow(sec)	10	6	3
Hesitancy (sec)	10	6	2
Residual urine(ml)	110	70	20

Discussion-

Patient presented with chief complaints of increased frequency of urination and turbid urine for past four months. Her past history mentions low backache, which was associated with lumbar radiculopathy. cystitis pathology was ruled out in ultrasound abdomen. A diagnosis of neurogenic bladder was made in the light of history and investigations. Patient has hysterectomy done before 18 years, which leads to vitiation of Vata dosha. Also patient's age (45 years), is more prone to Vata vikaras. Vata dosha controls the nervous phenomenon of the body. Apana vayu governs the working of kidneys, colon, rectum, hence facilitate

the elimination of waste products like stool, urine etc. from body. Vitiating Vata results in Mutra vaha sroto dushti which presents as Atipravritti of Mutra (increased frequency of micturition). For all the urinary problems Basti and Uttara basti is the better treatment. It is stated that in vitiated Vata diseases or Vata dosha dominant diseases Basti is the best treatment. Basti also does disintegration and integration of Purisha (stool), Mutra (urine), Pitta (bile salts) and useful entities in body. Thus, Basti was planned in the current case. The choice of Matra basti was made because of its qualities like; it can be given at any time, can be recommended for daily use in emaciated patients with over exertion, over work, weight lifting, riding, travelling, indulgence in women, in debilitated persons as well as in those afflicted with Vata vikara (diseases of Vata). It is Balya, Brimhana, Vatarogahara, simple to administer and helps in easy evacuation of Mala and Dosha. Sahachara taila was used for Basti as it is indicated in Mutra ghata and said to be as 'Sarvavatavikarajit'. Matra basti was administered for one month because of the convenience of the patient. After completion of treatment patient was advised to take Chandraprabha vati (250 mg) twice a day as Rasayana and Shamana drug for fifteen days to rejuvenate the urinary system and was advised not to take Vataprakopaka diet and not to follow Vataprakopaka lifestyle. Patient was advised to re-visit hospital after 15 days for follow up. No further relapsing of symptoms was noticed. No complications were noticed or reported with usg post void residue is 20cc, cystitis decrease, no smell in urine.

Conclusion-

Neurogenic bladder is caused by the damage of the nerves governing the functions of urinary bladder. Vitiating Vata dosha (Apana vayu) is the main culprit in this disorder, which results in Mutravaha srotodushiti (dysfunctioning of urinary system) and thus Atipravritti (increased frequency of micturition). The adopted therapy i.e.Sahacharadi taila matra basti in the current case provided marked decrease in the frequency of micturition and relief in abdominal distension, which was not controlled by other oral medications like Chandraprabha vati and Gokshuradi guggulu. Basti is stated as best treatment for vitiation of Vata. In this particular case, the

treatment protocol adopted proved to be beneficial for the patient. No side effects were noticed during the period of treatment. The efficacy may be studied in larger samples to draw efficacy of Ayurveda treatment modalities. Also there is a need to promote role of Ayurvedic Panchakarma therapies in neurogenic bladder and make them more aware of its benefits over contemporary approaches.

References-

1. <https://emedicine.medscape.com/article/453539-overview/> last accessed on 17.8.2019 at 11.18.
2. https://upload.wikimedia.org/wikipedia/commons/5/5e/Neurogenic_bladder.webm/ last accessed on 17.8.2019 at 11.20.
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC32870341/> last accessed on 20.12.2017 at 20:37.
4. Shastri K, editor. Charaka samhita of Agnivesha, Siddhi sthana; chapter 9, verse 44-48. Varanasi: Chaukhambha Bharti Academy; 2011. p. 1062. reprint 2011.
5. Shastri K, editor. Charaka samhita of Agnivesha, Siddhi sthana; chapter 9, verse 49-50. Varanasi: Chaukhambha Bharti Academy; 2011. p. 1063. reprint 2011.
6. Srivastava S, editor. Sharangdhara samhita of Sharangdhar, Madhyam khanda; chapter 6, verse 115-119. Varanasi: Chaukhambha Orientalia, 2009. p. 188. reprint 2009.
7. Sharma R, Sharma S, editor. Sahasrayogam, Dhanvantarataila, chapter 5, Delhi: Chaukhambha Sanskrit Pratishthana; 2007. p. 74. reprint 2007.
8. Dwarkanath C, editor, Introduction to Kayachikitsa, A reassessment of the concept of kriyakala, sharira-vata and nerve phenomenon, chapter 8; 4th ed. Varanasi: Chaukhambha Orientalia; 1996. p. 113.
9. Shastri K, editor. Charaka samhita of Agnivesha, Chikitsasthana; chapter 28, verse 11. Varanasi: Chaukhambha Bharti Academy; 2011. p. 778. reprint 2011.
10. Tripathi B, editor. Astangahrdayam of Vagbhata, Sutra sthana; chapter 19 verse 1. Delhi: Chaukhambha Sanskrit Pratishthan; 2007. p. 229. reprint 2007.
11. Shastri K, editor. Charaka samhita of Agnivesha, Siddhi sthana; chapter 1, verse 39. Varanasi: Chaukhambha Bharti Academy; 2011. p. 971. reprint 2011.
12. Shastri K, editor. Charaka samhita of Agnivesha, Siddhi sthana; chapter 4, verse 52. Varanasi: Chaukhambha Bharti Academy; 2011. p. 1013. reprint 2011.

ISSN 2349-638X

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International Journal of Health Research and Medico-Legal Practice

Open access full-text article
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RESEARCH PAPER

A case series on suicide by hanging: a prospective study conducted in Mumbai region

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Received on: Nov 30, 2019

Editorial approval on: 30 Jan 2020

Checked for plagiarism: Yes

Peer review: Double-blinded

Peer review comments: Three

Editor who approved:

Prof. Putul Mahanta

Background and aims: The present scenario of globalisation, urbanisation and industrialization is creating lot of stress on individual in particular as well as on the society in common. Person who are not able to sustain these stressful situations are the major victims of suicidal deaths. **Materials and methods:** Present study is carried out at the department of Forensic Medicine and Toxicology and post mortem centre of a tertiary care hospital and a medical college in Mumbai region. Suicidal hanging cases over the last two years were included for this study. The statistical analysis was carried out using the Microsoft Excell and SPSS software 18. Ethical clearance was obtained from the ethics committee of the institute. **Results:** A total 124 cases of hanging were studied in detail. Out of 124 suicide cases 77 were males (62.10%) and 47 were females that is 37.90%. Fifty-seven victims were of age group between 21 to 30 years (45.97%). Privacy for suicide was maintained by selecting lonely place by 97 cases (78.22%). **Conclusion:** The most commonly affected age group was between 21 to 30 years. In the present study male victims (62.10%) outnumbered the female victims. The lower socioeconomic group was more vulnerable (49.5%) for suicide. Most victims were married and committed suicide due to unemployment and money crisis. The commonest cause of suicide in housewives was marital disharmony and dowry related issues.

Keywords: Suicidal hanging; vulnerable age group; socioeconomic status; privacy for suicide; suicide note.

Cite this article as: Chikhalkar BG, Waghmare PB, Thote AS. A case series on suicide by hanging: a prospective study conducted in Mumbai region. *Int J Health Res Medico Leg Prae* 2021 Jan-Jun; 7(1):32-36. Doi:10.31741/ijhrmlp.v7.i1.2021.5

INTRODUCTION

Suicide is a major public health problem: approximately 0.9% of all deaths are the result of suicide. About 1000 persons are estimated to commit suicide each day worldwide.¹ Suicide may be defined as, “an intentional act causing harm to a person amounting to death and committed by person himself in the absence of contribution from any external agency particularly in the commencement of act.”² Recently the term suicide has been replaced by “Intentional Self-Harm”(ISH) in the scientific literature due to derogatory nature of the word “Suicide?”² Hanging is almost always suicidal or accidental, the former being by far the most common.³ Most hangings are self-suspensions, this may be carried out by a wide variety of methods, but a typical method of self-suspension is to attach a thin rope to a high point such as a ceiling beam or staircase.³ Any substance that is available at the time of the impulse has been used by the suicides as a ligature for hanging.⁴

MATERIAL AND METHODS

This study is prospective study carried out at post mortem centre attached to Medical College in Mumbai. Only the alleged suicidal cases or suspected suicidal deaths by hanging are included in this study. The natural deaths, accidental deaths, deaths due to multiple injuries are excluded. The study duration is two years i.e., from 1st October 2012 to 30th September 2014.

Collection of data: The primary data in each case is collected from the police inquest along with the statement of relatives taken by investigating officers. Findings of thorough external examination and internal examination of the corpse studied in detail. Post mortem reports were studied in all cases and suicide notes were investigated. Further toxicological analysis and crime scene visit was done wherever feasible.

Data Analysis: Data were imported from Microsoft Excel into SPSS. The later same software was used to generate figures and to calculate descriptive statistics, including: means, ranges, odds ratios, confidence intervals, and p values. Chi Square test was employed to evaluate the statistical significance of differences between the categorical variable.

RESULTS

Total of 3429 cases were referred for medico-legal post mortem examination. Out of these 1669 cases are natural and 1314(38.3%) cases are unnatural. In 1314 unnatural cases 216 are of suicide (16.43%). Out of total 216 cases of suicide 124 cases (57.4%) are of hanging. Every case of hanging is studied in detail and the following observations are made.

Age: The cases are divided in seven age groups as follows, (0-10) years no case found, (11-20) 9 cases(7.25%), (21-30) 57 cases(45.97%),etc. The minimum age observed

among victims is 11 years and maximum age is 85 years (Table 1).

Table 1 Age group wise distribution

Age group (years)	Frequency	Per cent
11-20	9	7.25
21-30	57	45.97
31-40	30	24.20
41-50	12	09.68
51-60	7	5.65
> 60	9	7.25
Total	124	100

Gender: Out of 124 suicide cases 77 are males (62.10%) and 47 are females (37.90%). Male to female ratio is 1.6:1. Mean age for male and female is 37(36.79) year and 29(29.12) year respectively.

Marital Status: Out of 124 cases 81 cases are married (65.32%) and 36 cases(29.03%) are unmarried etc. (Figure 1).

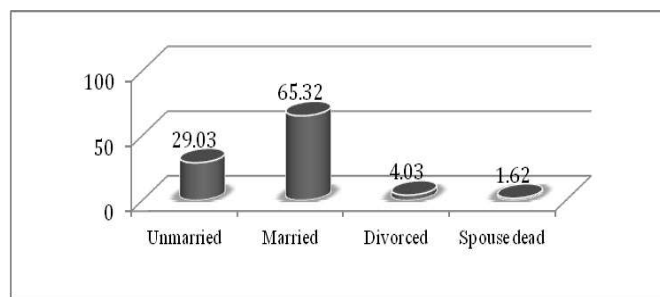


Figure 1 Marital status

Table 2 Mean age

Gender	Marital status	Number	Mean age
Female	Unmarried	13	20 (20.15) years
	Married	32	33 (32.71) years
Male	Unmarried	23	25 (25.43) years
	Married	49	40 (39.79) years

Occupation: Out of 124 22 victims were Labourers (17.74%), Housewives- 29 cases (23.4%), Students- 2 in

number (1.61%), prisoners- 1 case (0.8%), farmers- 3 cases (2.41%) Those having no job at present are 27 in number (21.78%).

Statistical analysis:

- Null hypothesis: There is no association between the gender and employment in suicide.
- Alternate hypothesis: There is an association between the gender and employment in suicide.

Out of 124 suicidal cases employment was not known in 11 cases so chi square table is prepared for 113 cases and the result is interpreted.

Table 3 Chi-square test

		Employment		Total
		Yes	No	
Gender	Female	7	39	46
	Male	24	43	67
Total		31	82	113

Chi square (X²) value of the above table is 5.81.

Degrees of freedom (d.f.)

= (Column – 1) (Row – 1) = (2 – 1) (2 – 1) = 1

Chi square (X²) tabulated value of d.f. = 1

is 3.84 at p<0.05 i.e. at 95 % level of significance.

As the calculated chi square (X²) value is higher than the tabulated (X²) value, we should reject the null hypothesis and accept the alternate hypothesis. Probability of the difference occurring in gender and employment by chance is less than 5 out of 100 cases, i.e. probability of not getting the difference between gender and employment in nature is 95%. So the gender and employment are associated in suicide.

Socioeconomic status: Depending on Kuppuswamy’s socioeconomic scale groups are made, upper class - 9 cases (7.25%), middle-upper class- 3 cases (2.42%), middle-lower class- 50 cases (40.33%), and lower class 62 cases (50.0%). Out of 124 cases 100 cases are Hindu (80.64%), 18 cases are Muslim (14.52%) and 6 cases are Christian (4.84%). Time of suicide preferred by 32 victims morning -25.80%, afternoon - 44 cases(35.49%), evening- 16 cases(12.90%), night - 21 cases(16.93%) and late night in 11 cases(8.88%).

Privacy for suicide: Privacy for suicide is maintained by selecting lonely place by 97 cases (78.22%) but not so by 27 cases (21.78%). In 98 cases (79.03%) suicide is committed following sudden provocation and in 25 cases (20.17%) suicidal act is planned and pre decided. In 4 cases (3.23%) there is a definite history of previous attempts of suicide. In four cases (3.23%) multiple methods are used for committing the suicide.

Place of suicide: Place of suicide is own residence in 102 cases (82.23%), Work Place- 9 cases (7.27%), (Figure 2).

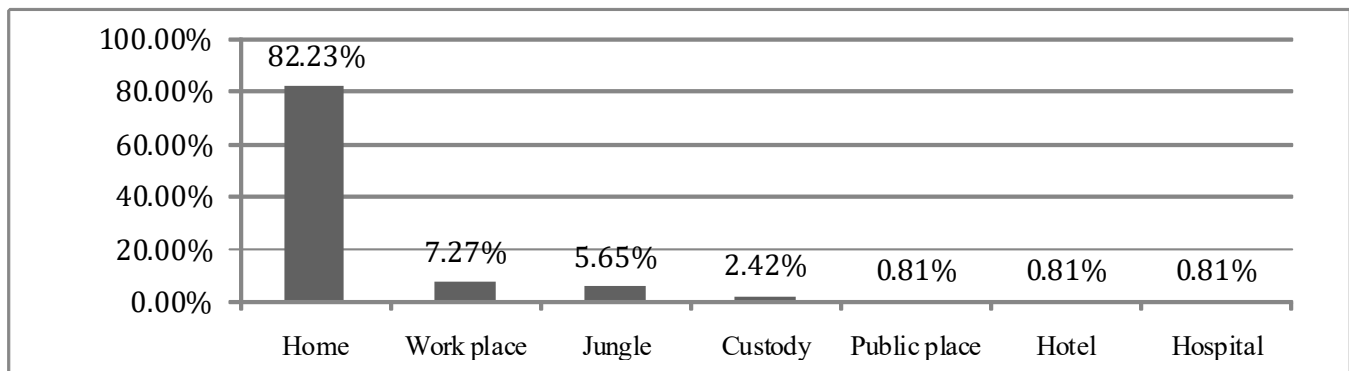


Figure 2 Place of suicide

Behavioural changes: Behavioural changes were noticed by relatives in 107 cases (86.3%), changes like become silent and less talkative, short tempered and violent or rowdy etc. Diagnosed psychiatric illness was found in 8 cases (6.45%). History of acute depression is present in 29 (23.38%) individuals. In 22 cases (17.74%) chronic illness was documented as a reason for suicide. Alcohol addiction present in 18 cases (14.52%). Menstrual history was present in 5 cases (10.64%) out of 47 females.

Suicide within seven years after marriage: This parameter was studied because Section 304B of Indian penal code deals with dowry death:1) Where the death of a woman is caused by any burns or bodily injury or occurs otherwise than under normal circumstances within Seven years of her marriage and it is shown that soon before her death she was subjected to cruelty or harassment by her husband or any relative of her husband for, or in connection with, any demand for dowry, such death shall be called “dowry death”, and such husband

or relative shall be deemed to have caused her death.⁵

In present study out of 47 females, 32 females (68.08%) were married and out of which 15 females (46.87%) were within the seven years of marriage. Out of 15 cases in 3 cases (20.0%) maternal relatives had allegation about death.

Ligature material used: Commonest ligature materials used for hanging are rope in 46 cases (37.1%) followed by dupatta in 41 cases (33.1%) etc. (Table 4).

Table 4 Ligature material used

Material	Frequency	Per cent
Rope	46	37.1
Dupatta	41	33.1
Sari (Saree)	15	12.1
Shawl	7	5.6
Bedsheet	5	4.0
Cable wire	2	1.6
Shirt	2	1.6
Lungi	2	1.6
Rubber tube	1	0.8
Jeans belt	1	0.8
Packaging tape	1	0.8
Not known	1	0.8
Total	124	100

Commonest suspension points used is ceiling fan 66 cases (53.2%) followed by ceiling (roof) 35 cases (28.2%), Fixed knot was present in 105 cases (84.7%), running noose in 18 cases (14.5%).

Suicide note: Suicide notes found in 10 cases (8.07%) and not found in 114 cases (91.93%). All suicide notes language was in mother tongue. In one case (10.0%) written on left forearm. Electronic device (laptop) is used in one case (10.0%). In all suicide notes reason for suicide was mentioned.

DISCUSSION

In present study ligature mark is present in all 124 cases (100%). Suicide predominantly noted in males, i.e., 62.1% compared to females, i.e., 37.9% consistent with PN suresh kumar⁶ (51.9%) and correlates with study of Sachil Kumar et al⁷ (56.61%), Bennett and Collins et al.⁸ (79.5%) and Kanchan T et al.⁹ (73.7%). As per Table 1 most vulnerable age group is between 21 to 30 years (45.97%) consistent with Behera A et al¹⁰ and Ambade VN et al.¹¹ In this younger age group suicidal tendency is more frequently observed may be due to frustration and acute depression secondary to exam failure, unsuccessful love affair, marital disharmony and unemployment, etc.

According to **figure 1** suicide incidences are more in married (65.32%) correlated with Behera A et al.¹⁰ (72.32%) and Kadu Sandeep et al.¹³ (74.68%), but Panarat Sritus et al.¹² observed more in unmarried (46.7%). Maximum victims are Hindu (80.64%) consistent with Kadu Sandeep et al.¹³ (87.0%) and Kanchan T et al.⁹ The incidence of suicide is noted more in housewives (23.4%) followed by those have no job (21.78%) consistent with PN Suresh Kumar et al.⁶ may be due to stress and marital disharmony. Maximum (50.0%) cases are from lower socioeconomic class consistent with Kadu Sandeep et al.¹³

As per **figure 2** place of suicide is own residence in 82.23% individuals consistent with Rodge et al.¹⁴ (65%) and Lisa BE Shields et al.¹⁵ (63.9%). Maximum cases occurred in afternoon, (35.49%) but Panarat Sritus et al.¹² and Kadu Sandeep et al.¹³ found in morning (40.30%) and Behera A et al.¹⁰ in night. In afternoon family members are outside from home for job so that female victims get privacy for their suicide act. In present study suicide note is observed in 8.07% cases correlated with Bennett and Collins et al.⁸ (22%) and Panarat Sritus et al.¹² (3.70%). Privacy for suicide is maintained by selecting lonely place by 78.22% victims but not so by 21.78%.

In 3.23% cases definite history of previous attempts of suicide noted consistent with Bagadiya et al.¹⁶ (7%). Documented chronic illness is a reason for suicide in 17.74% cases consistent with Behera A et al.¹⁰ (16.4%) and Kadu Sandeep et al.¹³ (9.49%). Diagnosed psychiatric illness is found in 6.45% cases consistent with Sachil Kumar et al.⁷ (10.9%). In 3.23% cases victims preferred more than one method to commit suicidemay be because of failure of first consistent with Behera A et al.¹⁰ (2.51%). Menstrual history is present in 10.64% females consistent with Behera A et al.¹⁰ (30%). 46.87% females committed suicide within the seven years of marriage consistent with DS Bhullar et al.¹⁷ (44.19%).

According to **table 4** rope (37.1%) is the commonly used ligature material by males followed by dupatta (33.1%) by females, consistent with Ambade VN et al.¹⁸ Unusual ligature materials like cable (TV) wire and packaging tape is used by victims who committed suicide at workplace and where these materials are used by them for their work. Most commonly used suspension point used for hanging is ceiling fan in 53.2% cases closely related with studies of Patel AP¹⁹ and Meera Th et al.²⁰ In present study unusual suspension points like door grill, window grill, railing, ladder and swinging chair hook at roof are used by victims and their body found in partial hanging position. The type of knot is fixed noose in 84.7% cases and running noose in 14.5% cases consistent with Ambade VN et al.¹⁵ Complete hanging seen in 79.83% victims followed by partial hanging (20.17%) consistent with Ambade VN et al.¹⁵ Dried saliva stains are found over the angle of mouth in 28.22% cases and absent in remaining 71.78% cases of suicidal hanging dribbling of saliva/salivary

stains not observed, which indicates absence of saliva need not necessarily indicate that the hanging is not ante mortem and not suicidal.

CONCLUSION

Suicide tendency is more in males as compared to females. Younger age group (21 to 30 years) is more vulnerable for suicide. Commonest cause of suicide in housewives is marital disharmony and dowry related issues. Unemployment and money crisis is the commonest cause of suicide. Own residence preferred by maximum (82.23%) victims. Behavioural changes are noticed by relatives in 86.3 percent cases. Preferred language for suicide note is mother tongue of victims. Privacy for suicidal act is maintained by 78.22% victims. Mentally ill persons are highly prone to develop suicidal tendency. In menstrual phase suicidal tendency is more seen in females. Dowry demand is provocative factor for suicidal attempts in newly married females. Dupatta is the most commonly used ligature material for hanging used by females and rope by males. In 72% cases of suicidal hanging dribbling of saliva/salivary stains not observed. More vulnerable victims in suicidal hangings are housewives, labourers, students, farmers.

Acknowledgements: The authors are thankful to the faculty and post graduate students of the Department of Forensic Medicine of GGMC Mumbai for their co-operation. The author wishes to acknowledge Dr. SD Nanandkar for his valuable suggestions in structuring this article and Vd. SP Waghmare for moral support and guidance.

Conflict of Interest: None declared.

Funding: None.

Contribution of Authors: BG Chikhalkar and PB Waghmare had examined the cases. PB Waghmare had collected the data. BG Chikhalkar had provided guidance to PB Waghmare and contributed to writing and revising the manuscript. Both authors contributed to the study design and had full approval of the submitted version. Vd. AS Thote did statistical analysis of data.

Ethical clearance: The study work is conducted after the approval of Institute's Ethics Committee for Academic Research Projects, Grant Govt. Medical College Mumbai, India.

REFERENCES

1. Sadock BJ, Sadock VA. Chapter 29.1, Suicide. Kaplan & Sadock's comprehensive textbook of Psychiatry. 7th ed. Philadelphia: Lippincott Williams & Wilkins; 2000. p. 4186, 4200-4201.
2. De Leo, D, Burgis, S, Bertolote, J, Kerkhof, AJFM, & Bille Brahe, U (2006). Definitions of Suicidal Behaviour: Lessons learned from the WHO/EURO Multicentre Study. *Crisis*. 27(1):4-15. Available from: URL:https://doi.org/10.1027/0227-5910.27.1.4
3. Pekka Saukko, Knight B. Knight's Forensic Pathology. 3rd ed. London: Arnold Publication; 2004. p. 384.
4. Modi JP. In. Mathiharan K, Kannan K editors. A textbook of medical jurisprudence and toxicology. 24th ed. Haryana, India: LexisNexis; 2012. p. 445.
5. Universal's Criminal Manual. New Delhi, India: Universal Law Publishing Co. Pvt. Ltd; 2014. p. 517-8.
6. Suresh Kumar PN. An analysis of suicide attempters versus completers in Kerala. *Indian Journal of Psychiatry* 2004;46(2):144-149.
7. Kumar Sachil, Verma AK, Bhattacharya Sandeep, Rathore Shiuli. Trends in rates and methods of suicide in India. *Egyptian Journal of Forensic Sciences* 2013;3(3):75–80.
8. Bennett AT, Collins KA, Suicide: a ten-year retrospective study. *Journal of Forensic Sciences* 2000;45(6):1256-8.
9. Kanchan Tanuj. Day, week, month of suicide by hanging. *J Indian Acad Forensic Med*; 30(4):202-206.
10. Behera A, Balabantray JK, Nayak SR. Review of suicidal cases, A retrospective study. *JIAFM* 2005;(2):100-102.
11. Ambade VN, Godbole HV, Kukde HG. Suicidal and homicidal deaths: a comparative and circumstantial approach. *J Forensic Leg Med* 2007;14(5):253-60.
12. Panarat Sritus, Montip Tiensuwan, Suda Riengrojpitak. A retrospective study on suicide autopsy cases from Ramathibodi hospital in Bangkok Thailand. 2010: 25-28.
13. Kadu Sandeep, Asawa Rajshrikant, Medico legal evaluation of suicidal deaths in rural area. *Journal of Forensic Medicine, Science and Law* 2011;20(1):8-11.
14. Rodge Sidsel, Hougen PH, Poulsen K. Suicides in two Scandinavian capitals- a comparative study. *Forensic Science International* 1996;80:211-219.
15. Shields Lisa BE, Hunsaker DM, Hunsaker JC. Suicide: A ten-year retrospective review of Kentucky medical examiner cases. *J Forensic Sci* 2005;50(3):1-5.
16. Bagadia VN, Abhyankar RR, Shroff P, Mehta P, Doshi J, Chawla P. Suicidal behaviour: a clinical study. *Indian J Psychiatry* 1979;21:370-375.
17. Bhullar DS. Profile of unnatural female deaths between 18-30 years of age. *JFMT* 1997;8(3):5-8.
18. Ambade VN, Tumram Nilesh, Meshram Satin, Borkar Jaydeo. Ligature material in hanging deaths: The neglected area in forensic examination. *Egyptian Journal of Forensic Sciences* 2015;5(3):109-113.
19. Patel AP, Bansal A, Shah JV, Shah KA. Study of hanging cases in Ahmedabad region. *JIAFM* 2012;34(4):343-345.
20. Meera Th, M Bipin Kumar Singh. Pattern of neck findings in suicidal hanging- a study in Manipur. *JIAFM* 2011;33(4):352-354.

The Management of Psychological Disorders W.S.R to Ayurveda.**Vd. Shweta Apsingekar¹, Vd .Yogita Shrotriya²**

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Abstract:

In Today's era of competitive life are under influence of Rajas .Excessive travelling, over consumption of tea or coffee, preoccupied mind have depressing effect on mind leading to Psychological Disorder. Unhappy state of mind impacts our day today activities. Both body and mind are the locations of disorders as well as pleasures. The treatment (Chikitsa) of this Manas (Psychological) disorder is necessary for being healthy. Ayurveda recommends preventive medicine, correct behavior, balanced diet and non suppression of natural urges, Yoga Therapy following daily and seasonal regimens (Dincharya, Ritucharya). In this context detail description of Ayurvedic Management of Manas (Psychological) disorder are described.

KEYWORDS: Mana, Sadvritta, Sattvavajay Chikitsa, Achar Rasayan, Daivyapashraya Chikitsa

Introduction

Ayurveda is traditional science. The purpose of this science is to preserve the health of the healthy and cure the disease of the unhealthy. ¹ Both body and mind are the locations of disorders as well as pleasures. The balanced use (of the factors mentioned in previous verse) is the cause of pleasures.² Manas Roga or psychological disorder are associated with emotion, trauma, negative attitude, stress, personal loss, or some drug addiction. Manas Roga are caused due to disturbance in Sattva and when there is predominance of Raja and Tama Manas Doshas.

Their predominance and manifestations leads to disorders like *Kama* (lust), *Krodh* (anger), *Lobh* (greed), *Moha* (Delusion), *Irsha* (Jealousy), *Mana* (Pride), *Shoka* (Grief), *Chinta* (depression), *Bhaya* (Fear), *Matsarya*, *Vishad* (Sadness), *Dainya* (Affliction), *Unmad* (Psychosis), *Aptantrak* (Hysteria), *Apsasmar* (Epilepsy), *Attatvaabhinivesh* (obsession), *Chittovega* (Anxiety), *Murccha* (Fainting), *Anavasthit Chittatva* (Unstable Mind), *Tandra* (Stupor), *Nidradhikya* (Insomnia), *Klama* (Neuroasthnia), *Gadodvega* (Hypochondriasis) Psychological disorder occurs . As Stated in *Bhagwatgita* whenever and wherever the mind wonders due to its flickering and unsteady natures

we must bring it back under control of self chapter ³ mind can be controlled by constant practice and detachment . ⁴

The mind which is happy responsible for Happiness .⁵ Positive health can be achieved by following keys: Brahmacharya (celebacy), Jnana (knowledge), Dana (charity), Maitri (friendship), Karunya (compassion), Harsha (happiness), Upeksha (detachment) and Prashama (peace). One who assiduously follows these prescriptions is devoid of all diseases, lives for a hundred years and does not suffer from untimely death. ⁶ If it is proven that mind and intellect are like the soul, these cannot be sole cause of birth. Those who accept the theory of mind and intellect of parents as sole factor of birth .⁷

The people who follow the path of Dharma (eternal duty), they are devoid of fear, attachment, hatred, greed, confusion, vanity and all their mental defects are vanished, they have great knowledge. Their mind and intellect are functioning forever, such ancient and most ancient sages with their divine sight after careful observation has enunciated the theory of rebirth. Everyone should think over this and there should be no doubt. Some should concentrate mind on the path of eternal duty. Paths are to give service to the preachers/teachers/elders, studies, performing spiritual acts, marriage, producing children,

maintenance of servants, giving respect to the guests, giving donations, no greed for others money, penance, avoid jealousy, performing acts which do not affect physical, verbally and mind, introspection of body, sensual faculties, mind, intellect and self and meditation are included. Similar acts recommended by virtuous persons which are conducive for doing well in life, and attainment of heaven after death, means of livelihood should be done. By doing such acts one gains fame and attains heaven after death. Thus, the third basic desire is explained. 9

Three types of Vikalpa (Atiyoga, Ayoga and Mithyayoga) and three actions (speech, mind and body) come under category of deeds done of Prajnaparadha (intellectual defects). 10

Aims And Objectives:

- 1) To study Ayurvedic Approach of psychological Disorders.
- 2) To study *Chikitsa* mention in *Ayurvedic Granthas* for psychological disorders.

Materials And Methods:

In *Ayurveda*, there are various literatures available in Samhita's about a Management of *Manas Vikar* (psychological disorder) Ayurveda describes various principles and modalities for maintaining health like *Dinacharya*, *Ritucharya*, *Ratricharya*, *Rasayana therapy*, *Proper Aahara – Vihara*, *Vyayama*, *Sadvritta*, *Acharya Rasayana* etc. with the help of implementation of all this modalities Sharira Bala, Manasa Bala and *Vyadhikshamatva* also increases.

Review of Chikitsa:

Definition of Mana (Mind): Sometimes one understands a thing and sometimes one does not. This proves the existence of the mind as a separate sense organ. That is why, when there is no contact of the mind with sense organs and their objects, no understanding of things can occur. It is only when the required mental contact is there that one can understand things. 11

Types of Diseses (Vyadhi): There are three types of diseases – Nija (endogenous), Agantuja (exogenous) and Manasa (psychological). Nijayadhi (endogenous diseases) are caused by vitiation of body Doshas (Vata, Pitta and Kapha).

Agantuja (exogenous diseases) are caused Bhuta (invisible organisms), poisonous substances, wind, fire and trauma. Manasa (psychological diseases) are caused by conflict between not getting the desired things and getting non desired things. 12

Definition of Chikitsa- Sharira Dosha are pacified by remedial measures of divine and rational qualities while the Manas dosha can be treated with knowledge of self (Jnana), scientific knowledge (Vijnana), restraint/temperance (Dhairya), memory (Smriti) and salvation/concentration (Samadhi). 13

Types of Chikitsa: There are three kinds of treatment modalities-

Daivavyapashraya (divine or spiritual therapy), Yuktivyapashraya (therapy based on reasoning) and Satvavajaya (psychotherapy). Daivavyapashraya includes mantra chanting, medicine, wearing gems, auspicious offerings, oblations, gifts, offerings to sacred fire, following spiritual rules, atonement, fasting, chanting of auspicious hymns, obeisance to gods, visit to holy places, etc. Yuktivyapashraya includes proper dietetic regimen, medicine planning. Sattvavajaya is withdrawal of mind from harmful objects.

Mind is the link between Atman (soul), Indriya and Sharira (senses and body). It is responsible for the Pravritti (indulgence) and Nivritti (non-indulgence) in health promoting and health-degrading activities (Shubha or Ashubha Karmas) because thinking is the object of Manas. Samayoga (proper association) of these leads to fruitful results and Atiyoga (excessive correlation), Hinayoga (deficient/no correlation) and Mithyayoga (perverted correlation) leads to dreadful consequences. The Sattvavajaya treatments (restraining senses from harmful objects by controlling mind) form important component for psychiatric and psycho-somatic disorders. 14

1) **Satvavajaya Chikitsa:** *Sattvavajaya* is withdrawal of mind from harmful objects. ¹⁵*Sattvavajaya Chikitsa* literally means controlling the mind, in such a way that it is not acted upon by various stressors making it prone to *Prajnaparadha*. Acharya Charaka defines *Sattvavajaya* as withdrawal of mind from unwholesome objects. It includes

- *Mano nigraha*: regulating mind/subjugating mind from unwholesome interactions
- *Dhee-dhairyaatmadi Vijnanam*: It is providing a deeper level of understanding which helps ultimately in better control of mind. *Charaka* also explains the utility of replacing negative emotions with that of positive emotions that is beneficial to psyche. Thus *Satvavajaya* encompasses various aspects that deal with mind – its physiology, morphology, morbidity and also management of Psychological as well as Psychosomatic diseases.¹⁵

a) **Consumption of Sattvik Ahar** Since Vedic era, food has been given the prime importance. Three categories of *Ahara* are described in *Bhagvad Gita* are *Sattvika*, *Rajasika* & *Tamasika*. *Sattvika* persons prefers food which increases life span, nourishes *Sattva*, keeps body healthy, increases happiness and prosperity, which are pleasing and full of nutrients, unctuous in nature, providing stability and conducive for the heart and soul .

- Those persons who take foods which are very pungent, sour, salty, very hot, very sharp in taste, excessively dry, which causes burning sensation, and foods which causes sadness, depression and various diseases are *Rajasika* persons and thus such foods can be categorized as *Rajasika* .
- Food that is not freshly cooked, unhygienic food or food which is devoid of nutrients, foul smelling, stale, mixed with pollutants, dust etc. and left over food comes under the *Tamasika* food and which is appreciated and practiced by *Tamasika* persons .¹⁶

Habit of taking *Ahara* which is *non-Satvika* i.e. *Rajasika* or *Tamasika* (continuously for a long time) causes some sort of mental disturbances and later on causes serious mental illnesses like *Unmada* and *Apasmara*.

Satvika Ahara not only consists of food with proper nutrition but also it indicates the rules of taking food should be followed. For eg. *Ashtaaharavidhi Visheshayatana (Charaka)*,¹⁷ *Dwadashashan Pravicharana (Susruta)*¹⁸. In the treatment aspect also, specific food along with health-conducive routines/regimens plays an

important role along with medicines. Somatic or psychic food plays an important role as a preventive factor, causative factor and as a curative factor. Proper diet helps a healthy person to stay healthy/improve it and prevent illness. *Ayurveda* owns clear and scientific concepts in this regard. The influence of digestive system on the emotional aspects of human beings is another domain of related study in modern research. Gut is considered as the second brain due to the intrinsic neuronal networks. The age old medical system, *Ayurveda* elaborated the same concepts eons before.

Pathya Ahara in Mental Illness: The foods with the qualities like color, smell, taste and touch can be pleasing to the sense organs and conducive to the health if taken in accordance to the rules is the very life of living beings. If proper, it kindles the digestive fire, promotes mental as well as physical strength, complexion, and strength of tissue elements and is pleasing to the senses, otherwise they are harmful. Consumption of *Madhura*(sweet) food produces Happiness of Mind ,*Harsh* .after food intake individual should do the things which made him happy like hearing songs do the things which are good in *Shabda*(to hear),*Sparsh*(to touch),*Rupa*(to visualize),*Rasa*(inTaste),*Gandh*(in smell).¹⁹

b) **Pathya Viharas in Mental Illness**

- **Dinacharya** :²⁰ *Ayurveda* promotes a lifestyle that's in harmony with nature.
 - It is advisable to wake up during *Brahma Muhurta* (preferably between 4.00 a.m. to 5.30 a.m.).
 - Drinking water early in the morning according to one's capacity cleanses the body by enhancing the elimination of toxic wastes.
 - One should attend the nature's calls.
 - The soft brushes made out of twigs of *Khadira*, *Karanja*, and *Apamarga* etc. Tongue should be cleaned by a long flexible strip of metal or plant twig. It not only cleanses the tongue but also stimulates appetite and digestion. Mouth should also be cleaned properly.
 - Eyes should be cleaned with fresh water to prevent eye diseases and promote vision. Also wash eyes with *Triphala Phanta* every day for clarity of vision and prevention of eye diseases.
 - Chewing of betel leaves with small pieces of *Areca nut (kramuka)* and fragrant substances like cardamom, cloves, refreshes the mouth and enhance digestion.

- It is necessary to massage whole body with oil every day. Oil massage ensures softness and unctuousness of skin, free movement of joints and muscles, peripheral circulation and elimination of metabolic wastes.
- Regular exercise is essential for perfect health. It builds up stamina and resistance against disease, clears the channels of body (*Srotas*) and increases the blood circulation. It enhances efficiency of body organs, promotes appetite, digestion and prevents obesity.
- Bathing improves enthusiasm, strength, sexual vigour, appetite, span of life and removes sweat and other impurities from the body. After bath one should wear clean clothes and smear the body with perfume.
- **Ritucharya**²¹: In *Ayurvedic* classics, there has been a thorough consideration for seasons, besides the dietetic regimens for days and nights. Whole year is divided into six seasons and detailed regimen for these seasons is prescribed.
- In spring season (*Vasant*), bitter, hot and astringent diet is advised while salty, sour and sweet food should be avoided. Wheat, barley, honey syrup, fruits like mango, jack fruit-etc. and meat of forest animals are advised.
- In summer season (*Grishma*) due to hot climate, aggravation of *Pitta* occurs. Hence *Pitta* pacifying cold, liquid, sweet and oily diet is advised. Excessive hot, spicy, sour salty diet should be avoided. Intake of rice, milk, ghee, sugar, grapes, coconut water etc is advised.
- In rainy season (*Varsha*) aggravation of *Vata* occurs, hence *Vata Shamaka* sweet, sour and salty food and drinks are preferred. The food should be hot, dry, fatty and easily digestible. Preserved rice, wheat, barley and mutton soups are advised.
- In pre winter and winter season (*Shishir & Hemant*) *Vatadosha* aggravates due to cold, dry, chilly atmosphere hence *Vataghna*, *Pittavardhaka* diet is recommended. Hot, sweet, sour and salty food, milk, sugarcane, rice, oils and fats are advised
- In autumn season(*Sharad*) aggravation of *Pitta Dosha* occurs. Therefore, it is ideal to

take ghee processed with bitter drugs; purgation, bloodletting, coolant, and light diet are advice. Diets dominant in Bitter, sweet, pungent diets are good.

Table 1: Showing Pathya Ahar –Vihar in Manas Vikara

Ahar			Vihar
Sattvik	Rajasika	Tamasik	
<ul style="list-style-type: none"> • Food having Ashtaaharavidhi Visheshayatana (Charaka), • Dwadashashan Pravicharana (Susruta). • Dwadashashan Pravicharana (Susruta). • Food which is freshly Cooked, Having vegetables, Fruits, Milk, • Ghee, tasty which creates happy mind should consume 	very pungent, sour, salty, very hot, very sharp in taste, excessively dry, which causes burning sensation, and foods which causes sadness, depression and various disease do not consume	Not freshly cooked, unhygienic food or food which is devoid of nutrients, foul smelling, stale, mixed with pollutants, dust etc. and left over food do not consume	<ul style="list-style-type: none"> • Follow the <i>Ayurvedic</i> regimen of <i>Dincharya</i> • Follow the <i>Ayurvedic</i> Regimen Of <i>Ritucharya</i> • I o the things which are good in <i>Shabda</i>(to hear), <i>Sparsh</i>(to touch), <i>Rupa</i>(to visualize), <i>Rasa</i> (in Taste), <i>Gandh</i>(in smell).

2) **Daivayapashraya Chikitsa**: It includes Chanting of Mantras and performances of Homes (Yadnya/Hawan) are integral part of Daivayapashraya Chikitsa It gets revives normal functioning of Sattva and removes obstacles of Rajas.²²

3) **Acharya Rasayana** : An individual who is truthful, free from anger, abstaining from wine and women, non violent, relaxed, calm, soft spoken, engaged in meditation and cleanliness, perseverance, observing charity, penance, worshiping gods, cow, Brahman's, gurus, preceptors and elders, loving and compassionate, is vigilant and sleeps in balanced way, consumes routinely ghee extracted from milk, considering the measure of place and time with

propriety, un-conceited, well behaved, simple, with his senses well concentrated to spirituality, keeping company of elders, positivist, self restrained and devoted to holy books should be regarded as using the rasayana for ever. Those, who, endowed with all the auspicious qualities, consumes rasayana, gets all the aforesaid benefits of Rasayana treatment.²³

- Sadvritta' -Sadvritta' means good code of conduct. It is indicated in preservation of health and prevention of diseases. It fulfils two objectives – maintenance of positive health and control over sense organs.
- One should worship God, cows, Brahmins, preceptors, elderly persons, highly accomplished persons and teachers
- One should honor fire with oblation, should put on auspicious herbs
- One should bathe twice a day, and one should clean his excretory passages and feet frequently
- Cutting of hair, shaving & nail cutting should be done thrice a fortnight
- One should always wear untorn clothes, should be cheerful, and use flowers and fragrance. The attire should be gentle and style of hair should be as commonly in practice
- One should apply oil to head, ear, nose, and feet daily and should resort to (healthy) smoking
- One should take an initiative during discourses and remain pleasant faced.
- One should save persons in dire situations or distress
- Should offer oblation, perform religious sacrifices, donations, pay respect to road crossings, offer bali (religious offerings or ritualistic sacrifices)
- Should offer hospitality to guests, offer Pindas (rice balls) to forefathers
- One should timely speak useful, measured, sweet & meaningful words
- Should be self controlled & virtuous
- One should be zealous to the cause but not be anxious about the result/outcome
- One should be free from anxiety, fearless, shy (from committing bad deeds), wise,

highly enthusiastic, skillful, fore bearing, religious, with positive attitude

- One should be devoted to the teachers, accomplished persons and to those who are superior in modesty, intellect, learning, clan and age.
- One should walk with an umbrella, stick, turban & foot wear, and look six feet ahead
- One should adopt auspicious conduct, should avoid places with dirty clothes, bones, thorns, impure articles, hairs, chaff, garbage, ash, and skull and one should bathe & sacrifice
- Should discontinue exercise before feeling of fatigue.
- Should behave like brother to all living beings (i.e., should be compassionate), should pacify the angry and the discontent, and console the frightened
- Should help the poor, be truthful & peaceful.
- Should be tolerant of harsh words, and should curb the practice of intolerance
- Should always concentrate on the qualities of peaceful life and should be the remover of the causes of attachment and aversion.²⁴
- **Behavioural code with preceptors**
- One should not speak ill of noble persons and preceptors.
- One should not perform spells, worship of sacred trees and superiors, and studies while remaining impure.²⁵
- **Codes for maintaining good psyche in society**
- One should always control the senses (mind & 5 sense organs) and should suppress the urges like Lobha, Irshya, Dwesh, Matsarya, Raga etc.²⁶
- One should not be impatient, or overexcited/over exhilarated.
- One should not be the person who does not support his attendants, confide in his kins, be happy alone and has unpleasant conduct, behaviour and attendance.
- One should not rely on everybody nor suspect all and should not be critical (too meticulous) at all times.²⁷
- **Code of conduct at work-place**
- One should not be submissive to his senses nor should let his fickle mind move around.

- One should not overburden his/her intellect or senses.
- One should not do things in a fit of anger or rejoicing.
- One should not be under continuous grief.
- One should not be conceited over achievements or desperate in loss.
- One should always remember his own constitution of mind (nature).
- One should have faith in the correlation of the cause and effect that is good and bad deeds and their corresponding results and should always act on it.
- One should not be despondent and assume that now nothing can be done.
- One should not lose spirit (give up courage) nor should remember his insults.²⁸

➤ **Codes of conduct for blissful well-being**

One who is desirous of well-being should not offer oblation to the fire with cow ghee, whole rice grains, Tila (Sesame indicum Linn.), Kusha grass (Desmostachya bipinnata Staff.) and mustard seeds while in impure condition. One should touch water, reciting mantra- Agnirne Na Apagachhet Sharirad, Vayurme pranam Aadadahatu, Vishnurme Balam Aadadahatu, Indro Me Viryam Shiva Mam Pravishantva Apa Apohishthetyapah Sprushet. After touching the lips and feet, one should daub water on all the orifices of the head (two nasal, one buccal, two auditory, and two ocular orifices), the seats of his soul (mentally), heart and head.²⁹

- Persons those who have not been able to free themselves from Rajas and Tamas (psychological Doshas), for them advice given by the learned sages in religious literatures is that they cannot attain salvation.³⁰

➤ **Aushdhi Chikitsa**

- Dravyas those increases the Medha is known as 'Medhya'. Although this function is related with Mana, and due to Nadisansthan is the Visistha Adisthana of presence of Mana; this Medhya Karma is related with Nadisansthan. Nadisansthan are connected with Brain that's why the Medhya Dravya also known as brain tonic.
- The Medhya Karma is considered as Prabhava Jayna because some Medhya Dravya are Shita

Virya, Madhura Rasa and Madhur Vipaka e.g. Yashtimadhu; and some are Tikta rasa and Ushna virya e.g. Guduchi.

- These Medhya Dravya have more Medhya Karma present rather than a Samanya Dravya, so Medhya Karma is Prabhava Jayna...Consumption of Mandukaparni juice, the powder of Yashtimadhu with milk, the juice of Guduchi along with its roots and flowers and the paste of Shankhapushpi – these Rasayana drugs are life promoting, disease alleviating, promoters of strength, Agni, complexion, voice and are intellect promoting. Of them Shankhapushpi is specifically intellect promoting.³² Medhya Ramayana.

These four Rasayana enhance intelligence. Yashtimadhu is Shita, pacifies Vata-Pitta and maintains normal Kapha. It controls Rajoguna and increases Sattva, resulting in boosting intelligence. Yashtimadhu also nourishes Dhatus and ultimately increases Shukra and Oja.

As explained by commentator Chakrapani, effects on Indriya, Mana and Buddhi are mediated through Oja. Mandukaparni is Sheeta and it specially pacifies Pitta. It also controls Rajoguna and increases Sattva. Shankhapushpi is slightly Ushna, specially pacifies Vata.

Shankhapushpi also controls Rajoguna and increases Sattva. Shankhapushpi nourishes Majja. Whereas Guduchi is also slightly Ushna, pacifies all three Doshas, controls Tama and increases Sattva. Keeping in mind such peculiarities, specific Rasayana is chosen for a specific person. Many researchers have been conducted on these Medhya Rasayana.³³

- **Dharaneeya Vega:** An intelligent person should control greed, grief, fear, anger, egoism, shamelessness (impudence), jealousy, excessive affliction (in anything), and desire to acquire someone else's wealth.³⁴

- **Mano Vikara** (Psychological disorders) Jealousy, grief, fear, anger, egoism and hatred, etc. and all other mentioned mental disorders result from defects in one's intellect^{35, 36}

- Excessive indulgence in Dharaneeya Vega is the result of improper Atma-Indriya-Artha Samyoga and further impairs the synchrony of Manogunas. Thus, one can understand

that Manasika Vega is a result of vitiated Rajas and Tamas that cloud the mental faculties and cause it to form unwholesome association with objects due to impairment of the intellect and the other regulating factors.

4) Practicing Yogic lifestyle –

The literal meaning of *Yoga* is ‘to join’, that is joining of Mind and Body. *Yoga* advocates that every life form is interconnected and united¹³ the eight limbed path of *Yoga* includes: *Yama* (moral codes), *Niyama* (self-discipline), *Asana* (postures), *Pranyama* (breath practices promoting life force), *pratyahara* (sensory transcendence), *Dharana* (concentration), *Dhyana* (meditation) and *Samadhi* (state of bliss).

Happiness and miseries are felt due to the contact of the soul with the sense organs, mind and the objects of senses. Both these types of sensations disappear when the mind is concentrated and contained in the soul and the super natural powers in the mind and body are attained. This state is known as *Yoga* according to sages well versed in this science.

The application of *Yoga* as a therapeutic intervention began early in the twentieth century, taking advantage of the various psycho-physiological benefits of the component practices. The physical exercises (*Asanas*) may increase patient’s physical flexibility, coordination, and strength, while the breathing practices and meditation may calm and focus the mind to develop greater awareness and diminish anxiety, and thus results in higher quality of life. Other beneficial effects include a reduction of distress, blood pressure, and improvements in resilience, mood, and metabolic regulation. It has been found in many researches that *yoga* have positive effects on mild depression and sleep problems, and it improves the symptoms of psychiatric disorders like schizophrenia and ADHD among patients using medication. Some studies even suggested that *yoga* might affect the body in ways similar to antidepressants and psychotherapy. For instance, *yoga* may influence brain chemicals known as neurotransmitters (boosting levels of feel-good agents like serotonin), lower inflammation, reduce oxidative stress and produce a healthier balance of

lipids and growth factors — just as other forms of exercise do.³⁷

(1) Entering others body, (2) thought reading (3) doing things at will, (4) Super natural vision (5) super natural audition (6) miraculous memory (7) uncommon brilliance and (8) invisibility when so desired – these are the eight supernatural powers attained by those who practice *Yoga*.

All this is achieved through the purity of the mind. (Free from Rajas and Tamas)³⁸

In order to transcend this dichotomy, Patanjali described the following eight limbs of Ashtanga *Yoga*.

The first two aspects are *Yama* and *Niyama* to create social and personal discipline in the society. The next two, *Asana* and *Pranayama* are to achieve physical and mental strength and stability.

- *Pratyahara*, *Dharana*, *Dhyana* and *Samadhi* are to achieve *Moksha* by detachment, focus, meditation and bliss. Each one of us has unique qualities and has different levels of existing skills provided by each of the limbs of *Yoga*. Therefore, some individuals may require a teacher or *Guru* to give guidance in the early stages.
- *Yama* (social restraints for relating to society) These are:
 1. Ahimsa: We should not cause pain to others by thoughts, words and actions. Show kindness and thoughtfulness to others.
 2. Satya: Truthfulness and honesty.
 3. Asteya or non-stealing: Tangible and intangible.
 4. Bramhacharya: Control over senses, appropriate sexual behavior.
 5. Aparigraha or non hoarding: Taking from nature what is needed.
- *Niyama*: (Personal restraints or conduct)
 1. Shaucha: Physical and mental cleanliness or purity.
 2. Santosha: Contentment
 3. Tapas: Self discipline.
 4. Swadhyaya: Self study
 5. Ishwara Pranidhana: Acceptance. Do karma and leave results to higher powers.
- *Asanas*: Means steady and comfortable posture. Improves health, strength, balance and flexibility. On a deeper level it is a tool

to calm the mind and move into the inner essence of being.

- Pranayama: Directing the life force produces heat (Tapa) and cleans the channels, strengthens the respiratory system, calms the mind to be able to concentrate and meditate.
- Pratyahara: This is a stage when withdrawal of senses occurs due to break in the link between senses and the mind. It facilitates the next three limbs of Yoga.
- Dharana: This is a stage of deep concentration of mind on one particular object, sound or thought and there is cultivation of inner awareness.
- Dhyana or meditation: This is the seventh step of Yoga and during this stage there is deep awareness but no focus. There may be very few thoughts or no thoughts.
- Samadhi: This is a stage of bliss where the subject and object merge as one. Person feels connected to all living beings and is at peace. Illusionary separation of “I” and “mine” is lost as mind does not distinguish between self and non-self.

All these have positive benefits to improve body-mind strength and harmony.³⁹

5) Exercise and the brain: Exercise help memory and thinking through both direct and indirect means. The benefits of exercise come directly from its ability to reduce insulin resistance, reduce inflammation, and stimulate the release of growth factors—chemicals in the brain that affect the health of brain cells, the growth of new blood vessels in the brain, and even the abundance and survival of new brain cells.

Indirectly, exercise improves mood and sleep, and reduces stress and anxiety. Problems in these areas frequently cause or contribute to cognitive impairment. Many studies have suggested that the parts of the brain that control thinking and memory (the prefrontal cortex and medial temporal cortex) have greater volume in people who exercise versus people who don’t Exercise affects the brain on multiple fronts.

It increases heart rate, which pumps more oxygen to the brain. It also aids the bodily release of a plethora of hormones, all of which participate in

aiding and providing a nourishing environment for the growth of brain cells.Exercise stimulates the brain plasticity by stimulating growth of new connections between cells in a wide array of important cortical areas of the brain.From a behavioral perspective, the same antidepressant-like effects associated with “runner’s high” found in humans is associated with a drop in stress hormones.⁴⁰

Discussion:

Famous Saint Samarth Ramdas Swami said in his Granth Manache Shlok our evil desires are of no use, sinful thoughts should not come to our mind. we should always have ethics ,we should always know real truth in our mind .41If our mind get corrupted then we lose our reputation amidst people,so let say no to anger which makes us feel sorry ,let us not corrupt our mid with all sorts of desires ,let us not praise ourselves due to jealousy for others.⁴²

Let us have great patience ,let us bear the evil words spoken to us,let us always understand others.We should not bleed our mind with sorrow ,we should not been grossed with sadness &worries.so that we maintain our mental hygiene.⁴³

A wise person even if suffering from psychological disease should consider carefully what is beneficial and what is harmful for health. One should discard the harmful or unwholesome regimens and do the beneficial work regarding the Dharma (virtue), Artha (wealth) and Kama (desire). In this world happiness or sorrow cannot occur without these three. That is why one should try to indulge in doing beneficial work and discard the harmful one. One should serve the intellect. Also, try to acquire knowledge about Atman (self), Desha (place), and Kala (time), Bala (strength), Shakti (potential/capacity).

Thus, it is said that the treatment of psychological diseases is- to follow the conduct related to Dharma (virtue), Artha (wealth) and Kama (desire). To do service of persons who are having knowledge of psychological diseases and follow their instructions, to obtain the knowledge about self etc. 46

Conclusion:

The former ones (Sharira Dosha) are pacified by remedial measures of divine and rational

qualities while the latter ones (Manas Dosha) can be treated with knowledge of self (Jnana), scientific knowledge (Vijnana), restraint/temperance (Dhairya), memory (Smriti) and salvation/concentration (Samadhi).⁴⁷

Avoidance of improper activities of body, mind and speech by willful transgression of rules, control over senses remembering the previous experiences, knowledge pertaining to place, time and constitution, adherence to rules of good conduct as prescribed in Atharvaveda, propitiating unfavourable Grahas, Adopting ways to keep away from demons etc is treatment for Agantuja Vikara.⁴⁸

As said by Charakacharya Worry / grief (Shoka) leads to emaciating/ wasting (Shoshnanam), Grief (Vishad) leads to aggravation of diseases (Rogvardhananam, Unhappiness / Disgust (Daurmanasya) leads to loss of virility (Avrushyananam), Harsha gives delight (Prinananam).⁴⁹ One should be relieve all the worries and one should behave according to Sadvritta leads to Joyfull life and may achieve Dharma, Artha, Kama, Moksha and Health.

References

- 1) Agnivesha Revised by Charak, Drudhbala Vaidya Kushvaha H.S *Charaka Samhita Textbook with Hindi Translation with Chakrapani Tika* (2018) Sutrasthana, Adhyaya 30th, Shlok no.26, Chaukhambha Publications, New Delhi, Page No 495
- 2) Agnivesha Revised by Charak, Drudhbala Vaidya Kushvaha H.S *Charaka Samhita Textbook with Hindi Translation with Chakrapani Tika* (2018) Sutrasthana, Adhyaya 1, Shlok no.55, Chaukhambha Publications, New Delhi, Page No 24
- 3) Shri Shrimad. Swami Prabhu Pad A.C.B. V (1996) *Bhagvat Gita Jashi Ahe Tashi*, Chapter 6 Shlok no 26, Bhakti Vedant Trust, New Delhi, Page No, 242
- 4) Shri Shrimad. Swami Prabhu Pad A.C.B. V (1996) *Bhagvat Gita Jashi Ahe Tashi* Chapter 6, Shlok no 35, Bhakti Vedant Trust, New Delhi, Page No 250
- 5) Sushruta, Vaidya Shastri, A.D. *Sushruta Samhita Textbook with Hindi Translation* (2015) Sutrasthana, Adhyaya 15th, Shlok no.48, Chaukhambha Sanskrit Sansthana, Varanasi, Vol 1, Page No 84.
- 6) Agnivesha Revised by Charak, Drudhbala Vaidya Kushvaha H.S *Charaka Samhita Textbook with Hindi Translation with Chakrapani Tika* (2018) Agnivesha Revised by Charak, Sutrasthana, Adhyaya 8, Shlok no.29-33, Chaukhambha Publications, New Delhi, Page No
- 7) Agnivesha Revised by Charak, Drudhbala Vaidya Kushvaha H.S *Charaka Samhita Textbook with Hindi Translation with Chakrapani Tika* (2018) Adhyaya 11, Shlok no.11, Chaukhambha Publications, New Delhi, Page No 159
- 8) Agnivesha Revised by Charak, Drudhbala Vaidya Kushvaha H.S *Charaka Samhita Textbook with Hindi Translation with Chakrapani Tika* (2018) Sutrasthana, Adhyaya 11, Shlok no.29, Chaukhambha Publications, New Delhi, Page No 167
- 9) Agnivesha Revised by Charak, Drudhbala Vaidya Kushvaha H.S *Charaka Samhita Textbook with Hindi Translation with Chakrapani Tika* (2018), Sutrasthana, Adhyaya 11, Shlok no.33, Chaukhambha Publications, New Delhi, Page No 169
- 10) Agnivesha Revised by Charak, Drudhbala Vaidya Kushvaha H.S *Charaka Samhita Textbook with Hindi Translation with Chakrapani Tika* (2018) Sutrasthana, Adhyaya 11, Shlok no.41, Chaukhambha Publications, New Delhi, Page No 177
- 11) Agnivesha Revised by Charak, Drudhbala Vaidya Kushvaha H.S *Charaka Samhita Textbook with Hindi Translation with Chakrapani Tika* (2018) Sharirsthana, Adhyaya 1, Shlok no.18-19, Chaukhambha Publications, New Delhi, Page No 714
- 12) Agnivesha Revised by Charak, Drudhbala Vaidya Kushvaha H.S *Charaka Samhita Textbook with Hindi Translation with Chakrapani Tika* (2018) Sutrasthana, Adhyaya 11, Shlok no.45, Chaukhambha Publications, New Delhi, Page No 179
- 13) Agnivesha Revised by Charak, Drudhbala Vaidya Kushvaha H.S *Charaka Samhita Textbook with Hindi Translation with Chakrapani Tika* (2018), Sutrasthana, Adhyaya 1, Shlok no.58, Chaukhambha Publications, New Delhi, Page No 27
- 14) Agnivesha Revised by Charak, Drudhbala Vaidya Kushvaha H.S *Charaka Samhita Textbook with Hindi Translation with Chakrapani Tika* (2018), Sutrasthana, Adhyaya 11, Shlok no.54, Chaukhambha Publications, New Delhi, Page No 183
- 15) Agnivesha Revised by Charak, Drudhbala Vaidya Kushvaha H.S *Charaka Samhita Textbook with*

Hindi Translation with Chakrapani Tika(2018)
Sutrasthana, Adhyaya 11, Shlok
no.54,Chaukhambha Publications, New Delhi ,
Page No183

16) Shri Shrimad.Swami Prabhu Pad A.C.B. V (1996)
Bhagvat Gita Jashi Ahe Tashi Chapter17Shlok no
8-10, Bhakti Vedant Trust,New Delhi, Page No
552,553

17) Agnivesha Revised by Charak,Drudhbala Vaidya
Kushvaha H.S *Charaka Samhita Textbook with
Hindi Translation with Chakrapani Tika*(2018)
Vimanthana, Adhyaya 1, Shlok
no.21,Chaukhambha Publications, New Delhi,Page
No 595

18) Sushruta,Vaidya Shastri, A.D.*Sushruta Samhita
Textbook with Hindi Translation* (2015)Adhyaya
64 , Shlok no.56,Chaukhambha Sanskrit
Sansthana, Varanasi,Vol 2, Page No 618

19) Sushruta,Vaidya Shastri, A.D.*Sushruta Samhita
Textbook with Hindi Translation* (2015)
Sutrasthana, Adhyaya 46 , Shlok no.48, Vol.1,
Chaukhambha Sanskrit Sansthana, Varanasi,Vol 1 ,
Page No 485

20) Prof. Vaidya Dhiman.K.S, Dr Srikanth.N, Dr..
RaoB.C.S Ayurveda Based Dietary And Lifestyle
Advocacy For Mental Health & Psychiatric
Disorder,Retrived From
<http://www.ccras.nic.in/sites/default/files/ebooks>
Central Council For Research In Ayurvedic
Science),Page No 17-18

21) Prof. Vaidya Dhiman.K.S, Dr Srikanth.N, Dr..
RaoB.C.S Ayurveda Based Dietary And Lifestyle
Advocacy For Mental Health & Psychiatric
Disorder Retrived From
<http://www.ccras.nic.in/sites/default/files/ebooks>
Central Council For Research In Ayurvedic
Science),Page No 18

22) Agnivesha Revised by Charak,Drudhbala Vaidya
Kushvaha H.S *Charaka Samhita Textbook with
Hindi Translation with Chakrapani Tika*(2018)
Sutraasthana, Adhyaya 11, Shlok no.54,
Chaukhambha Publications, New Delhi, Page No
183

23) Agnivesha Revised by Charak,Drudhbala Vaidya
Kushvaha H.S *Charaka Samhita Textbook with
Hindi Translation with Chakrapani Tika*(2018)
Chikitsasthana, Adhyaya 1, Shlok
no.30,Chaukhambha Publications, New Delhi,
Page No,463

24) Agnivesha Revised by Charak,Drudhbala Vaidya
Kushvaha H.S *Charaka Samhita Textbook with
Hindi Translation with Chakrapani Tika*(2018)
Sutrasthana, Adhyaya 8, Shlok
no.18,Chaukhambha Publications, New Delhi,
Page No 129

25) Agnivesha Revised by Charak,Drudhbala Vaidya
Kushvaha H.S *Charaka Samhita Textbook with
Hindi Translation with Chakrapani Tika*(2018),
Sutrasthana, Adhyaya 8, Shlok
no.23,Chaukhambha Publications, New Delhi,Page
No 134

26) Vagbhat Shri Garde .G.K .Sarth
Vagbhat(2012),Sutrasthan Adhyay 8 ,Shlok no
135,Profishant Publishing House,Pune ,Page No 38

27) Agnivesha Revised by Charak,Drudhbala Vaidya
Kushvaha H.S *Charaka Samhita Textbook with
Hindi Translation with Chakrapani Tika*(2018),
Sutrasthana, Adhyaya 8, Shlok
no.26,Chaukhambha Publications, New Delhi,
Page No 135

28) Agnivesha Revised by Charak,Drudhbala Vaidya
Kushvaha H.S *Charaka Samhita Textbook with
Hindi Translation with Chakrapani Tika*(2018)
Sutrasthana, Adhyaya 8, Shlok no.27,
Chaukhambha Publications, New Delhi ,Page No
135

29) Agnivesha Revised by Charak,Drudhbala Vaidya
Kushvaha H.S *Charaka Samhita Textbook with
Hindi Translation with Chakrapani Tika*(2018)
Sutrasthana, Adhyaya 8, Shlok
no.28,Chaukhambha Publications, New Delhi,
Page No 136

30) Agnivesha Revised by Charak,Drudhbala Vaidya
Kushvaha H.S *Charaka Samhita Textbook with
Hindi Translation with Chakrapani Tika*(2018)
Sutrasthan , Adhyaya 11, Shlok
no.28,Chaukhambha Publications, New Delhi,
Page No 167

31) Muthuswami NE.*Bhadanta Nagarjuna. Rasa
Vaiseshik*, (1976) Sutra 4 Shlok no 27, Kerala
Gov. Ayu. Publication series -2 ,Page No 133

32) Agnivesha Revised by Charak,Drudhbala Vaidya
Kushvaha H.S *Charaka Samhita Textbook with
Hindi Translation with Chakrapani Tika*(2018)
Chitsasthana, Adhyaya 1, Shlok no.30-
31,Chaukhambha Publications, New Delhi , Page
No 6

33) R. Archana and Namshivayam, *A.Antistress effect
of Withania somnifera* Dunal,J.Ethnopharmacology
Retrived From
<https://www.carakasamhitaonline.com> Page
No 64:91-93

34) Agnivesha Revised by Charak,Drudhbala Vaidya
Kushvaha H.S *Charaka Samhita Textbook with
Hindi Translation with Chakrapani Tika*(2018)
Sutrasthana, Adhyaya 7, Shlok

- no.27,Chaukhambha Publications, New Delhi ,
Page No 109
- 35) Shri Garde .G.K .*Sarth Vagbhat*(2012)Vagbhat ,
Adhyay 4 ,Shlok no 24,Profishant Publishing
House,Pune ,Page No 39
- 36) Prof. Vaidya Dhiman.K.S, Dr Srikanth.N, Dr..
RaoB.C.S *Ayurveda Based Dietary And Lifestyle
Advocacy For Mental Health & Psychiatric
Disorde*(2018) Retrived
fromhttp://www.ccras.nic.in/sites/default/files/eboo
k Central Council for Research in Ayurvedic
Science, Page No 25-26
- 37) Shari Agnivesha Revised by Charak,Drudhbala
Vaidya Kushvaha H.S *Charaka Samhita Textbook
with Hindi Translation with Chakrapani Tika*(
2018)Sutrasthan, Adhyaya 1, Shlok
no.138,Chaukhambha Publications, New Delhi,
Page No 27
- 38) Agnivesha Revised by Charak,Drudhbala Vaidya
Kushvaha H.S *Charaka Samhita Textbook with
Hindi Translation with Chakrapani Tika*(2018)
Sharirsthana, Adhyaya 1, Shlok no.140-
141,Chaukhambha Publications, New Delhi ,Page
No 744
- 39) Vaidya . Pathrikar.V *Swasthavritta Vidnyan*(2007)
, Jaykruna ooset works.Nagpur, ,Page No 33-39
- 40) Prof. Vaidya Dhiman.K.S, Dr Srikanth.N, Dr..
RaoB.C.S *Ayurveda Based Dietary And Lifestyle
Advocacy For Mental Health & Psychiatric
Disorder*, Retrived From Central Council For
Research In Ayurvedic Science,Page No 25
- 41) Shri. Ramdasi.M. .*Shri Ramdas Swami Kruta
Manache Shlok* (1935) Shlok no 4,Samarth Seva
Mandal,Sajjangad ,PageNo 1
- 42) Shri Ramdasi .M. *Shri Ramdas Swami Kruta
Manache Shlok* (1935) Shlok no 5-7,Samarth Seva
Mandal,Sajjangad,Page No 2
- 43) Shri Ramdasi M. *Shri Ramdas Swami Kruta
Manache Shlok* (1935), Shlok no 12,Samarth Seva
Mandal,Sajjangad ,Page No 3
- 44) Agnivesha Revised by Charak,Drudhbala Vaidya
Kushvaha H.S *Charaka Samhita Textbook with
Hindi Translation with Chakrapani Tika*(2018)
Sharirsthana, Adhyaya 11, Shlok no.46-
47,Chaukhambha Publications, New Delhi, Page
No 180
- 45) 45) Agnivesha Revised by Charak,Drudhbala
Vaidya Kushvaha H.S *Charaka Samhita Textbook
with Hindi Translation with Chakrapani Tika*(
2018) Sharirsthana, Adhyaya 1, Shlok
no.58,Chaukhambha Publications, New Delhi ,
Page No 27
- 46) Vagbhat Shri Garde .G.K .*Sarth Vagbhat*(2012),
Sutrasthan Adhyay 4, Shlok no 31, Profishant
Publishing House, Pune, Page No 41
- 47) Agnivesha Revised by Charak,Drudhbala Vaidya
Kushvaha H.S *Charaka Samhita Textbook with
Hindi Translation with Chakrapani Tika*(2018)
Sharirsthana, Adhyaya 25, Shlok
no.40,Chaukhambha Publications, New Delhi,
Page No 353

PUBIC SYMPHYSIS DIASTASIS DURING NORMAL VAGINAL DELIVERY – A CASE STUDY**¹*Dr. Snehal Prakashrao Pawar and ²Dr. J. S. Deshmukh**¹PG Scholar (Prasutitantra & Streerog), ²HOD & Professor of Prasutitantra & Streerog
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Article Received on 26/03/2021

Article Revised on 14/04/2021

Article Accepted on 05/05/2021

ABSTRACT

Pubic Symphysis Diastasis is defined as separation of the joint, without fracture. Pubic Symphysis Diastasis following childbirth via vaginal delivery is a rare but debilitating condition. It is a condition that allows excess lateral or anterior movement about the Symphysis pubis and can result in Symphysis pubis dysfunction. It is usually noticed after delivery and has been associated with forceps delivery, rapid second stage of labour or severe abduction of the thighs during delivery. Unbearable pain on moving from side-to-side and on performing any weight-bearing activity such as walking or climbing stairs precludes ambulation in the immediate postpartum period. Radiography, ultrasound and magnetic resonance imaging are the diagnostic modalities that aid confirmation of diagnosis. There is no overwhelming evidence in the medical literature to support any particular treatment. Most of the cases can be treated Conservatively. However, external and internal surgical stabilization may occasionally be required. A Case is reported here of severe separation of the Symphysis pubis during delivery, including several Previously unreported complications. A review of the literature follows, highlighting the variety in Presentation, treatment, and prognosis.

KEYWORDS: Pubic Symphysis Diastasis, Spontaneous vaginal delivery, Conservative management, Bed rest, Pelvic binder.

INTRODUCTION

The Pubic Symphysis is a non-synovial joint that connects the right and left superior pubic rami. Due to hormone related changes and physiological alterations observed during pregnancy, the gap can increase by 2-3mm and remain after delivery, such a separation is called as "Physiological Pelvic Symphysis Diastasis". Infrequently vaginal delivery might lead to joint widening of more than 10mm which is diagnostic and defined as "Pathology Pubic Symphysis Diastasis".^[1] The abnormally widened gap can cause significant pain followed by the inflammation and swelling. A Physiological widening of the Symphysis joint is based on normal endocrine changes during pregnancy; therefore, it does not depend on the mode of delivery and the Pathological Diastasis is considered complication of the vaginal delivery method of childbirth and can be prevented by Cesarean delivery.^[2] This is a rare pathology found in postpartum women with an estimated prevalence ranging from 1 in 300 to 1 in 30,000 Pregnancies.^[3]

Diastasis can also occurs as a result of Precipitate labour and instrumental delivery.^{[4][5]} These changes are reversible after complication free birth but sometimes

may result in considerable & prolonged morbidity.

Possible predisposing factors involve the no. of pregnancies, fetal macrosomia, narrow pelvic outlet or cephalo-pelvic disproportion, rapid & dense contractions, during labour, epidural route of anaesthesia, Previous trauma in the pelvic region, osteomalacia, chondromalacia & infections.^[6]

A rapid delivery is thought to play a role in rupture of the pubic ligaments, But intervention with the vacuum extraction or Forceps delivery has not had an important role in the series reported. Clinically, separation of the symphysis pubis is Heralded by pain in the region of the symphysis, With point tenderness in the region of the symphysis pubis and pain in, that area on compression of the pelvis. Pain usually occurs with walking, And an unstable or waddling gait is noted. With Wider separations, back pain in the sacroiliac Joints becomes more prevalent because of the Hinge-type movement when the pelvis widens.

Treatment modalities range from Conservative management including analgesics, pelvic binders, transcutaneous nerve stimulation and chiropractic

management to orthopaedic intervention such as external fixation or open reduction and internal fixation.

MATERIALS AND METHODOLOGY

Study type

A single case study of Pubic Symphysis Diastasis.

Study Design

A single case study of patient was taken from IPD of our Ayurved Rughnalya. Informed & written consent was taken.

CASE REPORT

A 24 years old patient G₃P₁ had a Prolonged second stage of labour with spontaneous vaginal delivery of a 3.3kg healthy female child. Immediate after labour, the patient noted severe suprapubic pain and was unable to move due to the severity of pain. Attempts by physical therapists to mobilize the patient had failed due to significant pain & discomfort. Results of a neurological examination of her legs were normal. Then patient was evaluated by an orthopaedic surgeon.

On Physical examination, there was no obvious instability with compression of both iliac wings. There was reproducible pain over the midline & in the infra umbilical region and tenderness over the pubic symphysis, with a small palpable defect.

Radiography of the pelvis were ordered to further assess the symphysis pubis & sacroiliac joints. Initial images of the pelvic were obtained on postpartum day 5 and demonstrated abnormal widening of the symphysis pubis to a maximal transverse measurement of 4cm. There was no definite sacroiliac joint widening. Radiological imaging findings and the stability of the posterior ring, so, Conservative management was recommended and patient was placed in a pelvic binder. Also recommended to take bed rest and supportive treatment was continued for 3 months.

Supportive treatment

- 1) Mahayograj Guggul 250mg 2BD warm water for 15days.
- 2) Asthiposhak Vati 250mg 2BD
- 3) Shatawari Kalpa 1tsf—1tsf with milk
- 4) shunthi siddha erand tail 5ml at night with luke

Also, sequential images at follow up were obtained. The patient improved clinically and Radiographically. On follow up visits, she reported progressive improvement of symptoms.

DISCUSSIONS

Anteriorly, the pelvic bone are jointed together by symphysis pubis. The structure consists of fibrocartilage and superior & inferior pubic ligaments. In pubic symphysis Diastasis, the separation of the right and left pubic rami. The abnormally widened gap can cause

significant pain followed by inflammation and swelling. Diagnosis may be made based on multiple imaging studies.

In the medical literature, there are no definite guidelines to support any particular treatment. Most of the cases respond to Conservative therapy in the form of bed rest, Analgesics and pelvic binders. Conservative therapy usually results in a complete recovery in acceptable time span. Physiotherapy in the form of muscle strengthening exercise also has a role.

CONCLUSION

Separation of the pubic symphysis during pregnancy and delivery is normal. However, large separation is a potential complication requiring treatment and follow up. Treatment should generally be Conservative and symptomatic.

Conservative management including rest, analgesics and a pelvic binder is a reasonable method of management. Under the guidance of expert obstetric, physiotherapist, this clinical entity shows significant improvement in pain, functional status and overall physical health.

REFERENCES

1. Jain S, Eedarapalli P, Jamjute P, Sawdy R. Symphysis pubis dysfunction: a practical approach to Management. *Obstetrician Gynaecologist*, 2006; 8: 153-158 [DOI:10.1576/toag.8.3.153.27250]
2. Heim J, Vang S, Thomas A, Ly T, Das K. Effect of Pregnancy, Labor, Delivery and Postpartum on Physiological Pubic Symphysis Diastasis [23I]. *Obstet Gynecol*, 2016; 127: 79S. [DOI:10.1097/01.AOG.0000483727.45018.04]
3. Parker JM, Bhattacharjee M. Images in clinical medicine. Peripartum diastasis of the symphysis pubis. *N Engl J Med*, 2009; 361: 1886 (PMID: 19890131 DOI: 10.1056/NEJMc0807117)
4. Sakhare AP, Bhingare PE, Ghodke UP, Mahale AR. Pubic symphyseal diastasis during normal vaginal Delivery. *J Obstet Gynecol India*, 2005; 55: 365-6.
5. Kelly O, Anne P, Gerald M. pubic symphysis separation. *Fetal Maternal Med Review*, 2002; 13: 141-55.
6. Yoo JJ, Ha YC, Lee YK, Hong JS, Kang BJ, Koo KH. Incidence and risk factors of symptomatic Peripartum diastasis of pubic symphysis. *J Korean Med Sci*, 2014; 29: 281-286. [PMID:24550659] <http://dx.doi.org/10.3346/jkms.2014.29.2.281>.

EFFECT OF TRIGUNA ON HUMAN BEHAVIOUR***¹Dr. Anil Devraj Sandri, ²Dr. Anjali Hingane, and ³Dr. Smita Dhurde**¹PG Scholar (Samhita Siddhant),²MD Samhita and Siddhant, Prof. Dept. of Samhita and Siddhant,³MD.Ph.D. Samhita Siddhant, Prof. & HOD of Dept. of Samhita and Siddhant,
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22 April 2021,Revised on 12 May 2021,
Accepted on 2 June 2021,

DOI: 10.20959/wjpps20217-19262

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Maharashtra.**ABSTRACT**

Man is a social animal. His behavior depends on his personality. There are so many factors which are responsible for development of personality of an individual such as method of upbringing, school life, friends, family profession, job satisfaction, financial status, marital life, etc. Ayurveda theory of mental constitution helps here which is based on ratio of Triguna namely Satva, Rajasa, Tamasa. The term Guna refers to the tendency which human mind functions. Guna is Sahaja Prakruti which stays inside a person.^[1] The Prakruti is composed of three Guna Satva, Rajasa, Tamasa. On an individual level they are corresponds to various psycho-physiological state & personality types. Satva response to clarify of thoughts & purity of mind Rajasa denotes

passionate, excitable, aggressive states of mind & Tamasa denotes Indifference, confusion & depression In Shrimada Bhagavada Gita there is description about triguna and its swabhava, lakshana, karya, phala and parinama.^[2]

KEYWORDS: Satva, Rajasa, Tamasa.**INTRODUCTION**

Triguna are present in all human beings, none is free from the operation of any one of the three qualities. There are not constant, sometimes Satva predominates and at other time Rajasa and Tamasa predominates. One who know that the Satva is Shreshtha and one cannot get rid of Rajasa and Tamasa, should do Sadhana in enlightening the Satva. These three Guna is different properties influence the mental and intellectual caliber of every individual. Guna

indicates the attribute with which human mind functions. Dominance of Guna determines the Individuals personality.

In Shrimada Bhagavat Gita, Lord Krishna has explained the concept of Triguna, characters of each Guna, the relationship between food & habits in Triguna & methods of controlling the mana. Apart from Bhagavat Gita the other Acharyas also mentioned about Triguna. In Sushruta Samhita personality of a man is explained based on Triguna, Satvika, Rajasika, Tamasika Purusha lakshana.^[3]

Acharya Charaka mentioned mental faculty of three types; Satvika, Rajasika & Tamasika. The Satvika is one which free from defects as it is enclosed with auspiciousness. The Rajasa is defective because it promotes wrathful disposition. The Tamasa is the one which is similarly defective because it suffers from ignorance.^[4]

In Ashtanga Hrudaya the characteristics of Triguna are mentioned as Satvika person having Guna like cleanliness, have faith in God, righteous, honest & intellect. Rajasika persons are talkative, having anger, jealousy & are proud. Tamasika persons are coward, illiterate, sleepy, lazy & non-enthusiastic. According to Sankhya philosophy, Satva guna is the indicator of purity, creativity & bliss. Rajasa is distinguished by movement, dynamism & reactivity. Tamasa is characterized by ignorance, delusion & power of resistance.^[6]

Aim: To study the concept of Triguna critically.

Objectives: To study the effect of Triguna on human behavior.

METHODOLOGY

1. Shrimada Bhagavata Geeta – 14th Chapter⁸

The highest of three qualities is Satva. It is pure. It brings about happiness, wisdom & illumination. The second quality is of Rajasa gives rise to passion manifested by intense, attachment & greed. It causes sorrow & suffering. The third, Tamasa is the worst of all. It arises due to ignorance & results in darkness, lethargy & delusion.

One should control Rajasa by holding it in check, divert its power towards good kind of activities. Satva should be carefully cultivated, developed & conserved in order to enable us to attain immortality. Lord Krishna in Bhagavata Geeta says that, one who rises beyond all the Triguna through spiritual practices become free from birth, death, old age, sorrow & enjoys immortality. Triguna; Satva, Rajasa, Tamasa are born of prakruti which binds immortal soul

to body in its embodied state. Satva which from its stainlessness is luminous & healthy, binds by attachment to knowledge & to happiness. Rajasa to be of nature of passion, the sources of thirst (for sexual enjoyment) & attachment. It binds fast & embodied one by attachment to action. Tamasa is born of ignorance, deluding all embodied beings, it binds fast, is full of thoughtlessness, sleep & ignorance.

Satva attaches to mood of joy, while Rajasa to action. Tamasa to ignorance & heedlessness. When Satva is dominant, then all the senses, knowledge, happiness & similar characteristics manifest. Greed, extroversion, ceaseless, planning & execution of work, restlessness, desire for enjoyment, these arises when Rajasa is predominant. When Tamasa dominates there is lack of intelligence, lack of effort, negligence & delusion.^[8]

2. Shrimada Bhgavada Geeta 17th Chapter -

These endowed with Satva, worship devotes those with Rajasa worship Rakshas & Rakshasas. Those with Tamasa worship the spirits of dead ancestors & elementals. Ahara is of three kinds, the person who are Satvika by nature, like food that promotes longevity, vitality, energy, health, happiness, cheerfulness & that are juicy, soft, nourishing & agreeable. Person who is Rajasika by nature like food that are katu, Amla, lavana excessively ushna, teekshna, ruksha, vidhahi & thirst producing, as also which brings on uneasiness, depression & diseases. Persons who are Tamasika by nature like food that is state, fastless, putrid, decayed unclean & constitutes the leavings of others (leftovers).

The Dana given to others with the absolute sense of duty, without expectation of any kind of return, given at the proper time & place to a fit recipient is said to be of the nature of Satva. The Dana Which is given in consideration of some gift in return or with some fruit to be reaped in future or in a grudging mood, that is the nature of Rajasa. The Dana is made at an improper time & place to an unworthy recipient, who is with lack of courtesy & in a disregarded manner that is nature of Tamasa.^[9]

3. Sushruta Samhita

Characteristic features of Satva guna are kind, merciful, samvibhaga ruchita, patient, truthful, follow righteous way, belief in God. Dnyan, buddhi, intelligent, smruti, courageous, who do their work without any expectation.

Rajasa guna predominant persons are always in grief, wondering, unhappy, ahankaara, felling lies, Akarunya, deceiving, respectful, joyous, kama & krodha.

Tamasa guna predominant persons are in sadness, lack of belief in existence of God, doing unrighteousness things, Buddhirnirodha, Agyani, foolish, does not like to work & nidralu.^[3]

4. Charaka Samhita

Acharya Charaka mentioned mental faculty is of three types, Satvika, Rajasika & Tamasika. Satvika is one which is free from defects as if is endowed with auspiciousness.

Rajasika is defective because it promotes wrathful disposition. Tamasika is the one which is similarly & defective because it suffers from ignorance.^[4]

The human behavior comes under Satvika faculty (Shuddha Satva) as follows^{4-a} ;

- 1) Maintain cleanness & purity.
- 2) Always talks truth.
- 3) Control their sense organs.
- 4) Do equal distribution of things with their colleague.
- 5) Free from Shadripu.
- 6) Do study.
- 7) Maintain celibacy (non-indulgence in sexual activity).
- 8) Give respect to guest.

The human behavior comes under Rajasa faculty as follows;

- 1) Bravery, leadership, envy, cruelty.
- 2) Intolerance, constant anger, violence at weak points.
- 3) Restoring to abnormal diet & regimens.
- 4) Sharp reaction.
- 5) Actions without discrimination.
- 6) Attachment with passion.

The human behavior comes under Tamasa faculty as follows;

- 1) Lack of intelligence.
- 2) Hateful conduct & food habit.
- 3) Gridiness for food.
- 4) Unsteadiness

5) Excessive sexual indulgence & sleep^{4-a}.

The person having Satva as essence are endowed with memory, devotion, are grateful, learned, pure, courageous, skillful, resolute, fighting in battles with process, free from anxiety, having well directed & serious intellect and activities & engaged in virtual acts.

The person with Satva Sarata (Superior psyche) possessing short body are seen unmoved even is severe afflictions – innate or exogenous due to predominance of Satva quality. Those having medium psyche sustain themselves at the instance of others or entirely by others. But those possessing inferior psyche can sustain neither by themselves nor by others. Although having big stature, they are unable to even mild pain, they are associated with fear, grief, greed, confusion, and conceit & even during fierce, frightening, disliked, disgusting, & ugly narratives or on the look of the animal or human flesh or blood get afflicted with anxiety, abnormal complexion, fainting, insanity, giddiness or falling on the ground or even succumb to death^{4-b}.

5. Ashtanga Hrudaya

Satvika persons having guna like cleanliness, have faith in God, righteous, honest & intellect. Rajasika persons are talkative, having anger, jealousy & proud. Tamasika is the one which is similarly defective because it suffers from ignorance.^[5]

The person with predominance of Satva guna experiences happiness & misery without agitation & humanity respectively. Whereas persons of Rajasa & Tamasa do not so.^[5]

6. Triguna in Sankhya Karika

Satva guna is the indicator of purity, creativity & bliss. It can be compared with flame & is represented by white colour, Rajasa by nature is ; stimulant, hyperactive & tickle, therefore said to be the indicator of stimulation, impatience & pain. It can be compared with wick & is represented by red color. Tamasa is heavy & work as covering for the consciousness. It is indicated by ignorance, darkness & nobility. It can be compared with oil of a lamp & is represented by blue color.^[6]

7. Shrimada Bhagavata Purana

The signs of Satva are control of the mind & senses, forbearance, discrimination, austerity, truthfulness, comparison, memory, contentment, self sacrifice, lack of desire, faith, revulsion from evil, charity, absorption in the self. Signs of Rajasa are desire, activity, pride, greed, self

boasting, longing for one's selfish ends, sense of difference between man and things, sensuality, enthusiasm arising from excitement, craving for name and fame, indulgence in ridicule of others, demonstrativeness, aggressiveness.

Characteristics of Tamasa are anger, greed, untrustworthy, cruelty, beggarliness, hypocrisy, inactivity, quarrel someness, depression, delusion, despondency, wrefobedness, lassitude, expectations, fear, lack of initiative, & vigour in work. When Satva is illuminating, brilliant, pure & peaceful, dominates over the other two gunas then person will be happy and established is mortality & knowledge. When Rajasa characterized by attachment, sense of difference, & consciousness of one's power, dominates over Satva & Tamasa the man becomes subject to suffering, sorrow, following as he does the path of desire-prompted action seeking wealth & fame.

When Tamasa dominates other Rajasa & Satva, then man becomes subject to pessimism, delusion, cruelty & indulgence is vain expectations, when consciousness clears up, senses are not distracted, physical self confidence & detached mind is there, the Satva guna dominates. When intelligence is disturbed by actively, one fails to disengage from senses & mind is unsteady, it shows that Rajasa has become dominant. When mind is unstable to sustain consciousness, dissolves into sleep, dominance of inertia & pessimism, then Tamasa guna is dominant. When a person does any work in the feeling of dedication to God without desiring the fruits, then he will become Satvika. When a person expects benefit from the work then he will become Rajasika. If he is self praising himself & egoistic towards the work & performed with violence & pressure, then he will become Tamasika.

A worker free from attachment is of Satvika, binded by personal desire is of Rajasika having lose one's memory & doesn't think about pros & cans before doing any work is of Tamasika. Satva is the one who believes in spiritual Matters, Rajasika Rajasa is one who believes in outcome of trait from work. Tamasa is one who believes in Adharma.

Those who control over sense organs are called Satvika. Those who uses sense organs for enjoyment are Rajasika.^[7]

DISCUSSION

A person having Satva guna abstain from disease caused due to Pardnyaparada & Asatmendriyartha Sanyoga. Acharya Sushruta not separately mentioned the types of guna &

Satva pariksha, he explained according to the pradhan guna of manasa. In Bhgavata Geeta there is explanation about qualities.

In Shrimada Bhagavata Purana the characteristics are mentioned about Satva, Rajasa & Tamasa which are; The signs of Satva are control of the mind & senses, forbearance, discrimination, austerity, truthfulness, comparison, memory, contentment, self sacrifice, lack of desire, faith, revulsion from evil, charity, absorption in the self. Signs of Rajasa are desire, activity, pride, greed, self boasting, longing for one's selfish ends, sense of difference between man and things, sensuality, enthusiasm arising from excitement, craving for name and fame, indulgence in ridicule of others, demonstrativeness, aggressiveness.

Characteristics of Tamasa are anger, greed, untrustworthy, cruelty, beggarliness, hypocrisy, inactivity, quarrel someness, depression, delusion, despondency, wretchedness, lassitude, expectations, fear, lack of initiative, & vigour in workites of Satva, Rajasa and Tamasa guna.

Satva guna of the person at the time of vedhan, chedhya bhedyo vidhi shastra karma does not cause dukha. Satva is the capacity of mind which does not cause the frustration at the times of sorrow, joy etc. satva gunayukta purusha from his atmbala he overcomes from the pain caused by sharirika & manasika vyadhi. Raja guna pradhana purusha with the help of others he can bear & overcomes from his problems but Tama guna pradhana purusha does not bear & overcomes from such problems.^[10]

Manasika prakruti can be identified on how a person behaves or reacts to a given situation considering the place & time, Acharya Sushruta describes the same in the aspect of guna where each guna is explained with each of the exclusive character of the person & each of the character defines how the person will react to a situation.

CONCLUSION

Bhagavata Gita, Bhagavata Purana, Sankhya Karika & Ayurvedic literature gives detailed information about Triguna, their function, characteristics & their role in maintenance of health of an individual. Triguna plays major role in treatment to know about mentality of each person & their mindset towards every situation. This article provides all that information compiled at one place. Every human being behaves according to their Satva, Raja & Tama guna.

REFERENCES

1. D.V.Gundappa, Shrimada Bhagavada Geeta Tatparya, kavyalaya publication, kannada, Edition 2001, prakashan 15, Adhyaya 14-Gunatraya vibhaga yoga, page no-367.
2. D.V.Gundappa, Shrimada Bhagavada Geeta Tatparya, kavyalaya publication, kannada, Edition 2001, prakashan 15, Adhyaya 14, Gunatraya vibhag yoga, page no-368.
3. Sushruta, Sushruta samhita, Kaviraj Ambika datta Shastri, sharira sthana, adhyaya 1st, shlok no. 23-25, Chaukhambha Sanskrit sansthana, Varanasi, Reprint, 2017; 8-9.
4. Charaka, Charaka samhita, Purvardha, Acharya Vidyadhara Shukla & Ravidutta Tripathi;
 - a) Sharirsathan, adhyaya 4th, shlok no. 36-38, Chaukhambha Sanskrit Sansthan, Reprint 2009; 735-739.
 - b) Vimanasthana, adhyaya 8th, shlok no. 110,119, Chaukhambha Sanskrit Sansthan, Reprint 2009; 647: 653.
5. Vagbhata, Ashtanga Hrudaya, Kaviraj Atrideva Gupta, Sharira sthana, adhyaya 3, shlok no. 7,119, Chaukhambha Prakashana, Varanasi, Reprint, 2017; 250: 264.
6. Dr. T.G. Mainkar, Sankhya karika of Isavara krushna, 11th verse, Chaukhambha Sanskrit sansthana, 2004; 69.
7. Shrimada bhagavata geeta, Acharya Shri Lakshmamandasa Velankara, Khanda 2nd, 11th Skanda, adhyaya 25th, shlok no. 30.
8. D.V.Gundappa, Shrimada Bhagavada Geeta Tatparya, kavyalaya publication, kannada, Edition 2001, prakashan 15, Adhyaya 14, Gunatraya vibhag yoga, Shloka no.5-26.
9. D.V.Gundappa, Shrimada Bhagavada Geeta Tatparya, kavyalaya publication, kannada, Edition 2001, prakashan 15, Adhyaya 17, Shraddhatray vibhag yoga, shloka no.4-22.
10. Sushruta, Nibandhasangraha tika, Shri Dalhanacharya, Edited by Vaidya Yadavaji Trikamaji Acharya & Narayana Ram Acharya, sutrasthana, adhyaya 35th, shlok no.37-38, Chaukhambha Sanskrit sansthana, Varanasi, Reprint, 2009; 251.



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Original Article

Title of Article: Effect of *Patoli Taila* in Management of *Parikartika* (Fissure-in-ano) in Comparison with *Jatyadi Taila*: Randomized Clinical Trial

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Article Info:

Article History:

Received: 13 May 2021

Accepted: 15 June 2021

Published: 10 July 2021

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ISSN No.: Awaited

ABSTRACT

Presently, the majority of the population is getting impacted by lifestyle disorders stemming from constipation. In *Ayurveda*, several ano-rectal diseases have been considerably described by *Acharya Sushruta*. Ano-rectal diseases are *Gudagat vyadhi*. *Parikartika* is one of these diseases. It is a dreadful condition involving the anal region. It is rightfully called *Parikartika* because it causes *Parikartanvat vedana*: cutting and burning sensation at the anal region. *Parikartika* is *vataja* in nature even though its *pittaja* and *kaphaja* types and *Lakshanas* are described by *Acharya Kashyapa*. Its root cause is habitual constipation resulting in hard stools. *Patola* belongs to *Patoladi gana* mentioned in *Sushrut samhita*. *Patola* has *vedanasthapana* and *vranashodhana* property. In this comparative study evaluation of the effect of *Patoli Taila* in experimental group and *Jatyadi Taila* in the control group in the case of *Parikartika* on two different groups of 50 patients, each within the age group of 20-60 years is done. The cases were followed up weekly and results were assessed for statistical analysis of improved findings. The result shows a better outcome of *Patoli Taila* over *Jatyadi Taila*.

Keywords: *Parikartika, Taila, Patola, Fissure-in-ano.*

INTRODUCTION

Fissure in ano has a prevalence rate of 8.42% in the total ano-rectal diseases. Its incidence is very common in constipated people. 90% of the anal fissures develop at the posterior region of the anal canal, however, 10% develop at the anterior region^[1]. *Parikartika* has been mentioned by *Acharya Shushruta, Acharya Charka, and Acharya Kashyapa* as a complication of *Basti, Virechana, and Garbhini avastha* respectively.^{[2][3]} It can be correlated with Fissure-in-ano described in modern medical science which is an anorectal disease and is a severely painful

condition. Fissure-in-ano is the condition in which an ulcer is formed in the longitudinal axis of the lower anal canal. An ulcer can be compared with *vran* in Ayurveda. *Vrana* and its 60 different types of healing is sizably described in *Sushrut Samhita*.^[4] *Basti* is one of the factors mentioned for “*Adhahkaay vrana*”; especially *Parikartika*^[5]. *Sushruta* has mentioned “*vranya and vishapah*” properties of *Patoladi gana* supporting the healing action.

Nowadays there is observed a high incidence of *Parikartika*, *Acharya Sushruta* has mentioned *Vrana basti*

for healing of the *Vrana*. This principle has been applied for the treatment of *Parikartika* using *Patoli Taila*. This is the study of the efficacy of *Patoli* [Trichosanthes dioica] *taila* in an experimental group in the management of *Parikartika* (Fissure in ano) on symptoms like sphincter spasm, itching, pain, bleeding, etc which was evaluated and compared against *Jatyadi Taila* in the control group.

MATERIAL AND METHODS

In the present study, patients attending the OPD and IPD of *Shalyatantra* department of Government Ayurved College, Nagpur were taken as subjects. In this study, the study design is a Randomized control trial done by the Lottery method while the sample size was 100 divided into two groups of 50 patients each. And follow up was taken on the 8th, 15th, 22th & 29th day.

Inclusion criteria

1. Patients were selected irrespective of age, sex, marital status, religion, educational and economic status. 2. Age between 20-60 years. 3. Patients having acute or chronic Fissure-in-ano with sphincter spasm, itching, pain, bleeding.

Exclusion criteria

The patients with a disease like Tuberculosis, Ulcerative colitis, Fissure-in-ano associated with Haemorrhoids and Fistula. Patients requiring emergency management were excluded.

Method of collection of data

Patients fulfilling the inclusion and exclusion criteria were selected. A total 100 no of patients were divided into two comparative groups. Patients were investigated for CBC with ESR, B.T., C.T., BSL Fasting & P.P., Urine- Routine, and Microscopic. Group-A was an experimental group including 50 subjects. *Patoli Taila Basti* was given per rectum once a day for the minimum duration of 7 days and the effect was evaluated. Group-B was a control group comprising 50 subjects. *Jatyadi Taila Basti* was given per rectum once a day for the minimum duration of 7 days and the effect was evaluated.

Subjective Criteria:

- A) 1. *Kandu*(itching) 2. *Gudapida*(pain) 3. *Raktastrava* (bleeding per rectum) scales are explained in Table 1
- B) **Sphincteric spasm:** No spasm, spasm present, severe spasm, and slightly puckered anal aperture.
- C) **Healing:** Healed, in healing stage and no sign of healing.

OBSERVATIONS AND RESULTS

In group A i.e. experimental group patients were treated with *Patoli Taila vranabasti* and in group B i.e. control group patients were treated with *Jatyadi Taila Vranabasti* for 7 days. After 15 days follow-up was taken. The comparison of subjective and objective criteria before and after treatment of groups A and B was assessed by the Wilcoxon sign rank test. By Mann-Whitney U-test comparison of change after treatment was assessed.

Table 1: Grades of *Kandu*, *Gudapida*, *Raktastrava* per rectum

Grade	<i>Kandu</i>	<i>Gudapida</i>	<i>Raktastrava</i>
I	No itching	No pain	No bleeding
II	Complains on asking	Complains on asking	Streak/notice rarely
III	Once or twice a day	During & after defecation relieved without medicine	0-10 drops occasionally
IV	Very often, discomfort	Relieved with medicine	10-20 drops spotted
V	Constant itching	Throughout the day affecting routine work	Profuse bleeding or more than 20 drops

Assessment of the effect of *Vranabasti*

The total effect of *Vranabasti* was assessed in terms of cured, markedly cured, improved, and no change. **Cured-** If the sign and symptoms were relieved >75% was considered in the cured category. **Markedly cured-** If the signs and symptoms were relieved 51% to 75% considered as markedly cured. **Improved-** If the signs and symptoms were relieved 25% to 50% was considered as Improved. **No change-** If the signs and symptoms were relieved below 25% was considered as no change. **Not followed.** Lama (left against medical advice)

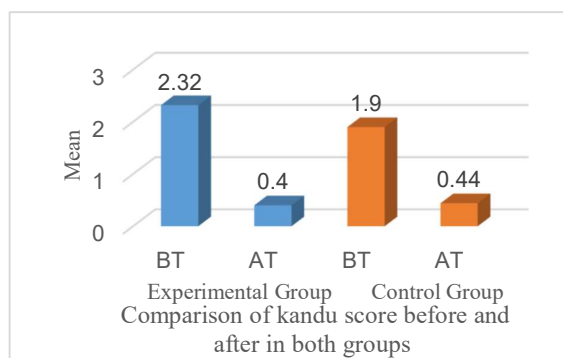


Fig. 1: shows a comparison of *Kandu* (Itching) score before and after in both groups

Fig. 1 shows the mean value of *kandu* in both the groups before treatment was 2.32 and 1.90. After treatment mean value of the experimental group was 0.40 with SD 0.60, whereas that of the control group was 0.44 with SD 0.61.

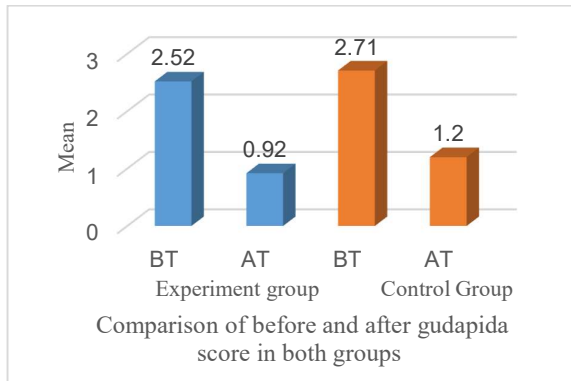


Fig. 2: shows a comparison of before and after *Gudapida* (pain) scores in both groups

The mean value of the *Gudapida* score of both groups before treatment was 2.52 and 2.71 shown in fig. 2. After treatment mean value of the experimental group was 0.92 with SD 0.80, whereas that of the control group was 1.20 with SD 0.78.

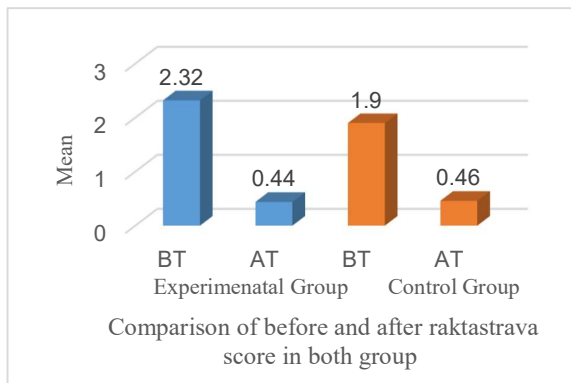


Fig. 3: shows a comparison of before and after the score of *Raktastrava* in both groups

The mean value of *Raktastrava* score of both groups before treatment was 2.32 and 1.90 as shown in fig. 3. After treatment mean value of the experimental group was 0.44 with SD 0.61, whereas that of the control group was 0.46 with SD 0.61.

Fig. 4 & 5 shows the mean value of sphincteric spasm score of both groups before treatment was 2.42 and 2.34, healing score was 2.34 and 2.32. After treatment mean value of experimental group was 0.62 with SD 0.49 for sphincteric spasm and for healing it was 0.58 with SD 0.53, whereas that in control group of sphincteric spasm was 0.62 with SD 0.49 and for healing it was 0.78 with SD 0.61.

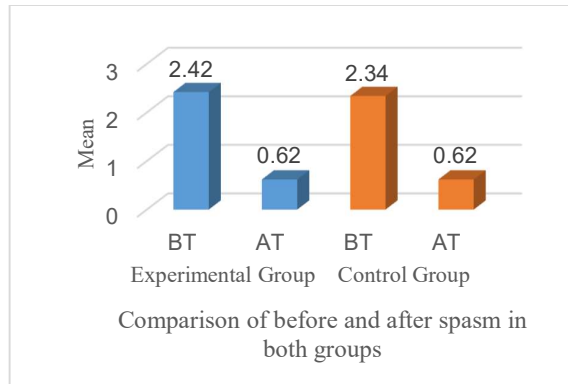


Fig. 4: Shows comparison of sphincteric spasm and healing before and after in both groups respectively

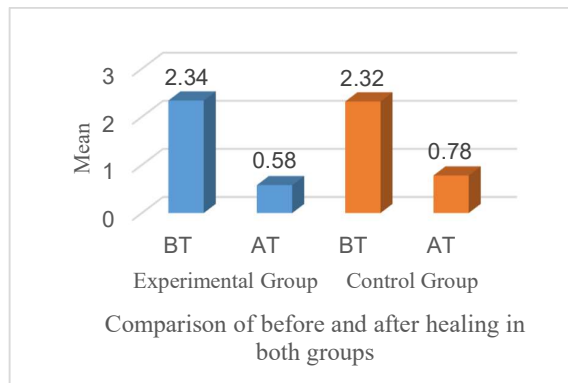


Fig. 5: Shows comparison of sphincteric spasm and healing before and after in both groups respectively

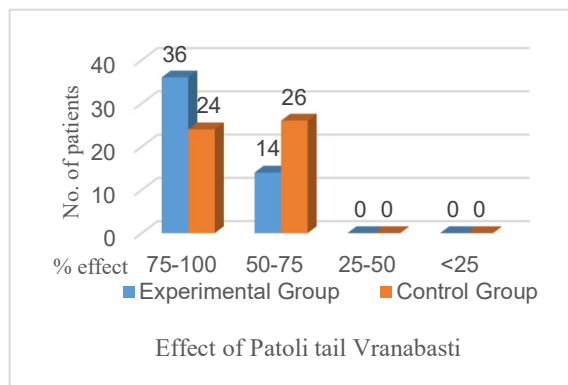


Fig. 6: Total effect of *Patoli Taila Vranabasti*

The total effect of the experimental group is 76.10% and for the control group is 74.81% p-value is 0.224 which is non-significant.

DISCUSSION

Parikartika has been mentioned in *Ayurveda* as a complication of *Virechana* and *Basti* by different acharyas. It is named *Parikartika* because it causes *Parikartanvat vedana* i.e. cutting and burning sensation at the *Guda* region⁹. *Acharya Kashyapa* has emphasized the *Doshas*

like *Parikartika* is Vataja in nature, *Guda Daha* is due to *Pitta*, itching, and infection rarely seen is due *Kapha*.^[6] There are various herbal drugs mentioned for the treatment of *Vrana*:

1. *Sushruta* has stated the “*Vranya* and *Vishapah*” effect of *Patoladigana* for healing purposes.
2. *Yogaratanakar* has mentioned that *Patoli Taila* is useful in burn ulcers, and for burning sensation.^[7]

In *Shushrut samhita*, *Patola* (*Trichosanthes dioica*) adverts to *Patoladi gana* along with its *Rasapanchak*.^[8] The *Vranya* and *Vishapaha* effects of *Patoladi gana* described in *Shushrut samhita* show remarkable significant results pertaining to healing properties in the present study. It is cost effective and also easily available. It has *Tridoshaghna* property, *Vedanasthapana*, *Vranaropana*, and *Shodhana*.^[9] *Madhura* and *Shita Guna* drugs are advised to be used in *chikitsa*.^[10] *Parikartika nashaka basti* includes various formulations also includes *Shita guna* stated by *Charaka and Sushruta*.^{[11][12]}

Raktashodhana is its Karma (action) that lessens the classical symptoms of *Parikartika*.^[13] Due to *Tikta Rasa Patola* is effective in *Ropana Karma*.^[14] This way *Patola* is found effective in this study of treatment of fissure-in-ano. Based on the clinical assessment of *Patol Taila* and *Jatyadi Taila*, both the groups show the analgesic property. *Patoli Taila* has been found more significant than *Jatyadi Taila* in itching, pain, bleeding, spasm, and healing of the fissure.

CONCLUSION

In this study pain, itching, bleeding, spasm, and healing of fissure have improved after *Patoli Taila Basti* in the management of the fissure in ano. Also, healing was found to be more significant than the control group. Fissure is more prevalent in the 31-40 years of age group and predominantly in the Female gender. Excessive intake of *Lavan*, *Katu*, *Tikta*, *Ruksha*, *Ushanahara* are the main causative factors. *Patoli Taila* has a high significance of reducing *Kandu* in *Parikartika* as compared to *Jatyadi Taila* along with healing of an ulcer. Fissures can be managed without the help of surgical measures.

ACKNOWLEDGEMENT:

I am grateful to Dr. Subhash Raut, Dr. Kiran Tawalare for their help in preparing this article.

REFERENCES

1. Manipal Manual of Surgery, written by K Rajgopal Shenoy, fourth edition, Year of Reprint 2016,2017, Published by CBS Publisher& Distributors; Pg 802
2. Sushrut. Sushrut Samhita. edited by Kaviraja Ambikadutta Shastri, (Vol.1.) Year of Reprint 2017, Published by Chaukhambha Orientation Varanasi; Chikitsa sthana 19/5
3. Agnivesha. Charak Samhita. Revised by Charaka and Dridhbala. Edited by Ravidatta Tripathi, Year of Reprint 2013, Published by Chaukhmba Orientalia Varanasi; Siddhi sthana 6/61-67 P 9267.
4. Sushrut. Sushrut Samhita. edited by Kaviraja Ambikadutta Shastri, (Vol.1.) Year of Reprint 2017, Published by Chaukhambha Orientation Varanasi; Chikitsa sthana 1/8 P 5
5. Sushrut. Sushrut Samhita. edited by Kaviraja Ambikadutta Shastri, (Vol.1.) Year of Reprint 2017, Published by Chaukhambha Orientation Varanasi; Chikitsa sthana 1/109 P 15.
6. Kashyapsamhita by vriddha Jivaka with Sanskrit introduction and its Hindi translation with vidhyoyini Hindi Commentary, Chaukhamba Sanskrit sansthan, Varanasi by Pandit Hemraaj Sharma.
7. Yogratnakar Uttarardha of Vd. Shree Lakshmispati Shastri Yogratnakar 7th edition 1999 Chaukhamba Sanskrit Series of Varanasi.
8. Sushrut. Sushrut Samhita. edited by Kaviraja Ambikadutta Shastri, (Vol.1.) Year of Reprint 2017, Published by Chaukhambha Orientation Varanasi; Sutra sthana 38/34, P 185
9. Studies on Medicinal plants and drugs in Dhanmvantari Nighantu, Chaukhamba prakashan, Varanasi – by S. D. Kamat, edited 2002
10. Agnivesha. Charak Samhita. Revised by Charaka and Dridhbala. Edited by Ravidatta Tripathi, Year of Reprint 2013, Published by Chaukhmba Orientalia Varanasi; Siddhi sthana 10/34,35 P 367
11. Agnivesha. Charak Samhita. Revised by Charaka and Dridhbala. Edited by Ravidatta Tripathi, Year of Reprint 2013, Published by Chaukhmba Orientalia Varanasi; Siddhi sthana 7/54,55 P 936
12. Sushrut. Sushrut Samhita. edited by Kaviraja Ambikadutta Shastri, (Vol.1.) Year of Reprint 2017, Published by Chaukhambha Orientation Varanasi; Chikitsa sthana 34/16 P 186
13. *Trichosanthes dioica* Roxb: An <https://www.ncbi.nlm.nih.gov/pmc/articles/PM3358970/>
14. Shivahare Y, Singour P, Patil UK, Pawar RS. Wound healing potential of methanolic extract of *Trichosanthes dioica* Roxb.(fruits) in rats, J Ethnopharmacol. 2010;127:614-9.

How to cite article:

Pankaj G, Hinganikar AK, Chandrakant J, Nita K. Effect of patolli tail in management of parikartika fissure-in-ano. AYUSH: International Research Journal of Ayurveda Teachers Association. 2021;1(1)3-6.

EFFECT OF JALAUKAVACHARAN IN PROLAPSED THROMBOSED HEMORRHOID- A CASE STUDY.

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Article Received on
28 June 2021,

Revised on 18 July 2021,
Accepted on 08 Aug. 2021

DOI: 10.20959/wjpr202111-21387

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ABSTRACT

Hemorrhoid is a very common Ano-rectal condition defined as the symptomatic enlargement and distal displacement of the normal Anal cushion. Hemorrhoid (Arsha) is an ailment that affects all the economic groups of population. The disease has its own complications like severe hemorrhage, inflammation and thrombosis which lead to severe pain disallowing to perform routine work. Prolapsed hemorrhoid is an emergency condition. The condition becomes worse after thrombosis and strangulation of the pile mass. Urgent surgical intervention is required in all the cases. Venous return of strangulated hemorrhoid mass becomes very low and severe edema takes place along with serious painful condition. Hemorrhoidal mass is not able to reduce further in Anal canal. Patient struck in serious, urgent surgical

attention. Jalauka can be used as a successful tool in this situation by relieving venous pooling of blood and also by liquefying the clotted blood in hemorrhoidal mass. In present case study, a patient of grade 4 hemorrhoid was cured by Jalaukavacharan.

INTRODUCTION

Ayurveda, the Indian system of medicine comprises of eight different specialities in which Shalyatantra, the surgical school of thoughts has got prime importance. Acharya Sushruta father of surgery has considered Arsha in Ashta mahagada. In Ayurveda.

- 1). It is a common disease of anal canal. Acharya Charak believes that vitiated doshas follow bahya and abhyantar rogamarga to produce Arsha.
- 2). Acharya Sushruta has described Arsha as rakta-mansa pradoshaj vyadhi common complaints. Complication of Arsha includes trishna, aruchi, shoola, raktastrava, shofa, atisara as per the Acharya Sushruta.
- 3). In Ayurveda, Kshar sutra ligation is a preferred surgical treatment in advance stage of Arsha. But in some situations, where surgery is not possible, due to patients complication, "Jalaukavacharan" is a good alternative treatment available. However Acharya Sushruta has contraindicated bloodletting in Arsha.
- 4). But in certain critical situation of hemorrhoids, it is advisable.
- 5). Acharya Charak has mention Jalauka karma in Raktaarsha(bleeding piles).
- 6). Acharya Vagbhata has also advised bloodletting in sanchit dushta rudhira(thrombosed), shoon(swelling), and kathin(hard) Arsha.
- 7). The present study is a case report of a grade 4th hemorrhoid patient, which was treated successfully with Jalaukavacharan.

Hirudin, calin and factor X_a which are present in salive of leech act as anti-coagulant and prevent clot formation, bdellin B-3 act as anti-inflammatory agent there by maintaining normal circulation.

AIM

The aim of case study was to find out the result of Jalaukavacharan in case of prolapsed and thrombosed hemorrhoid.

CASE REPORT

A 41yr old male patient, OPD registration no. 4711/168 come to OPD of Shalya dept. 25/5/2021 in a very panic and emergency situation. He had the following complaints since 5 yrs on and off symptoms.

- Sever pain and burning sensation in Anal region.
- Two big mass out side the Anal verge.
- Bleeding per rectum
- Difficulty in passing stool
- Constipation

Past History

He had a past history of surgery of hemorrhoids at an Allopathic hospital taken injection sclerotherapy before 3yrs back.

He had no history of DM, HTN, CHD or Koch's.

Examination

Patient was examined in lithotomy position. He has bluish blackish mass coming out from his anal verge. After proper digital examination it was found that there was a large prolapsed, thrombosed pile mass at 3 & 11 o'clock. It was not reducible pile mass at site so, it was diagnosed as case of grade 4th hemorrhoid. The patient was admitted in male surgical ward Reg. no. IPD 168.

Systemic Examination

Patient was conscious, oriented and good general condition. His vitals were recorded normal. B.P.- 130/80 mm of Hg, P.R.- 82/min. Temp. – 99 F. Baseline data collection and laboratory investigation were done on 25/5/2021 before Jalaukavacharan.

Blood Investigation**25/5/2021**

Hb – 9.8 g/dl

MCHC – 31.2g/dl

TLC – $8.8 \times 10^3/\mu\text{l}$

MCH – 23.9 Pg

RBC – $3.94 \times 10^6/\mu\text{l}$

Platelet count – 1.74 lakh

PCV – 30.1%

MCV – 76.4fL

B.T.– 1Min.,50sec

N – 6.3 %

C.T. – 5Min, 10sec.

L – $0.8 \times 10^3/\mu\text{l}$

P-LCR – 31.3%

BSL –® - 90 mg/dl

ECG – normal

HbsAg – Non-reactive

HIV – Non-reactive

Chest X-ray PA view- Normal

METHODOLOGY

Patient was admitted to Shalya IPD in male ward taking written consent of patient of patient.

Procedure of Jalaukaavacharan

As the patient was belonging to the emergency conditions assessed on the basis of signs and symptoms, respiration, pulse, blood pressure, apprehensive look, anxiety, etc. Hence it was not possible to put the patient, the known procedures of purvakarama for Jalauka application. Therefore patient was subjected to the application of Jalauka to the relief to the patient.

Material Required

- 1). Jalauka
- 2). Warm and cold water
- 3). Gloves
- 4). Gauze pieces
- 5). Cotton pads
- 6). Haridra churna
- 7). Bandages

Purvakarama for jalauka

To activate the Jalauka, they were put in a bowel containing a solution of haridra and water for 10-15min. later on Jalauka were cleaned by keeping them in another bowel, of pure, water for 5-7min.

Position

The patient was advised to lithotomy position for better exposure of anal region.

Pradhan Karma

Jalauka was applied over the most prominent part of the swelling at 11 & 3 o'clock. There after the Jalauka were covered with a gauze piece to keep it moist over the gauze piece, few drops of water were poured on and often. As soon as the Jalauka showed the signs of elevated head and pumping action of the anterior sucker region, the times was noted, when the Jalauka got detached at their own.

Procedure during application

Due care was taken, so that the Jalauka do not enter the anal canal.

With the onset of symtomatologies like burning, itching, pricking pain. The Jalauka were removed by sprinkling haridra powder.

Paschat karma

Some after the Jalauka got detached, the site of application was cleaned and after that sprinkling of haridra churna was done followed by a 'T' bandage. Patient were kept under observation in IPD. Reduction in the size of the pile mass, local swelling bleeding and other signs were recorded.

Jalaukavacharan 3 setting done on alternate days. First setting on.

1st setting on 27/6/2021

2nd setting on 29/6/2021

3rd setting on 31/6/2021

After that patient was observed for 10 days.

Oral medication

Tab. Arsh kuthar ras 2 tablet BD.

Gandharvahratik churna 10gm HS with koshana jala at night.

Local Application

Hot sitz bath with Triphala curna kwath BD

Matra basti of Jatayadi taila 5ml at night.

Observation

Symptoms were taken into consideration under grading symptoms according to their severity

No symptoms – 0

Mild – 1

Moderate – 2

Severe – 3

Observation Table

Symptoms	Before treatment	1 st setting	2 nd setting	3 rd setting
Pain	3	3	2	0
Tenderness	3	2	1	0
Burning Sensation	3	2	1	0
Bleeding	3	2	1	0
Mass Prolapsed	3	3	2	1
Constipation	3	2	1	0

RESULT

- As the Jalaukavcharana was started patient got relieved of pain and tenderness discomfortness level was also reduced.
- After 2nd setting size of prolapsed hemorrhoid was also reduced.
- After 3rd setting he was completely relieved and satisfied with the treatment only painless tag like structure is left in anal verge.
- He was discharged after giving proper diet instruction.
- Patient follow up after 7 days in OPD on examination observed that hemorrhoid mass was shrink in size.
- No bleeding or pain or tenderness was observed during per-rectum examination.

DISCUSSION AND CONCLUSION

Severe tenderness and bluish-black discolouration are the characteristics features of thrombosed pile mass. Bdellin present in the saliva of Jalauka act as anti-inflammatory agent there by reducing inflammation, maintains normal circulation and recovering discoloration. Anesthetic gel present in saliva of Jalauka reduces pain and tenderness giving symptomatic relief. Due to qualities of Jalauka anti-coagulant, vasodilator, thrombolytic, anti-inflammatory and anaesthetizing substances. Jalauka has been proved as a medical device. Though their sucking effect, Jalauka stimulate circulation of cells at risk of necrosis and maintain oxygenation of the tissue. They accelerate the hematoma congestion process. They ensure drainage and by partially or totally replacing venous return, they can be used in venous disorders. They benefit of Jalauka is that they are particularly attracted to deoxygenated blood.

In this case study it was observed that Jalaukaavcharan was found to be very effective in thrombosed hemorrhoids. Patient completely relieved after 7 days. Hence Jalaukavacharan can be an alternative treatment in the management of thrombosed hemorrhoids in which surgery is advised and patient is not willing for same.

REFERENCES

1. Kaviraja Ambika Datta Shastri, Sushruta Samhita Sutra Sthana 33/4, Part I, By Sushruta with Ayurveda Tantvasandipika commentary, Varanasi, Choukhamba Sanskrit Sansthan, 2003, P-126.
2. Pandit Kashinath Shasrti, Charaka Samhita Sutra Sthana 11/49, By Charak with Vidyotani Hindi Commentary, Varanasi, Choukhamba Sanskrit Sansthan, 2007.

3. Kaviraja Ambika Datta Shastri, Sushruta Samhita Sutra Sthana 24/9, Part I, By Sushruta with Ayurveda Tantvasandipika commentary, Varanasi, Choukhamba Sanskrit Sansthan, 2003, P-101.
4. Kaviraja Ambika Datta Shastri, Sushruta Samhita Sutra Sthana 33/10, Part I, By Sushruta with Ayurveda Tantvasandipika commentary, Varanasi, Choukhamba Sanskrit Sansthan, 2003, P-127.
5. Kaviraja Ambika Datta Shastri, Sushruta Samhita Sutra Sthana 14/24, Part I, By Sushruta with Ayurveda Tantvasandipika commentary, Varanasi, Choukhamba Sanskrit Sansthan, 2003, P-53.
6. Kaviraja Ambika Datta Shastri, Sushruta Samhita Chikitsa Sthana 6/7, Part I, By Sushruta with Ayurveda Tantvasandipika commentary, Varanasi, Choukhamba Sanskrit Sansthan, 2003, P-37.
7. Pandit Kashinath Shasrti, Charaka Samhita Chikitsa Sthana 14/61, By Charak with Vidyotani Hindi Commentary, Varanasi, Choukhamba Sanskrit Sansthan, 2007.
8. Dr. Brahmanand Tripathi, Ashtang Hridaya chikitsa Sthana, 8/28, By Vagbhatta, Varanasi, Choukhamba Sanskrit Sansthan, 2009.
9. Andreas Michalsen, Manfred Roth, Gustav Dobos; Medicinal Leech Therapy, New York, 2007; P-132.
10. Elder A, Orevi M, Rigbi M. The role of leech in medical therapeutics. Blood Rev, 1996; P-201.



Review of *Rasashastra* from the Perspective of Adverse Drug Reactions

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ABSTRACT

Pharmacovigilance is the need of hour to keep an eye on the adverse drug reactions induced by all systems of medicine. A Drug or formulation produces adverse events if it is not procured, produced, and used as per the classical guidelines. Various classical preparations along with some proprietary formulations were manufactured by the developed pharmaceutical industries which have brought many challenges about safe use of Ayurvedic Medicines especially metallic preparations and herbo-mineral drugs of *Ayurveda* are always in doubt regarding safety and toxicity. *Rasashastra* is the alchemy of traditional Indian system of medicine which deals with the preparation of therapeutic products by using metals, minerals, animal products and toxic substances. *Rasaushadhis* were known to cure illnesses in a short time period, very small dosage, and also easily palatable. Being the pharmaceutical branch *Rasashastra* literature is full of standard methods to prepare various medicines, and it also mentioned adverse drug events occurred due to inaccuracy in the procedures accepted. In this review article an attempt was made to throw some light on origins of those adverse drug reactions mentioned in literature.

Key Words *Rasaushadhi, Adverse drug reaction*

Received 19th June 21 Accepted 05th July 21 Published 10th July 2021

INTRODUCTION

Medicine or Drug is the one amongst four basic factors of the *Ayurvedic* treatment¹. The *Ayurvedic Materia Medica* mentions resources of plant, animal, metal, and mineral origin² which are suggested to be used in numerous pathologies. Considering the resources, *Ayurvedic* formulations are mainly -1) Herbal 2) Mineral / metallic and 3) Herbo-mineral combination. Herbo-mineral, metallic and mineral drugs are

called as *rasaushadhi*. *Rasaushadhis* are palatable, highly effective in minute doses in a very short time, builds popularity and occupied a significant place in *Ayurvedic* therapeutics³. They are being routinely prescribed in different parts of the India for hundreds of years but globally a serious question was raised about the safety of *Ayurvedic* preparations because it contains various heavy metals like mercury, lead, and also some poisonous substances like aconite.



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Any untoward effect caused because of a drug, aside from expected beneficial action is named as adverse reaction⁴. A drug or formulation produces adverse events if it is not obtained, manufactured, and prescribed as per the classical guidelines. Some therapeutic factors which can also contribute to a rise within the chances of ADR of *Ayurvedic* medicines like the irrational use of medicines without precision in diagnosis, disease variant, stages of the disease, and specific prototype of the person.

In earlier period *Rasavaidyas* or *Ayurvedic* Physicians were used to prepare medicines for their patients themselves but now days increased industrialization in *Ayurveda* manufacturing brought many challenges regarding drug safety. Good manufacturing practices are essential to produce quality genuine medicines. The Drug and Cosmetic Rule 1945 also in its Schedule T

explains G.M.P. for *Ayurveda* Drugs which clearly target on the Safe Basic control measures and procedures that need to be administered to produce a product that meets specifications and is safe to consume.

Rasashastra, an important branch of *Ayurveda* entirely uses various metals and minerals in therapeutics. It deals with types, characteristics, processing techniques, properties, and therapeutic uses of metals, minerals & poisonous herbs. Ancient *Ayurvedic* scholars were very much aware of the toxic nature of raw material used and keeping within the mind they have described ‘*Aushadh sevan janya vikar*’ in their classics elaborately, which reflect their concern about the adverse effect of *Ayurvedic* drugs. There are some guidelines given by the *Rasacharya* to minimize adverse drug reactions and increase the safety of *Rasaushadhi* during their preparation and use.

Table 1 *Rasadravya grahyagrahyatva* (characters and variety of authentic raw material)

Name of <i>rasadravya</i>	<i>Grahya lakshana</i>	<i>Grahya prakar</i> (Acceptable variety)
<i>Abhraka</i>	Black colour, Sigdha, Heavy, Pruthudala ,	<i>Krishna Vajrabhraka</i>
<i>Makshika</i>	Bright golden colour with blue ting, heavy, angle less	<i>Suvarnamakshika</i>
<i>Vimala</i>	Heavy, Shiny, Hexagonal	<i>Hemavimala</i>
<i>Shilajatu</i>	-----	<i>Karpurganghi Shilajeet</i>
<i>Rasak</i>	Without lamellae	<i>Karvellak</i>
<i>Gandhak</i>	<i>Shukapicchavat</i> -Greenish Yellow, Hard, Smooth	<i>Amalasar</i>
<i>Gairik</i>	Deep red Colour ,Soft ,Smooth	<i>Suvarnagairik</i>
<i>Hartala</i>	Golden colour, <i>Guru, Snigdha, Tanupatra</i> , Bright	<i>Patra</i>
<i>Manshila</i>	Red colour with yellow tinge, heavy	<i>Shyamangi</i>
<i>Kapardika</i>	Oval shape ,large edges, yellow tinge, possess nodule on its back,	----
<i>Hingul</i>	Coral red colour , possess white shiny lines	<i>Hamsapada</i>
<i>Suvarna</i>	Red colour on heating, White on cutting, yellow while rubbing on touch stone, shining, bright, heavy, soft, smooth	<i>Khanija</i>
<i>Rajat</i>	White like moon while heating-cutting and running on touch stone, bright, heavy	<i>Khanija</i>
<i>Tamra / Copper</i>	Smooth ,red, heavy, malleable	<i>Nepalaka</i>
<i>Vang / Tin</i>	White like silver, soft, smooth, heavy, melt rapidly	<i>Khuraka</i>
<i>Naag / Lead</i>	Black, heavy, soft, rapidly melt, smells putrid.	-----
<i>Yashada</i>	Heavy, soft, bright, quick melting	-----
<i>Vatsanabh</i>	Bulky, Heavy, smooth, newly harvested, not contaminated	-----



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MATERIALS AND METHODS

A) Selection of raw material:

The raw material used to prepare medicine should be authentic and prescribed quality⁵.

Rasashastra literature mentioned differing kinds of metals and minerals along with the preferred varieties (*Grahyadravya*) as shown in table no.1.

If the chosen material variety is different from the approved variety mentioned within the texts then the prepared medicines are of deprived quality and it would be harmful to the individuals.

B) Shodhan / purification process:

Metals, minerals, *vishadravya* are considered to be toxic on consumption but while using it as an ingredient in *rasaushadhis*, these materials should pass through a unique pharmaceutical process called *shodhan* or purification⁶. It was indicated to diminish the toxic properties of *rasadravya*. Various processes like *nirvaap*, *dhalan*, *swedan*, *bhavana*, etc with the particular medium on *rasadravya* results in the elimination of unwanted doshas⁷. If any substance was administered further without purification then the prepared medicine may lead in serious adverse events as shown in table no.2.

Table 2 Toxic effects due to use of *Ashuddha dravya* for medicine preparation

Name of <i>Rasadravya</i>	Toxic effects caused by <i>ashuddha dravya</i>
<i>Abhraka</i>	<i>Hrud-parshvapida, Shotha, Pandu, Kushtha roga, Agnimandhya, Guru. Vata-kaphavardhaka</i>
<i>Vaikrant</i>	<i>Kilasa, Kushtha, Daaha, Parshvapida&pandu.</i>
<i>Makshik</i>	<i>Netravikara, Mandagni, Kushtha, Halimaka.</i>
<i>Shilajatu</i>	<i>Daaha, murccha, Bhrama, Raktapitta, Agnimandya</i>
<i>Tuttha</i>	<i>Vaanti, Bhraanti</i>
<i>Kharpara</i>	<i>Vaanti, Bhraanti</i>
<i>Gandhaka</i>	<i>Kushtha, Taapa, Bhrama, Pittajavikara, Roopasukha-virya-balahara.</i>
<i>Hartala</i>	<i>Daaha, kshobha, kampa, toda, raktavikara, kushtha, vaatakaphaja roga karaka, mrityukaraka.</i>
<i>Manahshila</i>	<i>Ashmari, mutrakruchcha, mandagni, malabaddhata.</i>
<i>Hingula</i>	<i>Andhata, kshaya, klama, bhrama, moha, prameha.</i>
<i>Swarna</i>	<i>Sukha-virya-balanaashaka, rogakaraka.</i>
<i>Rajata</i>	<i>Aayu-sukha-balahara, santaapa, malabaddhata, rogakaraka, angasaada.</i>
<i>Taamra</i>	<i>Vaanti, moorchcha, bhrama, utklesha, kushtha, daaha, moha. (ashtadosha)</i>
<i>Lauha</i>	<i>Aayu-bala-kantinashaka, hridpida, shaitihilya, rogakaraka</i>
<i>Vanga</i>	<i>Kantihara, kushtha, kilasa, gulma, prameha, kshya, paandu, shotha, shleshma-jwara, bhagandara, shukraashmari, raktavikara.</i>
<i>Naaga</i>	<i>Kantihara, kushtha, sandhivedana, pakshaghata, gulma, prameha, aanaha, shotha, bhagandara, agnimandhya, anshashotha, udarashula, kshya.</i>
<i>Yashada</i>	<i>Gulma, prameha, kshaya, kushtha.</i>
<i>Vatsanabha</i>	<i>Daaha, murccha, hrudgati avarodha, mrutyu.</i>

C) Drug manufacturing process:

Rasaushadhis although named after mercury '*rasa*' or '*parada*', can be classified into two distinct groups mercurial and non-mercurials. *Murcchana* is the process to induce assured therapeutic properties in *parad* with a certain process while *marana* or incineration is the methodology where

metals and minerals get converted to bodily assimilable ash.

1) *Murcchana*⁸:

It is the process in which mercury with or without sulfur is converted into a suitable compound, which could be used internally for curing diseases even without reduced to ashes. Basic types of



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murcchana are described in table no.3. Long-term use of *sagandha murcchana* was permissible, itself suggest the safety of a selected formulation. *Rasaushadhies* prepared by *parada* without *gandhaka* i.e. *nirgandha murcchana* should not be

used for several days; its use was restricted till the disease condition cured. If such formulations were continued further then it may produce adverse events.

Table 3 Types of *Murcchana*

Type of <i>Murcchana</i>	Example	Duration of therapy
<i>Sagandha murcchana</i>	<i>Kajjali, rasantoor, rasaparpati</i>	Can be used as long term therapy
<i>Nirgandha murcchana</i>	<i>Mugdharasa, rasapushpa, rasakarpoor</i>	Limited use till the disease cured.

2) *Marana / Incineration:*

Incineration is the process in which *rasadravya* with the help of *maraka dravya* and herbs are

reduced to ashes by *puta*. It yields an assimilable product called *hasma* which will not create any harm to the human body.

Table 4 Methods of *Dhatu maran*

<i>Bhasma</i>	<i>Maraka dravya</i>	<i>Bhasma quality</i>
I	<i>Parad / mercurial compound</i>	<i>Uttam hasma</i> (superior quality)
II	Herbs	<i>Madhyam</i> (medium quality)
III	<i>Gandhak / sulphur</i>	<i>Kanishtha</i> (inferior quality)
IV	<i>Ari loha</i>	<i>Durgunprada</i> (non acceptable for internal use)

Table 5 *Puta* required for various drugs

Name of <i>rasadravya</i>	Type of <i>puta</i>
<i>Suvarna , rajat , naag , vang , mukta , praval</i>	<i>Kukkutaputa</i>
<i>Louha , tamra , abhraka , shankh</i>	<i>Mahaputa , Gajaputa</i>
<i>Makshika</i>	<i>Varah puta</i>
<i>Hartala, somal</i>	<i>Bhandputa</i>

Table 6 *Bhasma pariksha* of *rasadravya*

<i>Bhasma pariksha</i>	Name of <i>Rasadravya</i>
<i>Nischandra</i>	<i>Abhraka</i>
<i>Avaami, Amlapariksha</i>	<i>Suvarnamakshik , Tuttha, Tamra,</i>
<i>Nirdhoom</i>	<i>Hartal, Manashila, Somal</i>
<i>Apunarbhav, Niruttha</i>	For All <i>Dahatubhasma</i>
<i>Varitar, Rekhapurna , Niswadatvam</i>	Common tests for all <i>Bhasma</i>

i) *Maraka draya:* Ancient Scholars of *rasashastra* explained four conducts⁹ of *dhatu marana* /metal incineration according to the *maraka dravya* used in the process as shown in table no.4. Administration of *hasmas* prepared with *arilohas* was not suggested as it has the tendency to harm. *Rasoushadhi* manufactured with such *hasma* as an ingredient may cause adverse events to the end-users.

ii) *Application of puta:* Temperature required for the preparation of *hasma* was although the temperature employed in the *maran* that is *puta*. It helps in making the metals and minerals acquire better therapeutic values and also in removing or reducing their toxic properties to such an extent that they will not produce any harmful effects on body tissue when used for therapeutic purposes¹⁰. The type and number of *puta* were variable as it



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depends upon the material and purpose¹¹. Types of *puta* required for *rasadravya* are explained in table no.5. If adequate type and number of *puta* were not given then the *bhasma* was said to be ‘*apakwa*’ and possibly will produce adverse effects¹².

iii) *Bhasma pariksha*¹³:

The processed sample of *bhasma* must be tested on the basis of specific parameters given in classical texts, organoleptic parameters like colour, texture, etc, physicochemical parameters- *niruttha*, *amlapariksha*, *apunarbhav* etc. Specific

bhasma pariksha was essentially indicated for some *rasadravya* as per table no.6 with added common parameters.

iv) *Amrutikaran*¹⁴: It is an important process found described in the context of *abhraka*, *louha* & *tamra marana*. It had been indicated to eliminate leftover *doshas* of *bhasma* and to make them suitable for therapeutic uses. If these *bhasmas* were used without *amrutikarana* then it will cause adverse effects due to the residual *doshas*.

Table 7 *Apathya* during *rasaushadhi sevankaal*

Name of <i>Rasadravya</i>	<i>Apathya</i>
<i>Parad</i>	<i>Kakarashataka</i>
<i>Abhraka bhasma</i>	<i>Kareer, karvellaka, kshara, vruntaka, Oil</i>
<i>Louha bhasma</i>	<i>Kushmand, Til taila, mash, rajika, madhya, amlarasadravya</i>

Table 8 Remedies to cure adverse effects caused due to *rasaushadhi sevan* (*Vikarshanti Upaya*)

Name of <i>Rasadravya</i>	<i>Vikarshanti upaya</i>
<i>Ashuddha Parad</i> /Mercury	<i>Kakamachi swaras</i>
<i>Amurcchit parad</i>	<i>Kushmandadi Gana, shuddha gandhanka + cow's milk</i>
<i>Abhraka</i>	<i>Atasibeej powder with water</i>
<i>Makshik</i>	<i>Kulattha kwath, daadim tvak kwath</i>
<i>Rasak</i>	<i>Cow's urine</i>
<i>Gandhaka</i>	<i>Cow's milk+ cow's ghee + sugar</i>
<i>Hartal</i>	<i>Kushmand swarasa + sugar + cumin seeds</i>
<i>Manshila</i>	<i>Cow's Milk + honey</i>
<i>Naag</i>	<i>Shuddha gandhanka + cow's milk</i>

Table 9 Contraindications of *vishdravyayukta rasaushadhi*.

Name of Drug	Individuals	Disease condition
Formulations of <i>vatsanabha</i>	Children, elderly, pregnancy	<i>Heart disease</i>
Formulations of <i>ahiphen</i>	Children, elderly, pregnancy	<i>Diabetes, kidney disease, productive cough</i>
Formulations of <i>jaypala</i>	Children, elderly, pregnancy	<i>Piles, bowel disease, diarrhea, rectal prolapse</i>

D) Drug administration (Sevanvidhi):

1) *Matra/Dose*: *Rasaushadhis* are more popular than herbal medicines because of their minute

dosage. All the *rasaushadhis* mentioned in the classical texts are described with their individual therapeutic doses best suited for the individuals.



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Consumption of remedy in *alpamatra* /reduced dose, or *atimatra* /overdose can lead to toxic or untoward effects.

2) Duration: Long-term consumption of certain drugs can produce complications eg: *arogyavardhini* is one of the popular *rasaushadhi* effectively used in many disease conditions but its use should be limited for one *mandala* period, after that, it may produce adverse effects. A *mandala* is a period of nearly 40 days in which time the human system completes one physiological cycle. Likewise, inadequate action of the drugs may be noticed if not administered for a prescribed period.

3) Sahapana and anupana¹⁵: *Rasaushadhi*'s were advised to be administered with specified *anupana* and *sahapana* or vehicle, which helps in proper assimilation and absorption of the medicine. An ordinary medicine with appropriate *anupana* can yield extraordinary outcomes. It also helps in controlling the untoward effects of the prescribed drug.

4) Pathya-apathya: *Pathya* literally means anything it may be *ahara* and *vihara* which is not harmful to one's physiological state, in contrast, the *apathyas* are considered to be harmful to our body channels. The concept of *pathya-apathya* is important during the consumption of *rasaushadhi* as it may alter the pharmacokinetics of the drug. *Apathya ahara-vihara* may induce the failure of treatment which in turn leads to unintended drug reactions. *Apathya ahara* while consumption of certain *rasaushadhi* mentioned in ancient scripture is enlisted in table no.8.

5) Contraindications¹⁶: *Vishdravyas* are natural poisons but in *rasashastra* they are used as an ingredient in manufacturing *rasaushadhi* only after proper purification. Such formulations were contraindicated in some patients and certain disease conditions as shown in table no.9. Care must be taken while prescribing such cautious products otherwise it may lead to adverse drug reaction.

E) Remedies for Adverse drug reactions:

If any undesired events were noticed due to faulty processing, improper administration, or non-compliance of code of conduct, treatment procedures for such complications have also been prescribed as per table no.8

DISCUSSION

Ayurveda the traditional system of healing is gaining prime importance and becomes popular globally. World Health Organization in 2004 proposed guidelines of the safety monitoring of herbal medicines. To respond the same AYUSH decided to implement Pharmacovigilance programme to keep watch on the adverse drug reactions caused by the ASU drugs. Before that all users believed that the *Ayurvedic* formulations are harmless, without side effects but these all are evidenced as myths. Our ancient scholars are very well known about the possible adverse events, ample pieces of evidence available in the classics clearly reflect that the pioneers of *rasashastra* were well aware of the toxicity or untoward effects that can occur with the improper usage of metals



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or minerals. They have documented evidences of raw material authentication, standard operating procedures like *shodhana*, *marana*, *murcchana*, *amrutikaran* to convert inorganic material into therapeutic active compounds. Quality control parameters of the finished goods and user guide (*matra*, *anupan*, *kaal*, *pathya-apathya*) were also described deeply to avoid every chance adverse reaction. By chance any adverse reaction exists due to any reason than to overcome such casualties therapeutic remedies were also enlisted.

CONCLUSION

Rasaushadhi can cause adverse effect if it is not manufactured as per the classical guidelines. GMP is very much essential to prepare quality genuine medicines, which will be safe to consume. Unauthentic or Adulterated raw material, improper processing, lack of quality control and faulty administration, drug interactions are some possible reasons of ADR. Ancient *rasacharyas* were well versed with the, pharmacokinetics and pharmacodynamics of metallic preparations. Detailed literal awareness is necessary while practicing to curtail the occurrence of adverse effects.



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REFERENCES

1. Acharya Charak, Charak Samhita Translated by Dr. Bramhanand Tripathi, Chaukhamba Surbharati Publication, Varanasi, Sootrasthan Chapter 9/69-72, 37-38p.
2. Acharya Charak, Charak Samhita Translated by Dr. Bramhanand Tripathi, Chaukhamba Surbharati Publication, Varanasi, Sootrasthan Chapter 1/69-72, 37-38p.
3. Acharya Vagbhat, Rasaratnasamuchchaya Translated by Dr. Indra Dev Tripathi, Chaukhamba Sanskrit Sansthan, Varanasi, Chapter 28/01, 371p.
4. Dr. K.D. Tripathi, Essentials of Medical Pharmacology, Jaypee Brothers Medical Publisher, 8th Edition, Section 1, Chapter 6, 82P
5. Drugs and Cosmetics Rules, 1945 schedule T (rule 157) Good manufacturing practices for ASU medicines
6. Acharya Madhav Upadhyaya, Ayurved Prakash Translated by Gulraj Sharma Mishra, Chaukhambha Bharti Academy Publication, Varanasi, Chapter 06/47, 491p.
7. Acharya Sadanand Sharma, Rasatarangini Translated by Pandit Kashinatha Shastri, Motilal Banarasidas Publication, Delhi, Chapter 02/52, 23p.
8. Acharya Sadanand Sharma, Rasatarangini Translated by Pandit Kashinatha Shastri, Motilal Banarasidas Publication, Delhi, Chapter 06/1-8, 102-104p.
9. Acharya Vagbhat, Rasaratnasamuchchaya Translated by Dr. Indra Dev Tripathi, Chaukhamba Sanskrit Sansthan, Varanasi, Chapter 05/13, 53p.
10. Acharya Sadanand Sharma, Rasatarangini Translated by Pandit Kashinatha Shastri, Motilal Banarasidas Publication, Delhi, Chapter 03/32-35, 35-36p.
11. Acharya Madhav Upadhyaya, Ayurved Prakash Translated by Gulraj Sharma Mishra, Chaukhambha Bharti Academy Publication, Varanasi, Chapter 03/45-47, 354-355p, Chapter 02/106-107, 286p.
12. Acharya Madhav Upadhyaya, Ayurved Prakash Translated by Gulraj Sharma Mishra, Chaukhambha Bharti Academy Publication, Varanasi, Chapter 02/105, 285p.
13. Acharya Vagbhat, Rasaratnasamuchchaya Translated by Dr. Indra Dev Tripathi, Chaukhamba Sanskrit Sansthan, Varanasi, Chapter 08/20-31, 371p.
14. Acharya Sadanand Sharma, Rasatarangini Translated by Pandit Kashinatha Shastri, Motilal Banarasidas Publication, Delhi, Chapter 02/58, 24p.
15. Acharya Sadanand Sharma, Rasatarangini Translated by Pandit Kashinatha Shastri, Motilal Banarasidas Publication, Delhi, Chapter 06/199-202, 143p.
16. Acharya Sadanand Sharma, Rasatarangini Translated by Pandit Kashinatha Shastri, Motilal Banarasidas Publication, Delhi, Chapter 24/61-63, 256-257, 659-695p.

**AYURVEDIC MANAGEMENT OF PELVIC PAIN IN GYNAECOLOGY****Dr. Priya R. Suryawanshi*¹, Dr. Medha Paithankar*² and Dr. Jayashri S. Deshmukh*³**

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Article Received on
16 June 2021,

Revised on 06 July 2021,
Accepted on 26 July 2021

DOI: 10.20959/wjpps20218-19679

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ABSTRACT

Pelvis is part of body that lied between the lower abdomen and the lower extremities. Pelvic pain present as main symptom in 71%-87% causes of gynaecological problem. The management modalities to cop with the chronic frustrating pelvic pain or acute pelvic pain are still not reassuring. Ayurveda can provide effective pain management protocol. Mainly pelvic pain may also occurs due to Vata Dosha depletion and due to this the management of pelvic pain in gynaecology should concentrate on Vata Dosha like Basti, Snehana, Swedana, Abhyanga, Yonipichu etc.

KEYWORD: Pelvis, Vata dosha, Basti, Snehana, Swedana, Abhyanga, Yonipichu.

INTRODUCTION

Pain is an unpleasant sensory and emotional experience associated with actual or potential damage. Pelvic pain is common symptom in gynaecology.

Pelvic pain is known as KUKSHI SHOOL in Ayurveda. Common cause of pelvic pain are improper dietary habits and intake of Vata increasing habits are consider to be the major causative factor of pelvic pain and disease. Mainly pelvic pain may occurs due to Vata depletion and due to this the treatment should concentrate on vata Dosha . Basti technique of

Panchkarma along with Swedana and local massage are the main Ayurvedic therapy used for the treatment of KUKSHI SHOOLA.

Ayurvedic herbs like Nirgundi, Amalaki and Erand along with formulation such as Dashmool Kwatha and Abhayarishta are Helpful in treating the disease that lead to Pelvic Pain.^[1]

Types of pelvic pain-1.Acute 2.Chronic

Acute Pelvic pain- Acute pelvic pain is of short duration and generally the symptoms are proportionate to the extent of tissue damage. The basic mechanism of acute pain is due to irritation of peritoneum by either blood or infection.

Causes of Acute Pelvic Pain

1. Disturbed Tubal Pregnancy
2. Ruptured Chocolate Cyst
3. Ruptured corpus luteum or Follicular cyst
4. Acute PID
5. Tubo ovarian abscess
6. Following HCG
7. Abortion
8. Dysmenorrhea
9. Axial rotation of ovarian tumour pedical

Chronic Pelvic Pain

It is defined as the non cyclic pain of 6 month duration or more localized to the pelvis , anterior abdominal wall below the pelvis or lower back severe enough to cause functional disability that require medical or surgical treatment.

Causes of chronic pelvic pain

	Cyclic	Acyclic
1	Intermenstrual pain	Endometriosis or Adenomyosis
2	Dysmenorrhoea	PID
3	Premenstrual syndrome	Uterine displacement
4	Pelvic congestion syndrome	Uterine fibroid
5	Endometriosis	Ovarian cyst
6	Adenomyosis	Pelvic adhesion disease
7	Ovarian remanant syndrome	Intrauterine device
8		Trapped or residual ovarian syndrome
9		Idiopathic

Investigation

1. Blood investigation- for any infection
2. Urine examination- for UTI
3. USG or TVS-for adnex pathology like torsion, ectopic pregnancy or any uterine mass for fibroid.
4. X-ray abdomen- for free fluid suggest ruptured cyst
5. Laparoscopy -It is helpful to visualise pelvic pathology.²

Treatment

In detectable pathology where surgery is needed there surgery should be done eg. cyst, abscess, ectopic rupture etc.

Ayurvedic treatment for pelvic pain**Basti**

Basti is procedure in which Kwath or Oil introduce as enema in the large intestine.

Preparation are mainly oil based or decoction based

Basti is useful in the treatment of Dysmenorrhoea, UTI, Ovarian cyst, PCOD, and also help to maintain normal function in the pelvic area.

UTTAR Basti is given for the treatment of ovarian cyst and other uterine pathologies .and also helps to regulate physiological function of uterus, and nerve function of uterus.

Niruha and Anuvasana basti are highly effective in Dysmenorrhea.

Swedana

Swedana is the procedure in which induction of sweating involves to reduce the Heaviness, coldness, stiffness, in the body.

Swedana is treatment given Vata dominant condition. Before giving swedana internal or external Snehana might be performed for Best Result.

Swedana is very effective in treating Dysmenorrhea. Therefore it can provide relief from pelvic pain caused due to period pain.

Abhyanga

Abhyanga is the procedure in which medicated oils are applied to the affected area and massaged in specific direction.

Massaging the lower abdomen with til tail or sarshap tail for about 10-15 min. Followed by Swedana helps to relief pelvic pain.

Abhyanga is also useful in treating Constipation and also enhance muscles and bonestrength.

Yoni pichu

Yoni pichu is the procedure in which soaked cotton pad with medicated oil or in medicine are placed in vagina or desired area.

Yoni pichu given with nimb tail, chnadanbala lakshadi tail or lukewarm til tail in PID, or in abnormal vaginal discharge, and before menstruation reduce pelvic pain.

Ayurvedic Herbs for pelvic pain- Nirgudi

Nirgudi is used to treat irritable bladder, rheumatism bloody discharge from bowl syndrome, Inflammation joint swelling, piles.

It has pain relieving Diuretic aromatic, antiparasitic properties.

Nirgundi is effective in the management of endometriosis and helps in relieving pelvic pain caused due to this condition.

Amalaki

Amalaki acts on the excretory, circulatory, and Digestive system. Amalaki used to treat condition like hepatitis, piles, UTI, Diabetes

It is also helpful in treating UTI and relieving pelvic pain due to urinary infection

Eranda

Eranda has Analgesic and purgative properties, and act on excretory, urinary, and digestive system

It is effective in the Management of Constipation, dysmenorrhoea, PID.etc.

Eranda Tail is one of the primary herb that are used for treating Vata Dosh related Disorder,

irritable condition and inflamed Bowel and also treating dysmenorrhoea and relieve pelvic pain.

Musta

Musta is used to treat candida and yeast infection.

It is Useful in treating dysmenorrhea, bloody stool, Diarrhoea one of the symptom of IBS, it also relieves pelvic pain caused due to IBS.

Ayurvedic Preparation for Pelvic pain-Dashmool Kwath

Dashmool Kwath is a decoction prepared from dashmoola [Bilva, Shonak, Agnimanth, Patala, Gokshur, Kanatkari, Prushniparni, Gambhari, Shaliparni, Bruhati]

This medicine is primarily indicated for Vata Vyadhi, and also used to treat Dysmenorrhea and Pelvic pain.

Abhayarishtam

Abhayarishta consist of 11 ingredient [Haritaki, Amalaki, Pippali Vidang, mrudivika, Madhuk pushpa, chavya Danti, Trivrutta, dhatki, Gokshur etc.

It indicated in the treatment of oedema, uterine pathologies, menstrual disorders etc. It can also provide pelvic pain caused due to Dysmenorrhoea and Constipation.^[3]

CONCLUSION

Ayurvedic treatment provide best pain management in gynaecological pelvic pain. As per Ayurved pain is caused due to vitiate Vata Dosha. Kati, Pakwashaya, Basti are Moolsthana^[4] of vata that's why the Kati Shoola is best managed by Ayurvedic treatment.

REFERENCES

1. Murleedharan, Unnikrishnan P., Narayan P, Bhatt H.S.K., "Ayurvedic Treatment Protocol for chronic pelvic pain in Endometriosis". Journal of clinical and Diagnostic Research, 12, KD01-KD03, 2018; 2249782x.
2. Dutta D.C., Textbook of Gynecology, 5th Edition, Kolkata: published by new central Book agency (p) LTD, 2008; 555.
3. <https://www.mayupchar.com/en/disease/pelvic-pain/ayurveda>.
4. Vagbhat, Kaviraj atridev Gupta, Ashtang Hridayam published with vidhyotini bhashatika, sutrasthana, Adhyay 12, Shloka 1st, Varanasi, chaukhamba prakashana, 2011; 120.

Raktadhara Kala: The Endothelial disfunction in Covid 19**Dr. Prachi Pravin Pimparkar**Rachana Sharir,
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Abstract:

Kala is prime topic described by Acharya Sushruta in Sharir sthana. Kala is limiting membrane between the Dhaatu and Aashaya. Raktadhara Kala is a second prime Kala. It is situated in a mamsa and holds the Rakta present in Sira, Yakrut and Pleeha.

Raktadhara Kala can be correlated with endothelial lining of the blood vessels. Endothelial cells release substances that control vascular relaxation, contraction, as well as enzymes that control blood clotting immune function and platelet adhesion.

Covid-19 which is a zoonotic in origin and mostly spread through respiratory droplets. Corona Virus is a causative agent. SARs-CoV2 has spike protein which plays a key role in ACE2 receptor recognition. The second stage of covid-19 is characterized by pulmonary inflammation and coagulopathy. Normal function of Endothelium is hampered in second stage of covid-19. Increased levels of inflammatory biomarkers such as CRP, ferretin , IL-6, IL-1, D -dimer are seen .

Endothelial activation due to covid-19 and dysfunction with comorbidities are suggested for be coagulation cascade in the blood vessels.

Key Words: - Raktadhara Kala, Sira, Yakrut, Pleeha, Covid19, Spike Protein, ACE₂

Introduction: -

Ayurved sharir has many terminologies which are explained at many places in ancient campaign India. Especially many terminologies like Kandara, Kurcha Mamsarajju, Sanghat, Simanta are described in 5th chapter of Sushruta Samhita. Kala sharir is also one of them.

Acharya Sushruta mentioned the concept of Kala in Garbhvyakaran Sharir Adhaya of sharirsthan with detail development of body parts of Garbha.

Kala is limiting membrane or layers in the body situated between Dhatu and Ashaya¹.

Seven kalas are not only the limiting, covering membrane but also perform some vital functions of the body. These are special membranes in the body which are having important role in performing body physiology. They provide support and protection to the organs. The cell membranes

separating each and every cell can be considered as Kala.

Among seven Kala Raktadhara Kala is said to be second prime Kala in the body. It is situated in mamsadhara Kala (the membrane that holds muscle tissue) and holds the Rakta present in Sira, Yakrut (liver), Pleeha. (Spleen).²

Therefore, the major role of Raktadhara kala is to support Rakta and help for its circulation throughout the body. As per present knowledge of contemporary science, Raktadhara Kala, mentioned in Ayurveda can be correlated with endothelial lining of the blood vessels and sinusoids of liver and spleen³.

Kala as per Ayurveda performs vital functions of the body and any deformity or its malfunction will lead to pathology. The Doshs are moving across the body in their normal as well as in abnormal form but wherever they get suitable environment they get stuck to respective body part and results in formation of disease.

If this principle of Ayurveda is applied in case of kala then it can be said that kala can also be a sight of pathology. If Kala performs its normal functions then it will hold body physiology but when it will not able to perform its normal function then it will lead to some disease.⁴

Certain group of diseases is transmitted from one person to another by direct or indirect contact. Another group of disease is born from a common source of polluted water, air, land and or disturbed climate which refers to the board heading of "Janapadadhwasma". Janapada means community, Dhwasma means perishing or destruction.⁵

This Janapadadhwasma is closely associated to modern scientific knowledge of epidemics. Now a day corona virus which is pandemic.

Coronavirus disease covid-19 which is zoonotic in origin and mostly spread through respiratory droplets, has caused a big threat to mankind. Outbreak of covid-19 has been declared pandemic by WHO. Novel virus belonging to corona virus CoV family is causative agent. It causes systemic disease with possible involvement of kidneys, heart, blood vessels. Severe damage to the blood vessels leads to thrombosis.⁶

AIM: -

- To study basic concept of Raktadhara Kala in Ayurveda.
- To find out applicability of Raktadhara Kala in covid19.

Objective: -

Raktadhara Kala can be one of treatment site for management of covid19.

Materials and Methods: -

Classical texts of Ayurveda – Sushruta Samhita, Astangasangraha, Astangahridaya and Sharangdhara Samhita.

Reviewing of Journals, Article, Internet Material and previous research paper related to this article are referred.

Observation: -

Kala is one of the basic structures that has been described in Ayurveda. Kala is a thin membrane, which lines the internal cavity of Ashayas (organ that hold the vital elements), blood vessels and fibrous capsule of the joints and so on.

Kala separate the Dhaatu (vital elements) and the Ashaya.

The Ashaya is the cavity that gives Ashraya (holds) to the Dosha, Dhatu and Mala (waste products of the body). The Dhatu lives in Ashaya and inner lining of the Ashaya is called Kala. If we cut wood, the cross section of a wood shows its internal structures with its different layers and parts. In the same way, we have to cut a superficial layer of mamsa (flesh) to reveal the Dhatu. It means that Dhatu are principle factors of our body and they are located deeply. We have to incise the covering to reveal these Dhatus. Each Kala is different from other⁷.

According to Acharya Sushruta, Seven kalas are Mamsadhara kala, Raktadhara kala, Medodhara kala, shleshmadhara kala, purishdhara kala, pittadhars kala, shukradhara kala⁸.

Raktadhara Kala is second Kala which remains deep in mamsadhara kala.

Sira (blood vessels without pulsations), Yakurt (liver) and Pleeha (spleen) are the locations of Raktadhara Kala.²

Sushruta elaborates the characteristic feature of Raktadhara Kala with the help of simile. We take incision, a plant which produces exudate i.e., milky substance (kshiri). In the same way when there is incision to the skin, blood oozes out⁹.

Yakurt, Pleeha and Raktavahi Dhamanya are the moolsthana of Raktavaha strotas¹⁰.

Inclusion or exclusion of Dhamani makes a big difference in the basic nature of the structure of kala and strotasa.

Acharya Sushruta has described the Viddha lakshana of Raktavaha strotas are shyavangata (darkening of the skin) cyanosis, Pandu (pallor skin). These are the symptoms of mild-to-moderate hemorrhagic shock but he has not described viddha lakshana of Raktadhara kala because of Ashraya Sambandha between Raktavaha Strotas and Raktadhara Kala⁷.

Traumatological injuries and communicable diseases damage Raktadhara kala. In viral infections such as AIDS, Dengue, Ebola thrombosis is common. So as in covid19 hypercoagulability is seen. SAR-COV2 infection can be grouped into Asymptomatic infection, mild illness, moderate illness, severe illness and critical illness. As the

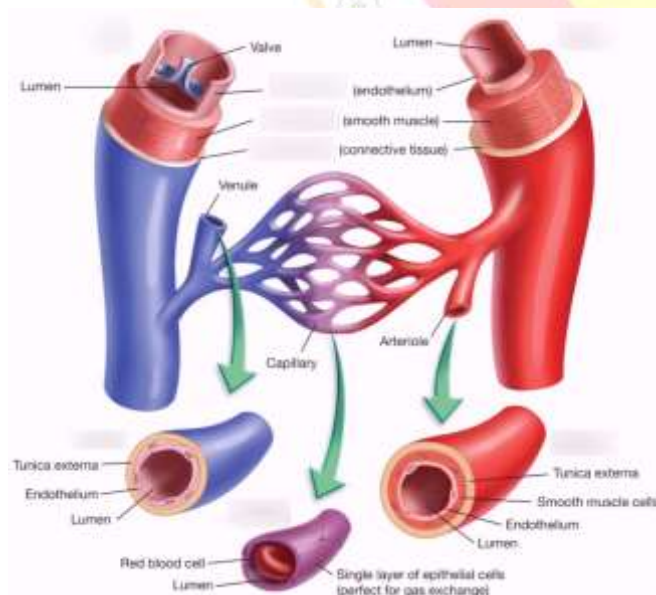
severity advances there is involvement of organs (lungs, heart, kidneys) and blood vessels¹¹.

Actually, Kala means different types of membrane like fibrous, serous and mucus, supporting and separating the fascia, septa, sheath and the capsule which covers the organ externally or internally and separates from one structure to another¹².

"Dhatva -shayan-tar maryadah" It is clear that Raktadhara Kala is a membranous limitation between Rakta dhatu and Aashaya (cavity of vessels). Raktadhara Kala is present within the capillaries, blood vessels and also the vascular organs. Sharirbhav (Dosh, Dhatu Mal) are permanu Swarup. They cannot be seen and they perform normal function to target organs. So as Rakta Dhatu, Raktadhara Kala are also permanu Swarup i.e., Microscopic¹³.

Modern science has explained the different types of blood vessels which include artery, vein, capillary, arteriole and venules. Anatomically there are three distinct layer which form wall of vessels that is tunica externa, tunica media, tunica intima¹⁴.

The three layered structure is present within all vessels.



The tunica externa and tunica media are not in direct contact with the blood. Tunica intima is direct contact with blood.

Special type of structure called sinusoids are present inside the liver and spleen in very large amount. Wall of sinusoids consists of endothelial

cells and its Prime layer which holds the blood under circulation. The wall of human heart is composed of three layers epicardium, myocardium and endocardium. The inner lining of the heart is in direct contact with blood. It merges with inner lining of endothelium of the blood vessels¹².

Covid-19 is a pandemic situation caused by respiratory virus which makes beeline for the cells lining blood vessels, filling them up like a Gumball machine and shredding the cell from Inside out. Blood vessels are blocked and blood clots are formed because of the lining damage¹⁵.

Discussion: -

Kala is important concept described in Ayurveda. Kala is one of the special membrane in the body which performs some functions to assist and maintain body physiology. Snayu pratichanna, Jarayu santat, and shleshma vestita can be correlated with fibrous, serous and mucous membranes in the body¹⁶.

Both Sushruta and Vagbhata 1 metioned that Raktadhara Kala is generally present Mamsaabhyantara. While describing manasadhara Kala both Aacharya mentioned that inside the Mansa, Sira, Dhamani, Srotases are spread. Within the muscle, Rakta is circulating in the Tubular structure i.e., Sira, Dhamani.

In modern science, blood vessels are spread inside the muscle and lined by membranous structure.

The functional aspects of Raktadhara Kala is Raktadhatu which carries 'Pranavayu' and cells present in Raktadhatu are responsible for Jeevan Kriya. Raktadhara Kala is holding the Rakta and it gives protection to the Raktadhatu. Life is holded or protected by Raktadhara Kala. रक्तं जीव इति स्तिति.

Blood is in direct contact with tunica intima and sinusoids of liver and spleen. It flows through the lumen or interior opening of the vessel. The main component of tunica intima and sinusoids are endothelium which lie the entire vascular tree including heart and lymphatic vessels. Endothelium is thin layer of flattened cells that lines the inner surface of entire cardiovascular system. Sub endothelial layer, basement membrane and internal elastic lamina forms tunica intima¹⁷.

Raktadhara Kala is considered as semipermeable barrier separating lumen from the

vessel wall. Endothelium is recognised as a complex endocrine organ responsible for variety of physiological processes vital for vascular homeostasis. Endothelial cells transduce a wide range of physiological stimuli, produce a variety of signalling molecules that exerts autocrine and paracrine effects. Therefore, endocrine system is responsible for maintaining vasomotor tone, haemostasis thrombosis, inflammatory processes, platelet leukocyte vessel wall interactions and controlling vascular permeability¹⁶.

In viral infections such as AIDS, Dengue, Ebola, thrombosis is common. The present era which is fearful due to rapid cases of covid-19 throughout the world. It has heavily affected the global population with more than 5.2 million infected and more than 337000 death are recorded.

Structure of corona virus

Corona virus particles are organised with long RNA Polymers tightly packed into the centre with nucleocapsid and surrounded by a protective capsid. Membrane glycoprotein (M), Spike protein (S) and Envelop protein (E) are present in corona virus.¹⁸

Stages of Covid19

Covid-19 has three consecutive stages in increasing severity.

First stage is characterized by infection with SARs-Cov2 covid. In this stage flu-like symptoms develop, subsequently patient can develop viral pneumonia requiring hospitalization and mechanical ventilation.

2nd stage is also characterized by pulmonary inflammation and coagulopathy. Increased levels of inflammatory biomarkers such as C-reactive protein (CRP), Ferritin, IL-6, IL-1 and D dimer are seen.

the final stage is fibrosis of lungs.¹⁹

In the second stage of covid 19, coagulopathy is seen. There is involvement of endothelium of blood vessels take place. This article is associated with endothelium of blood vessels i.e., Raktadhara Kala in covid-19.

As the spike protein (S) of SARs-Cov2 plays key role in ACE2 receptor (present in lungs, heart, Kidneys, liver and blood vessels) recognition and cell membrane fusion process. Replication and dissemination of SARs-Cov2 in systemic circulation

lead to extrapulmonary manifestation which play a major role in the disease progression.

In the body increased number of virus causes the host cell to undergo pyroptosis and release the damage associated molecular pattern (DAMPs), including nucleic acid, ASC oligomers. DAMPs recognition receptors are present on the lung's epithelial cells, endothelial cells of blood vessels, and alveolar micro phages. Triggering the generation of pro-inflammatory cytokines and chemokines are released. Recognition of viral RNA triggers type 1 interferon production (IFN α , IFN β) which protects from viral infection. SARs COV 2 is sensitive to IFN1. The young individuals after recognition of viral DAMPs, the Type 1 interferon is secreted and Virus replication is inhibited. That is why majority of the cases being asymptomatic but in the old individuals with comorbid conditions due to immune senescence, delayed IFN1 production may lead to the recruitment of inflammatory cells i.e. monocytes, macrophages and neutrophils. These cells secrete the use of pro-inflammatory cytokines known as cytokines storms that damage the lung alveoli causing ARDS.

Endothelial activation due to covid-19 and dysfunction with comorbidities are suggested to be related to the coagulation cascade.²⁰

covid-19 inducing a greater hypercoagulability SARs Cov-2 to infection induces the production of cytokines, resulting in a systemic inflammatory reaction which causes cytokine storm. Higher cytokine concentration can lead to systemic thrombus formation. Vascular endothelium by SARs Cov-2 appear to be involved in covid-19 thrombogenesis.

Covid-19 seems to attack the endothelial inside blood vessels. Raktadhara Kala mentioned in Ayurveda has great similarity with that of endothelial lining of blood vessels. Covid-19 a viral infection is associated with damaging the endothelium of the blood vessels.

So, keeping in mind the concept of Kala told by Ayurveda the treatment approach to this life-threatening viral infection can be obtained. Further research is needed for curing covid-19 conditions. Immuno boosters Drugs in Ayurveda helps in preventing covid-19. But what about curing patient at cytokine storm? Ayurvedic research is needed.

Conclusion: -

Kala described in Ayurveda are special membrane in the body present between Dhatu - Aashaya which performs the vital functions in the body.

'Dhatva - shyantar maryadah' it is clear that Raktadhara kala is membranous structure between Raktadhatu and Aashay.

Raktadhara kala is parmanu Swarup as said by Acharya Charaka. so, it can correlated with Endothelial linings present in Tunica intima and sinusoids of liver spleen. Endothelial cells are responsible for maintaining vasomotor tone, haemostasis, thrombosis, inflammatory process, platelet and leucocytes vessel wall interactions and controlling vascular permeability.

Spike like projections are recognized by receptor proteins on the host cells. corona virus infects lungs cells through receptor for Enzyme ACE2 present in heart, kidneys, blood vessels.

Thus, endothelium is injured causing vascular damage. To protect from direct or indirect damage, host innate defensive mechanism of blood clotting, vasoconstriction.

Thus, Raktadhara kala can be considered as one of the treatment sites for covid- 19.

References:

1. Shushrut Samhita, Commentator Dr. Ambika Datta Shashtri. Sharirsthana 4/5, Page No. 26, Varanasi: Chaukhamba Sanskrit Sansthan, 2005
2. Shushrut Samhita, Commentator Dr. Ambika Datta Shashtri. Sharirsthana 4/10, Varanasi: Chaukhamba Sanskrit Sansthan, 2005ss
3. Sushrut Samhita, Ghanekar Edition, Varanasi, Chaukhamba Orientalia, 2005; Sharir Santhan Aadhaya 4, page no.113
4. Sushrut Samhita, Sharma P. V. Editor 8th Edition, Varanasi, Chaukhamba Orientalia, 2005; Sutrashatana, 21/10, Page No.102
5. Concept of Epidemic diseases in Ayurveda sarmah Jyotirmoy, Sarma Dipti Rekha ISSN 2394/806 X IJHRMLP, Volume 2.
6. Histopathological Observation in Covid19 Systemic Review journal of Clinical Pathology BMJ Volume 74 issue-2
7. A Critical Analysis of Raktdhara Kala in Perspective of Acharya Sushrut. An International Quarterly Journals on Research in Indian System of Medicine. P- ISSN; 2320-4419 E-ISSN: 2455-5029 Year 2009 Volume 7 issue 1 Page 28 to 32.
8. Shushrut Samhita, Commentator Dr. Ambika Datta Shashtri. Sharirsthana 4/8, 10, 12, 14, 17, 18, 20 Page No. 30-31 Varanasi: Chaukhamba Sanskrit Sansthan, 2005
9. Shushrut Samhita, Commentator Dr. Ambika Datta Shashtri. Sharirsthana Adhyaya 4/21 Varanasi: Chaukhamba Sanskrit Sansthan, 2005.
10. Shushrut Samhita, Commentator Dr. Ambika Datta Shashtri. Sharirsthana Adhyaya 9/ ३ Varanasi: Chaukhamba Sanskrit Sansthan, 2005.
11. Clinical Spectrum of SARs Cov2 Infection NIH. www.covid19treatmentsguidelines.nih.gov
12. A Conceptual Study of Kala Sharir in Ayurved Science. Ayurlog NJRAS e-ISSN: 2320-7379 Oct-Dec 2019 Volume 7th and Issue 6th.
13. Charak Samhita Elaborated by Charaka and Drahabala, Volume 1, Charak Sharirsthan 7/17.
14. GRAYS ANATOMY, Blood vessels ,page no.682
15. Evidence shows that covid19 attacks blood vessels www.webmd.com by Carolyn crist.
16. Study of Raktdhara Kala w. s. r. to Atherosclerosis https://www.researchgate.net/publication/32029974 Article Sep. 2017.
17. Conformation of Anatomical Structure of Raktdhara Kala in Animal Model.
18. Structure of covid-www.biophysics.org Corona Virus Structure, Vaccine and therapy Development.
19. A Systematic Review of Pathological finding in covid19: a pathophysiological timeline and possible mechanism of disease progression. Review article published on 22nd June 2020.
20. Hyper inflammation and immune response generation in covid-19 https://www.karger.com/article

Unusual Branching of Left Superior Pulmonary Vein: A Case Report

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Abstract :-

Human dissection is indispensable for a sound knowledge in anatomy which can ensure safe as well as efficient clinical practice and the human dissection lab could be the ideal place to cultivate humanistic qualities among the future physicians in the 21st century. Dissection of human cadaver has a long tradition. It paved the way for modern anatomical knowledge and plays a crucial role in the education of medical students. Though fundamental anatomy has mostly been established, cadaveric studies still yield valuable findings.

On each side of the base of the heart, the superior pulmonary veins carry oxygenated blood from lungs to left atrium of heart. The variation in number and branching pattern of pulmonary veins is frequent and this knowledge is valuable for various procedures involving pulmonary veins. This variation in pulmonary veins ranges from variation in number to drainage pattern in left atrium. [1]

In approximately 48 years old Indian male cadaver during routine dissection, we reported a variant of pulmonary vein branching pattern where the left superior pulmonary vein has 3 openings while remaining 3 veins i.e. left inferior pulmonary vein, right superior pulmonary vein and right inferior pulmonary veins have their normal one opening. The anatomical and morphological variations of the left superior pulmonary veins are significant for diagnostic, surgical procedures and vascular radiology in head and neck region.

It is of clinical importance to know origin and course of pulmonary veins in detail and being aware of possible variation.

Keywords: Pulmonary veins, left atrium, variations, left superior pulmonary vein, radiological procedures.

1.Introduction :-

A cadaver or corpse is a dead human body that is used by medical students, physicians and other scientists to study anatomy, identify disease sites, determine cause of death, and provide tissue to repair a defect in a living human being.

Human cadaveric dissection has been used as the core teaching tool in anatomy for centuries. [2] It is noteworthy that the innovative modes of learning anatomy such as the interactive multimedia resources have not replaced student's perception about the importance of cadaveric dissection.[3] For many centuries, physicians of ancient Greece gained considerable information about human body and health. [4]

For a cadaver to be viable and ideal for anatomical study and dissection the body must be refrigerated or the preservation process must begin within 24 hours of death. [4]

In anatomy, normality embraces a range of morphologies. It includes those are more common and others called variations which are less frequent but not considered abnormal. [5]

The primary pulmonary circulation comprising of pulmonary arterial tree, extensive capillary bed and

pulmonary venous tree, connected in series is a low pressure, high capacitance system which provides large surface area for gas exchange.

An understanding of variability of pulmonary vein remains most important in radiological procedures and cardiothoracic surgeries, where an incompatible knowledge of anatomy can lead to complications. The pulmonary veins drain oxygenated blood from both lungs to left atrium. The pulmonary veins course in the inter segmental septa and as such don't run with bronchi like pulmonary arteries do. The left superior pulmonary vein take an oblique infero medial course, whereas both right and left inferior pulmonary veins runs horizontally before taking a more vertical course. They pass through lung hilum antero inferior to pulmonary arteries, forming a short intra pericardial segment, to drain into left atrium of heart. [6,7]

The ostia of inferior pulmonary veins are more posteromedial and left inferior Pulmonary vein being more superior. [8]

The knowledge of these variations is valuable in cardiothoracic surgeries and radiological procedures such as radiofrequency ablations in atrial fibrillations, cardiac valve replacement, pulmonary lobectomy and others [9, 10].

2. Material and Method :-

During routine dissection of a 48 years old Indian male Cadaver in Dept. of Anatomy, CSMSS Ayurved Mahavidyalaya, Aurangabad, it was observed that the left superior pulmonary vein has unusual branches emerging from left atrium of heart, in addition to 3 openings present for right superior and inferior pulmonary veins and left inferior pulmonary vein.

3. Inclusion criteria :-

- a) All the limbs of the cadaver are intact.
- b) Death is natural.
- c) The age of cadaver is between 20 – 60 years.

4. Exclusion criteria :-

- a) Absence of one or more limbs.
- b) Death is due to poison or accident.
- c) Age of cadaver is less than 20 years or more than 60 years.

5. Case Report :-

During a routine dissection of thoracic and abdominal cavity, an atypical left superior pulmonary vein found, which has 3 branches in a 48 years old Indian male cadaver in the anatomy dissection hall at CSMSS Ayurved Mahavidyalaya, Aurangabad. After opening the thoracic cavity, the left superior pulmonary vein was seen having 3 branches. The remaining i.e. left inferior pulmonary vein, right superior and inferior pulmonary vein has normal one opening and one branch. No other congenital variations were found. The further course, branching and drainage pattern of these pulmonary veins were normal.

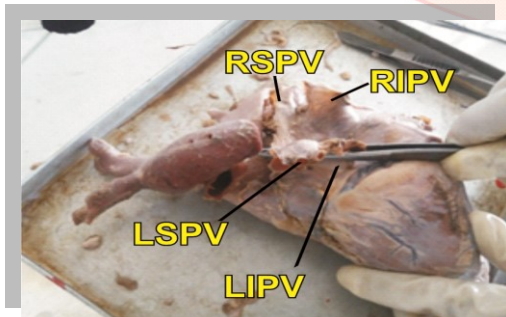


Fig. 1: Showing unusual branching of LSPV and normal branching of remaining 3 Pulmonary Veins. (LSPV-Left superior Pulmonary Vein, LIPV-Left Interior Pulmonary Vein, RSPV-Right Superior Pulmonary Vein, RIPV-Right Inferior Pulmonary Vein).

6. Discussion :-

Anatomical and morphological variations of pulmonary veins are of immense importance in cardiothoracic surgeries and radiological procedures. [7]. Researchers have documented that decreased use of dissection as teaching tool is one of the factor that can have a negative influence on anatomical knowledge of medical students. [18] Evidence suggests that learning anatomy by active exploration through cadaveric dissection actually contributes to improvement of anatomic knowledge. [19] Medical training essentially begins with cadaveric dissection and nearly all clinicians remember the details of their first interaction with the human cadaver. [20]

In our study, we found the unusual branching pattern of left superior pulmonary vein. Earlier it was considered that variations in number and course of pulmonary veins were rare and they are confined only few case reports. [8] Recently, however it has been found that variation in pulmonary venous anatomy were seen in 36% of patients. [9] and they were one of the etiologies for ectopic heart beats. [10] This greater than expected variability in pulmonary venous anatomy could substantially alter success rates of radiofrequency ablations, as ectopic foci could go untreated in variant veins. The successful treatment of atrial fibrillation by radiofrequency ablation of ectopic foci can be made possible only by having accurate knowledge of normal pulmonary venous anatomy and its measurement. [13]

The knowledge of these variations is valuable in cardiothoracic surgeries and radiological procedures [15] such as radiofrequency ablations in atrial fibrillation, cardiac valve replacement, pulmonary lobectomy and others. [14]

7. Conclusion :-

Human cadaveric dissection has survived the test of time and till time the student-cadaver encounter remains paramount in medical education. The rise of ancient Greek medicine paved the way for the inception of human cadaveric dissection as a tool for teaching anatomy in 3rd century B.C.

Typically there are four pulmonary veins with superior and inferior pulmonary veins on either side draining into the left atrium. [6]. There may be anomalous drainage in the left atrium or systemic veins. On left side, there may be convergence of the left pulmonary veins into a short or long common trunk that drains into left atrium. Anatomic variants on right side are less common and include accessory veins such as accessory right middle or upper pulmonary veins draining independently into left atrium. Partial Anomalous Pulmonary Venous Return (PAPVR) into a systemic vein produces a left to right shunt. In left sided PAPVR, left upper lobe pulmonary

veins form a vertical vein that joins the left brachiocephalic vein or coronary sinus. Anomalies in the branching pattern of pulmonary veins have been documented worldwide. We hope that our study has provided valuable data to clinicians and anatomists by enhancing their knowledge regarding the variation of the branching pattern of left superior pulmonary vein is important in cardiothoracic surgeries. The wide spectrum of variations in anatomical arrangement of human pulmonary veins and its branches offer valuable information to replace cardiac valve safely and performing pulmonary lobectomy. These anatomical and morphological variations in pulmonary vein are significant for diagnostic procedures and cardiothoracic surgeries.

8. References :-

1. Williams PL, Warwic KR, Dyson M, Bannister LH. Gray's Anatomy. 37. Edinburgh: Churchill Livingstone, 1989, 733-734.
2. Magee R. Artmacabre: resurrectionists and anatomists. ANZJ Surg.2001;71:377-380. [PubMed] [Google Scholar]
3. Azer SA, Eizenberg N. Do we need dissection in an integrated problem based learning medical course? Perception of first and second year students. Surg Radiol Anat.2007;29:173-180. [PubMed] [Google Scholar]
5. Sallam HN. The ancient Alaxandria School of medicine Gynecol obstet Fertil. 2002;30:3-10. [PubMed] [Google Scholar].
6. William PL, Humpherson JR. Concepts of variation and normality in morphology: Important issues at risk of neglect in modern undergraduate medical courses. Clin Anat. 1999, 12: 186-190.
7. Porres DV, Morenza OP, Pallisa E et-al. Learning from pulmonary veins. Radio graphics. 2013; 33(4): 999-1022.Doi:10-1148/rg. 334125043- [PubMed].
8. Teckbas G, Gumus H, Onder H, Ekici F, Hamjidi C, Tckbasi E. Evaluation of pulmonary vein variations and anomalies with 64 slide multi detector computed tonography. WeinklinWochenschr 2012; 124 (1-2) : 3-10 [Pub Med]
9. Cronin P, Kelly AM, Desjardius B et-al. Normative Analysis of pulmonary vein drainage patterns on multi detector CT with measurements of pulmonary vein ostial diameter and distance to first bifurcation. A cad Radiol. 2007; 14(2): 178-88
10. Marom EM, Herndon JE, Kim YH, Mc Adams HP. Variations in pulmonary venous drainage to left atrium: implications for radio frequency ablations. Radiol. 2004; 230:824-9 [Pub Med]
11. Tsao HM, Wu MH, Yu WK. Role of right middle pulmonary vein in patients with paroxysmal atrial fibrillation. Jcardio vasElectrophysiol 2001; 12 : 1353-7 [Pub Med]
12. Alfke H, Wagner HJ, Klose KJ. A case of an anomalous pulmonary vein of right middle lobe. Cardio vasInterventRadiol. 1995; 18:406-9 [Pub Med]
13. Ho Sy, Sanchez –Quintana D, Cabrera JA, Anderson RH. Anatomy of left atrium: Implication for radio frequency ablation of atrial fibrillation. J Cardin VascElectrophysiol 1990; 10:1525-33 [Pub Med]
14. Manghat NE, Mathias HC, Kakani N, Hamillon MCK, Morghan – Hughes G, Roobottom CA. Pulmonary venous evaluation using echocardiogram gated 64-detector row cardiac CT. British J Radiol. 2012, 85: 965-71. [PMC free article] [Pub Med].
15. Lacousis JM, Wigginton W, Fuhrman C et-al. Multi detector row CT of the left atrium and pulmonary veins before radiofrequency catheter ablation for atrial fibrillation. Radiographics. 2003; 23.Spec No. (Suppl-1): S35-48. Doi :10.1148/rg.23sio35508- Pubmed citation.
16. Marchand P, Gilroy JC, Wilson VH. An Anatomical study of bronchial vascular system and its variations in disease Thorax. 2004; 5(3): 207-21. PubMed citation.
17. Mc Lachlan JC, Paltan D. Anatomy teaching: ghosts of the past, present and future. Med Educ.2006;40:243-253. [PubMed]
18. Papa V, Vaccarezza M. Teaching anatomy in the XXI century: new aspects and pitfalls. Sci World J. 2013;2013:310348. [PMC Free article] [PubMed] [Google Scholar].
19. Bergman EM, Verheijen IW, Scherpbier AJ, Van der Vluten CP, De Bruin AB. Influences on anatomical knowledge: The complete arguments. Clin Anat. 2014;27:296-303. [PubMed] [Google Scholar]
20. Nwachukwu C, Lachman N, Pawlina W. Evaluating dissection in gross anatomy course: Correlation between quality of laboratory dissection and students outcomes. Anat Sci Edu.2015;8:45-52. [PubMed] [Google Scholar]
21. Rizzolo LJ. Human dissection: an approach to interweaving the traditional and humanistic goals of medical education. Anat Rec. 2002;269:242-248. [PubMed] [Google Scholar]
22. Ramsey-stewart G, Burgess AW, Hill DA. Back to the future: teaching anatomy by whole body dissection. Med J Aust.2010;193:668-671. [PubMed] [Google Scholar]
23. Gunderman RB, Wilson PK. View point: exploring the human interior: the role of cadaver dissection and radiologic imaging in teaching anatomy. Acad Med. 2005;80:745-749. [PubMed] [Google Scholar]
24. Warren WH, Milloy FJ. Pulmonary vascular system and Pulmonary hilum. Thorac Surg Clin 2007;17:601-17.10.1016/j.thorsurg.2016.12.012. [PubMed] [Google Scholar]
25. Cory RA, Valentine EJ. Varying patterns of the lobar branches of the pulmonary tree. Thorax 1959;14:267-80.10.1136/thx.14.4.267. [PMC free article] [PubMed] [Cross Ref] [Google Scholar]



STUDY OF MEDODHATVAGNI MANDYA IN MEDOROG W.S.R TO OBESITY

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DOI: <https://doi.org/10.17605/OSF.IO/2B8GU>

Article Received on 17/12/2020

Article Revised on 07/01/2021

Article Accepted on 27/01/2021

ABSTRACT

Healthy and unhealthy state of a human being depends on normal and abnormal functional state of *Tridosha*, considering the physiological importance of *Dosha* in maintenance of homeostasis of the body *Tridosha* have been called as root (*Dosha Dhatu Mala Moolam hi Shariram*) of the body. All the functions of the body could be explained in terms of *Dosha*, *Dhatu* and *Mala*. In ayurveda, *sthaulya* has been described in all the literatures. *Acharaya charaka* has described *sthaulya purusha* among one of the *ashta nindita purusha*. *sthaulya* is caused due to *medovridhi* which includes abnormal and excessive accumulation of *medodhatu* in the body. person of every age and sex is suffering by this widely spread epidemic i.e. obesity. In Ayurveda, main cause is *dhatvagnimandya*. As per involvement of *dosha-dushya* the disease can be considered among *santarpanajanyavikara*. the major pathological factors behind the disease basically include *kaphavridhi*, *jathargnidushti*, *medodhatvagnimandhya* and *avarana of vata* which all finally leads to *amarupa medovridhi*.

KEYWORDS: *Medodhatu*, Obesity, *Sthaulyata*, *medodhatvagni*.

INTRODUCTION

Hence, *Vihara* and *Ahara Vidhi* can be included under the heading of lifestyle in Ayurveda. *Vihara* consists of conducts explained under the heading of *Dinacharya* (daily regimen), *Ritucharya* (seasonal regimen) and *Sadvritta* (behavioral regimen) and *Ahara Vidhi* (dietetic rules) consists of the conducts given under the heading of *Ahara Vidhi Vidhana* (codes of dietetics), *Bhojanottara Vidhi Vidhana* (conducts after meal) etc., which are described in detail in Ayurveda. Wrong dietary habits such as *Adhyashana* (eating after meal), *Vishamashana* (diet on irregular time and quantity), and wrong behavioral pattern such as *Vegadharana* (suppression of urges) leads to vitiation of *Doshas* independently or together causing *Agnimandya* (indigestion). In Ayurveda, it is believed that *Agnimandya* is the root cause for all the diseases such as *Prameha* and *Sthaulya*. In modern science also, it has been proved that there exists gut-brain-endocrine axis which involves ghrelin-leptin hormones, insulin and orexins. Disturbance in this axis leads to diseases such as obesity and diabetes mellitus which are among the top ten lifestyle disorders. The causes for these diseases are improper diet pattern, disturbed sleep pattern etc.

Type of Agni

A) *charak* has described agni in 13 types

- 1) *Jataragni*^[1]
- 2) *Bhutagni*^[5]
- 3) *Dhatvagni*^[7]

B) according to *shushruta* agni is divided into five types

- 1) *Pachakagni*
- 2) *Ranjakagni*
- 3) *alochakagni*
- 4) *Sadhakagni*
- 5) *Bhrajakagni*

C) *Vaghahat* described into different 18 types

- 1) *Bhutagni*^[5]
- 2) *Dhatvagni*^[7]
- 3) *Malagni*^[3]
- 4) *Dhoshagni*^[3]

D) *Sharagandhar* has described it into 5 types

- 1) *Pachak*
- 2) *Bhrajak*
- 3) *Ranjak*
- 4) *Alochak*
- 5) *Sadhak*

E) bhavmishra ha describe as vaghabhat and charak

1) Jatharagni

If jatharagni is proper, balance, healthy the other form of agni is control in equilibrium. Agni means fire in belly which govern the preliminary process of digestion before the food converted into a form in which it could be absorbed, utilized in various forms of body function in the form of nutrition and energy. Jatharagni divides food into sara (essence food) and kitta (waste product) in human body.

It again divided into four types

1) **vishmagni:** Here digestive fire is distributed by vata, cholera, dysentery, enlarged spleen, abdominal tumour are outcome of vishmagni.

2) **Tikshagni:** Here digestive fire is divided by pitta, in this case immunity against disease is good. Urinary disease, yellow skin, tuberculosis.

3) **Mandagni:** Here digestive fire is distributed by kapha. Cough, bronchial asthma

4) **Samagi:** Normal digestive fire with strong appetite

2) **Bhutagni:** present in basic element.

3) **Dhatvagni:** seven element tissue of body contain their own agni to metabolize nutrients supply to them through channel of circulation.

- 1) Rasagni in rasa dhatu
- 2) Raktagni in rakta dhatu
- 3) Mansagni in mans dhatu
- 4) Medagni in meda dhatu
- 5) asthyagni in asthi dhatu
- 6) majjagni in majja dhatu
- 7) shuktragni in shukra dhatu

symptoms of Jatharagni

- 1) *Ajeerna* (indigestion)
- 2) *Atilalarava* (hyper salivation),
- 3) *Aruchi* (dislike of food),
- 4) *Adhmana* (heaviness of abdomen),
- 5) *Vibandha* (constipation),
- 6) *Chardi* (vomiting)

Agni in nature: वायोःअग्निः। (तैत्तिरीय उपनिषद्)

Medodhatvagnimandya

Agni is responsible for all metabolic activities of the body. It is solely responsible for any increase or decrease of Doṣa, Dhātu or Mala. The vitiation of Agni has serious impact on health at various levels depending on type of Agni involved. When Agni is decreased, it will lead to various metabolic disorders at various levels and produces "Āma" i.e., Agni fails to convert the Vijātīya Dravyas into Sajātīya ones and the end products cannot be assimilated by the Dhātus. Such products will be dangerous to body and can cause signs and symptoms according to their presence at various physiological levels. If Agnimāndya is present at the level of

Jatharāgni only, then Āma is usually restricted to Koṣṭha. There will be no production of Āhāra Rasa & result will be Dhātu Kṣaya. If Agnimāndya is present at the level of Bhūtāgni, then Āma is restricted to Āhāra Rasa and this Āhāra Rasa which is improperly formed cannot be assimilated by Dhātus and results in Dhātukṣaya. If Agni Agni-māndya is present at the level of Dhātūvāgni, then the particular Dhātus cannot assimilate nutrients present in the circulating Āhāra Rasa or circulating Poṣaka Dhātu. So, such Poṣaka Dhātus will be accumulated in Āhāra Rasa in abnormal quantities and they may further get accumulated at abnormal sites. This sort of process can be called as Leenatwa of Āma in Dhātus. Such Leenatwa can cause a number of disorders but it should always be kept in mind that once Jatharāgni is impaired, the Bhūtāgni and Dhātūvāgni would also be having impairment. Hence during treatment of any kind of Agnimāndya or Āma conditions one should think about all the three levels. Such a way if Medo Dhātūvāgni is impaired and the homologous nutrients present in Poṣaka Medo Dhātu will be in excess in circulation and this can be referred to the conditions such as hyperlipidaemia. This is because the Poṣaka Medo Dhātu cannot be assimilated into Sthāyi Medo Dhātu by Medodhātūvāgni. The cause for excess Poṣaka Medo Dhātu in circulation is not only Medodhātūvāgnimāndya, but there may be decrease in other Agni also. Any cause, which can lead to Kapha Vriddhi, Pitta Kṣaya or Vāta Prakopa, can lead to this condition. In Medoroga, due to the excessive supply of Snigdha, Madhura, Guru etc. types of āhāra, the āhārasa contains excessive nutrition homologous to Medas. Due to persistent overload, the Medoagni is diminished leading to excessive accumulation of Medas in Āma form and thus causing Medoroga

Obesity

Dfination

Obesity is a term used to describe excess body fat, it is defined in terms of a person's weight and height, or their body mass index (BMI). A person with a BMI over 30 is classified as being obese. Obesity makes your body less sensitive to insulin action.

obesity in ayurveda is correlated with sthauilya

Definition of Sthauilya

A person having excessive fat in life Sphika (Hip), Udara (Abdomen) and Stana (Chest) due to excess deposition of Meda (Fat) along with Mamsadhatu and also having unequal abnormal distribution of Meda with reduced enthusiasm towards life is called *Atisthula*. Obesity is an increase in body weight beyond the limitation of skeletal and physical requirements as the result of excessive accumulation of body fat.

Type of obesity

Two types are described on basis of etiology

1) **Primary:** Vast majority of cases are of the primary variety, it will be presumed that the obesity is of primary variety.

2)Secondary: where obesity is due to a known disorder(Cushing's syndrome,hypothalamic disorder.)

Cause of Obesity

1)Genetic- heredity: Obesity ,now it is established,is strongly dependent on heredity.some persons are,due to heredity factors,prone to become obese.

2)Hypothalamic se point: Hypothalamus has a set point regarding amount of body fat.if the body fat is lowered, the person develops ravenous appetite-he eats more until the set point is achieved.Conversely,if the body fat amount exceeds the set point the appetite decreases till the body fat amount is restored. It may be noted that this set point may alter in ones life time.Thus,in a middle aged person,the set point may be elevated and the person gains weight. A person may undertake semi starvation,losing weight but soon the appetite becomes so stronge weight gain is double or it is comparatively easy to reduce weight temporarily.it may be determined by genetic factors.

3)Psychology: some persons eat whenever the food is good,some of persons eat until they feel little discomfort.ssss

Pathophysiology of obesity

Leptin is a polypeptide hormone discovered recently and currently under intense research.Obesity, ischemic heart disease and even cancer may be related to leptin.Neuropeptide Y in hypothalamus increase appetite and food intake.

Leptin is produced by adiposity of te body rises,more leptin is produced → Leptin carried via blood → reaches hypothalamus → leptin binds with its receptors in hypothalamus → ultimate result is decreased food intake. Probably leptin causes suppression of neuropeptide Y synthesis. It appears human obesity is due to lack of leptin receptors. leptin is correlated with obesity, so obesity get increased.

Sign and symptom

1. Ayushohrasa (Diminution of life span)
2. Javoparodha (Lack of enthusiasm)
3. Kriccha Vyavaya (Difficulty in sexual act)
4. Daurbalya (General debility)
5. Daurgandhya (Foul smelling of body)
6. Swedabadha (Distressful sweating)
7. Kshudhatimatra (Excessive hunger)
8. Pipasatiyoya (Excessive thirst)

Classification

Vagbhata have been mentioned three types of *Sthaulya* i.e. *Adhika*, *Madhyama* and *Hina*.

(1) Hina Sthaulya : (B.M.I. 25-30 kg/m² – Over Weight)-Mild degree of overweight, without any complication or secondary disease, with less than four undesirable symptoms and with duration of less than 1 year – can be considered as *Hina Sthaulya*.

(2) Madhyam Sthaulya : (B.M.I. 30-40 kg./m² - Obese)-Moderate degree, with least complications without secondary disease, with less than 8 undesirable symptoms and duration of 1 to 5 years can be considered as *Madhyam Sthaulya*.

(3) Adhika Sthaulya : (B.M.I. > 40 kg./m² – Very Obese)-Excessive degree, with complication and secondary disease with all 8 undesirable symptoms and duration of more than 5 years can be considered as *Adhika Sthaulya*.

Samprapti

Nidansevan is first and most important event in Samprapti, Nidan as describe ultimately all of them to jataragni dushti and kaphavidhi. In which jatharagni is impaire and bhutagni,dhatwagni having Impairment which lead to Ama Annarasa and subsequent Ama rasa Dhatu.Ama rasa dhatu leads to medodhatvagnimandya leads to Amarupa Medovridhi which leads to sthaulya and medoroga. On other aspect Kapha vridhi and this ama meda dhatu formation leads to avarana of Vataand sroto avarodha which ultimately lead to vata dosha vitiation. Due to sanga in medovaha srotsa the nutrients can not be carried by Vyana vayu to their respective dhatus.the process of circulation ,digestion and proper distribution of dhatus are controlled by samana and Vyana vayu. In this disease vata has been mention in the state of avaritya Which provokes the agni ultimately increasing the demand for the food (abhyavaharana shakti). But in case of anya nidana like beejadosha and avarana direct medovaha Srotodushiti occurs which results in the vridhi of ama asthaya medo dhatu (dyslipidemia) or ama sthaya medo dhatu (excessive adipose tissue) or Both.the increase in ama sthaya medo dhatu would lead to condition like Ama asthaya medo dhatu vridhi (dyslipidemia) or prameha (dibetes Mellitus). the ama sthaya medo dhatu if untrated,on further progression Causes maragavarana to vata leading to the shoshana and kathinya of the Sthanika medo dhatu.this results in a condition termed as dhamani Praticchaya or atherosclerosis causes lesions in all the three maha marma Hridaya shira and basti which is evident as coronary heart disease, Cerebrovascular diseses and renal insufficiency.

SAMPRAPTI GHATAK

- 1) **Dosha:** Kapha ,vata
- 2) **Dushya:** Rasa, Meda Dhatu
- 3) **Agni:** Jatharagni Rasa and Meda Dhatvagni
- 4) **Srotas:** Rasavaha Srotas, Medovaha Srotas
- 5) **Srotodushiti:** Sanga
- 6) **Adhishtana:** Sarva sharir
- 7) **Udbhavasthana:** Amashaya
- 8) **Roga Marga:** Bahya
- 9) **Ama:** Jatharagni and Dhatvagni Mandyajanita Ama

DISCUSSION

Concept of abnormal & unequal distribution or collection of Medodhātu in body can be inferred as Medoroga.

Charaka given causes of Medoroga as, Medas potentiating diet, Harshnityatwat, Achintanat, excessive indulgence with Brimhana Basti, Taila Abhyanga, Snigdha Udvartana and Beejadosh. Whereas Sushruta & Vagbhata stressed mainly on endogenous causes including deranged functions of Doṣas, Dhātus, Mala, Strotasa etc.

Āmadoṣa is the cause behind Medoroga specially mentioned by Vagbhata. According to Samānaya Viśeṣa Sidhdhanta & Ashraya ashrayee Sambandha between Doṣa-Dushyas, there is direct relation between Kapha Doṣa & Medodhātu i.e. increased consequences of Kapha directly leads to increment in Medas proportion. All Acharyas have given nearly same pathogenesis in which Kapha & Medodhātu play vital role leading to Medoroga. Hence, these two are main Doṣa-Dushya Ghataka in pathogenesis. Accumulation of Kapha & Meda leads to Srotovarodha causing trapping of Samāna Vāyu in Koṣṭha leading to Āvaraṇa to Samāna Vāyu, it leads to Jatharāgni Sandhūkṣaṇ & increased Jatharāgni leads to rapid digestion of ingested food & leaves the person craving for food. This vicious cycle continues resulting in Meda Atiupachaya. Sushruta has mentioned Medoroga as Rasanimitaja Vikāraa i.e. Dushya dominant disorder. According to Ayurveda, when food is ingested, it is first of all acted by Jatharāgni to form Āhāra Rasa, thus Āhāra Rasa acts as Substrate for Dhātuposhana by respective Dhātuvāgni. Dhātuvāgnimandhya develops when the substrate for Medodhātuvāgni i.e. Meda Poṣaka Rasa is present in excess form than the digestive power of Medodhātuvāgni.

Sushruta says that the Atisnehayukta Anna Rasa leads to excess formation of Meda dhātu. The three Acharyas have considered Vrikka as one of the moola of Medovaha Srotas but Vapavahana, Kati and Mamsa are mentioned as second moola separately. Sushruta and Vagbhat have given more anatomical preference then the physiological point of view by considering Kati and Mamsa as “Moola” of the Medovaha Srotas. While Charaka’s consideration was a physiological one.

CONCLUSION

The Medo Dhatu plays an important role in two important functional aspects i.e. Dharana & Poshana of the body. Jatharagni is impaired, the Bhutagni and Dhatwagni especially Medo Dhatwagni is impaired resulting of the homologues nutrients present in Poshaka Medo Dhatu will be in excess in circulation and ultimately develops Medoroga. Lastly, Agni plays a very important role in growth, development & maintenance of the body. So the Agni should be maintained at equilibrium by changing the life style.

REFERENCES

1. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra sthana
2. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra sthana 23rd chapter Santarpanadhyaya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition, 2005; 436.
3. Brahmasankara Misra, Bhavprakash of Bhavmisra, edited with vidyotini hindi commentary, 39th chapter, Medorogadhyay, Chaukhambha Sanskrit Sansthan, Varanasi, 8th edition, 2003; 405.
4. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary Sutra sthana 21st chapter Ashtaninditiya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition, 2005; 411.
5. Harrison’s Principles of Internal Medicine, Vol 1, chapter 64, Obesity, Mc-Graw Hills; 16th Edition, 2005; 422.
6. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra sthana 21st chapter Ashtaninditiya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition, 2005; 409.
7. Shastri Ambikadutt, Susruta Samhita edited with Ayurveda tatva sandipika Hindi Commentary, Sutra Sthana 15th chapter, Dosha-dhatu-mala-kshaya-vridhdhivigyaniya, Chaukhambha Sanskrit Sansthan, Varanasi, reprint edition, 2007; 62.
8. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra sthana 21st chapter Ashtaninditiya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition, 2005; 411.
9. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary,
10. Sutra sthana 21st chapter Ashtaninditiya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition, 2005; 409.
11. Tripathi Ravidutt, Ashtanga Sangraha of Vagbhata, saroj hindi commentary, Sutra Sthana 24th chapter, dwividhupkramniya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition, 2003; 436.
12. Atrideva Gupta, Ashtanga hridya of vagbhata, vidyotini hindi commentary, sutra sthana 14th chapter dwividhupkramniya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition, 2007; 80.
13. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra sthana 21st chapter Ashtaninditiya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition, 2005; 415.
14. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra sthana 16th chapter Chikitsaprabhritiya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition, 2005; 321.
15. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini

- Hindi commentary, Sutra sthana 21st chapter Ashtaninditiya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition, 2005; 414.
16. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra sthana 23rd chapter Santarpanadhyaya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition; Varanasi, reprint edition, 2005; 437.
 17. Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra sthana 21st chapter Ashtaninditiya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition, 2005; 414.
 18. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra sthana 21st chapter Ashtaninditiya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition, 2005; 414.
 19. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra sthana 21st chapter Ashtaninditiya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition, 2005; 415.
 20. Shastri Kashinath & Gorakhnath Chaturvedi, Charaka Samhita of Agnivesha elaborated Vidyotini Hindi commentary, Sutra sthana 21st chapter Ashtaninditiya, Chaukhambha Bharati Sansthan, Varanasi, reprint edition, 2005; 414-5.
 21. Shastri Ambikadutt, Susruta Samhita edited with Ayurveda tatva sandipika Hindi Commentary, Sutra Sthana 15th chapter, Dosha-dhatu-mala-kshaya-vridhivigyaniya, Chaukhambha Sanskrit Sansthan, Varanasi, reprint edition, 2007; 62-3.
 22. Shastri Ambikadutt, Susruta Samhita edited with Ayurveda tatva sandipika Hindi Commentary, Sutra Sthana 38th chapter, Dravya-sangrahaniya, Chaukhambha Sanskrit Sansthan, Varanasi, reprint edition, 2007; 142.
 23. Brahmasankara Misra, Bhavprakash of Bhavmisra, edited with vidyotini hindi commentary, 39th chapter, Medorogadhyay, Chaukhambha Sanskrit Sansthan, Varanasi, 8th edition, 2003; 406-7.
 24. Brahmanand Tripathi, Sharangdhara Samhita elaborated dipika hindi commentary, purvakhand 2nd chapter, Chaukhambha Subharti Prakashan, Varanasi, reprint edition, 2011; 25.

THE PHYSIOLOGICAL AND PATHOLOGICAL CONCEPT OF AGNI**¹Dr. Deepali J. Amle, ²*Dr. Akshay D. Shirwat and ³Dr. Hemant Panchade**¹Guide and HOD Rognidan Dept. CSMSS Ayurveda College Aurangabad.²PG Scholar, Rognidan dept. CSMSS Ayurveda College Aurangabad.³Assistant Professor, Rognidan dept. CSMSS Ayurveda college Aurangabad.***Corresponding Author: Dr. Akshay D. Shirwat**

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Article Received on 29/04/2021

Article Revised on 19/05/2021

Article Accepted on 08/06/2021

ABSTRACT

Life (ayu), Varna, Bala, Utasaha (Enthusiasm), anabolism, Prabha, Oja, Drushti, everything depends on Agni. Agni is invariable agent in Paka (digestion), ingested food is to be digested, absorbed for maintenance of life (Ayu). Agni is present everywhere in the body for the process of metabolism and gives energy to the body, i.e., Jatharagni, Dhatvagni etc. Jatharagni is one of the most important Agni also known as Kayagni, vitiation of Agni called Mandagni and this is the main reason for Vyadhi. Therefore, for treatment of Vyadhi treatment of Agni is important. If Agni of a person is vitiated, the whole metabolism in his body is disturbed, resulting in ill health and disease. Hence, Agni is said to be the base (moola) of life.

KEYWORDS: Agni, Bhutagni, Dhatvagni, Jatharagni, Pitta.**INTRODUCTION**

Agni, Ayurveda has described the main component of the body, which is essential for the digestion and metabolism of the food. Ingested food must be digested for a healthy life and maintenance of life, this is performed by the Agni.

Ayurveda described Agni as Dehagni because Agni converts food into form of energy, which is responsible for all the functions of the body, nourishment, Oja, Teja, health.^[1]

Aacharya Charak mentioned that after stoppage of function of Agni the individual dies, when Agni is in absolute Sama state a person is healthy, and Charakacharya also mentioned that the destination of swasthya is Sama state of Agni.^[2] When Agni is vitiated by Hetu Sewana the Sama state of Agni is disturbed and individuals get suffer from disease (Vyadhi).

Aacharya Charak described Agni as Kaya, Kaya Chikitsa is a Chikitsa of Agni i.e., Agni is the base (Moola) of life.^[3]

The purpose of this article is to enlighten the function, importance, and physiological as well as pathological aspect of Agni.

Review of Literature

The term Agni which is derived from Agni = A+G+Ni. A denotes root "I" meaning "to go". "G" denotes the root "Anja", meaning "to glitter" or root

"Daha" meaning "to burn". "NI" meaning "to carry". This etymology is given by Yasaka.^[4]

In Shabdakalpdrum 61 synonyms of Agni are described, these synonyms are given by its nature and functions of Agni.^[5] E.g., Tanoopaka, Sarvapaka, Damunasa, Rudra etc.

According to Sushrutacharya Agni is described as Pitta. Pitta is derived from "Tapa" which means combustion or digestion.^[6] When describing about Agni & Pitta different views have been suggested by Aacharyas.

Concept of Agni as a Pitta

According to Sushrutacharya there is no Agni without Pitta, means Agni is one of the guna (quality) of Pitta.^[7] Digestion and metabolism are the main functions of this Pitta or Agni.

According to Aacharya Charak Agni present in the Pitta gives good or bad results when its normal or vitiated state.^[8]

Aacharya Hemadri described Agni as having five divisions located in Pawakshaya and Amashaya. It is composed of panchmahabutas, having dominance of Tejas Mahabhuta.^[9]

Types of Agni

There are 13 types of Agni described by Aacharyas;

1. Aacharya Charak^[10]: 13

Jatahagni -1, Bhutagni- 5, Dhavatgni-7

2. Acharya Sushrut^[11]: 5

Pachakagni, Ranjakagni, Alochakagni, Sadhakagni, Bhrajakagni.

1. Jatahagni- this agni is present in Aamashaya (Stomach & Duodenum) digestion of ingested food is the main function of Jatharagni. Kayagni is synonyme for Jatharagni, if Kayagni vitiated person get diseased hence mandagni is main reason for origin of Vyadhi, it is responsible for the duration of life, health, Ojas, give strength to all Dhavtagni, Bhutagni. In opinion of Dhanvantri Pittadharakala which is situated in the entrance of Pakwashaya and acting as pathway of food. When agni undergoes vitiation, Grahani also vitiated and produce Vyadhi.

Jatharagni is classified into four categories

Jatharagni is most important because each and every nutrient which is ingested first comes to jatharagni. Separation, digestion of ingested food is another function of Jatharagni.^[12]

Jatharagni also have three types Samagni, Tikshagni, Mandagni, vishamagni.

Samagni: Is a stable state of Agni. The Samagni digest food properly at the proper time. This Agni increases quality of Dhatus, Samagni is mentioned in the definition of Swastha Purush.^[12]

Tikshanagni: Tiksha means very fast. This Agni digest food very quickly, Acharya Shushrut states that when the power of digestion increased normal to above normal, food digest quickly and produce desire for food.^[13]

Mandagni: Mandagni means slow, the agni which digest food very slowly the power of digestion is Slow.

2. Bhutagni: Bhutagni is one present in basic element (Bhuta). There are 5 Agni of each five elements, Pruthvi(earth), Tejas (Agni), Apya(water), Aakash, Vayavya(Vayu). Each and every cell of body consist of these five basic elements or MAhabut. Also, every cell consist of these five Bhutagni also. All food we eat which is also made of these panch mahabhutas with their respective Agni or bioenergy. Acharya Charak mentioned that Panch Bhutagni digest their own similar elements present the food. After the process of digestion by Bhutagni digested material containing the element and qualities similar to each Bhutas nourishes their own specific elements.^[14] Thses Bhutagni acts after process of Jatharagni, the digestion by Bhutagni is called as "sukshma Paka".

3. Dhatvagni: there are seven Dhatus present in the body contain their own Agni for metabolism of nutrients. Agni metabolized the materials and supply to specific Dhatus.

Thses Agni namely

- a) Rasagni
- b) Raktagni
- c) Mansagni
- d) Medagni
- e) Asthiagni
- f) Majjagni
- g) Shukragni

The action of these Agni is selective. Acharya Chaerak mentioned that seven Dhatus contains their own Agni, and their own Agni they digest and transform nutrients and supplied to the specific Dhatus this is also called as "Sukshama Paka".^[15]

Importance of Agni

Bala, *Varna* (colour), Swasthya(health), Utsah (entusiasim), Ojas, Upchaya (development of body), Prabha, Tejas(valour), Ayu(life) all depends on Agni and its Sama State.^[16] As long Agni is in Sama state person can have healthy long life, loss of Agni leads to loss of life. To maintain Swasthya, digestion and metabolism is the main function if Agni.

Physiological and Pathological Aspect of Agni

- a) **Samagni:** this is physiological state of Agni, not associated with Dosha so called as Samagni. The Samagni digest food properly in proper time. This increase health of individuals, quality of Dhatus.^[12]
- b) **Vishamagni:** Vishamagni is state in which improper digestion of food takes palce. Sometime it performs normal metabolism, sometime abnormal metabolism shows following symptoms- Flatulence, abdominal pain, upward movement of Vata in sode koshta, atisar, intestinal gurgling, straining during defecation. When Agni is affected by Vatadosha created Vatavyadhi.
- c) **Tikshangi:** Pitta Dosha dominance present in Tikshagni. Tiksha means Fast/quick. When power of digestion increased normal to above normal food digest very quickly and produces hunger or desire for hunger this condition known as "Bhasmak Roga" in Ayurveda.^[13] Pitta dominance Prakruti Purush have lakshans of Tikshangi.
- d) **Mandagni:** Mand means slow, the digestive power of Mandagni is very low. Kapha Dosha dominance is present. Dhanvantri says this Agni digests the least amount of food in great amount of time and produce symptoms like- heaviness in abdomen and head, cough, dyspnea, vomiting, excessive salivation. Mandagni gives rise to Kaphaj vikara.

CONCLUSION

After detailed discussion of Agni, it can be concluded that, Agni is moola of life. Nourishment of body cells is the important function of Agni takes place through the digestion (Sthulpaka and Sukshama Paka). Sthulpachan is digestion of food in stomach by Jatharagni and Sukshmapachan is digestion of nutrients through

Bhutagni as well as Dhatugani. Agni is main reason for healthy ayu. Sama state maintain Swathya. And vitiated state gives rise to Vyadhi, hence in Kayachikitsa treatment of Agni is also important, for that Agni Parikshan is main tool to Diagnose cause of Vyadhi and correct treatment of Vyadhi.

REFERENCES

1. Sharma R.K. & Bhagwan Dash Charak Samhita Chikitsa Sthan 15/3 Chaukhamba Prakashan, 2009.
2. Charak Samhita-Bramhanand Tripathi -chaukhamba Prakashan; Chikitsa Sthan15/4:edition 2013.
3. Charak Samhita-Bramhanand Tripathi -chaukhamba Prakashan; Chikitsa Sthan15/4:edition 2013.
4. Shabdakalpadrum, Radhakantdev R, Amar Publication Varanasi: ChaukhambaSanskrit.1967:8.
5. Acharya Priyawat Sharma Sushrut Samhita nibhandh sangrah sutra sathan 21/5, Chuakhamba prakashan: varanasni Ed, 2007.
6. Acharya Priyawat Sharma Sushrut Samhita nibhandh sangrah sutra sathan 21/5, Chuakhamba prakashan: varanasni Ed, 2007.
7. Acharya Priyawat Sharma Sushrut Samhita nibhandh sangrah sutra sathan 21/9, Chuakhamba prakashan: varanasni Ed, 2007.
8. Charak Samhita-Bramhanand Tripathi -chaukhamba Prakashan; Sutrasathan Sthan 12/11: edition 2013.
9. Tripathi B. editor. Ashtang Hridayam, Sutra Sthan 12/10: Delhi; 1. Chaukhamba Sanskrit Pratisthan, 2009.
10. Charak Samhita-Bramhanand Tripathi -chaukhamba Prakashan; Chikitsa sthan Sthan15/38: edition, 2013.
11. Acharya Priyawat Sharma Sushrut Samhita nibhandh sangrah sutra sathan 21/10, Chuakhamba prakashan: varanasni Ed, 2007.
12. Tripathi B. editor. Ashtang Hridayam, Sutra Sthan 12/8: Delhi; Chaukhamba SanskritPratisthan, 2009.
13. Charak Samhita-Bramhanand Tripathi -chaukhamba Prakashan; Chikitsa sthan Sthan15/51: edition 2013
14. Sharma R.K. & Bhagwan Dash Charak Samhita Chikitsa Sthan 15/13,14 Chaukhamba Prakashan, 2009.
15. Sharma R.K. & Bhagwan Dash Charak Samhita Sutra Sthan 28/3 Chaukhamba Prakashan, 2009.
16. Charak Samhita-Bramhanand Tripathi -chaukhamba Prakashan; Chikitsa sthan Sthan 15/1-3: edition 2013.

IMPORTANCE OF SATTVA AND SATTVAJAYA CHIKITSA IN COVID-19

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Article Received on 15/03/2021

Article Revised on 04/04/2021

Article Accepted on 25/04/2021

ABSTRACT

Sattva is one of the three attributes of (Aayu) human existence. Sharir, Indriya, Attma these are other. Swastha (health) is depend upon the proper functioning of these attributes. Sattva is entity, which establishes contact between Indriyas and their Aarthas (object). Sattva Bala is provides adequate status of person which is part of the essential treatment. Sattva is described as immunity in Ayurveda. Psychic as well as physical health is important in treatment of disease, Psychic health is depending upon Sattva, for improvement of Sattva in patient Sattvajaya Chikitsa is described. Hence there is a need to assemble Available reference of Sattva and Sattvajaya Chikitsa to analyse the clinical use of Sattva, Sattva Parikshan and Sattvajaya Chikitsa. This is the purpose of this paper.

KEYWORDS: Sattva, Sattva Parikshan and Sattvajaya Chikitsa.**INTRODUCTION**

The word "Sattva" is derived from term "Sat" and "Tva", meaning of the word is Sattvo Bhava.^[1] Sat't refers to existence, reality, truth; Sattva is being true existence, spiritual essence and stable condition of mind and character.^[2] The stable condition of mind and character means person who having dominance of Sattva Guna are mentally stable and does not get frusted, with happiness, anger, fear etc.^[3]

Sattva is also described as Gunas. The Gunas are of 2 types Sharir Guna and Mans Gunas: Sattva, Raja, and Tama are Manas Gunas.

The Sattva Guna means Manas Guna.^[4] Chitta, Chetas, Hrida are the synonyms of Manas Gunas.^[5] Manas originates from mentioned Sattivik, Rajsik, Tamsik Ahankaras.^[6] According to the Sankhya Siddhanta, Shrushti Udpatti done with Sattvika, Rajsik, Tamsik Prakruti that's why they are more important or they are responsible for the Panchtanmatra Uadpatti.^[7]

Manas are the apparatus through which Indriyas percive knowledge.^[8] Indriyas are capable of perceiving knowledge of their respective objects through the Manas only when they are motivated by the Manas.^[9] Hridiya is place of Manas.^[9] Manas has three attributes i.e. Sattva, Raja, Tama.^[10]

Vyadhi are of two types; Sharir Vyadhi, Manas Vyadhi. Sharir Vyadhi occurs at Sharir level and Manas Vyadhi

at Manas.^[11] Manas Vyadhi (Mental disorders) occurs when the Sattva Bhava is depleted.^[12] While at the same time Rajas and Tamas Bhava are increased, So Sattva which is stable condition of mind, steadiness of the sense got lessen by the person and develop the Vyadhi (disease). Whenever there are Sharir Vyadhi, Manas Bhawas get vitiated and whenever there are Manas Vyadhi, Sharir Bhawas get vitiated.

Sattva is positive thinking, goodness, happiness of mind, which is necessary for prognosis of Vyadhi. According to Ayurveda Dashvidha Pariksha^[13] for examination of patient Bala are needed, and Sattva Pariksha is one of them, Hence It is very necessary to examine patients Sattva to access his prognosis. Status of Sattva is associated with person's surroundings i.e. Sattva defers person to person, hence Vyadhi Sadhyaasadyatva depends upon the Sattva of individual. Repeated contact of Rajasik things built Rajasik mind, similarly the Tamasik things built Tamasik mind and Sattivik things increase Sattivik mind which is very useful in the treatment of Vyadhi.

Sattivik food, Sattivik environment, types of activities like yoga, meditation built up Sattva Guna in individuals and that help in Sadhyata of Vyadhi or to cure disease.

Davavyapasraya, Yuktivyapasraya and Sattvajaya Chikitsa are the three ways described in the Ayurveda for the treatment of diseases. Sattvajaya means to overcome or control the mind, or method of restraining

mind from their objects (Artha)^[14] which helps in the improvement of mental status or Sattva of patient.

Covid-19 pandemic has already unleashed panic situation for all peoples, hypervigilance can arise because of fear and anxiety in severe case of covid-19, result in post-traumatic stress disorder or depression. Fear of unknow, in this case, the spread of disease impact on people's mental health, individuals, families, and communities experience feelings of hopelessness, despair, grief, bereavement and profound loss of purpose because of the covid-19.^[15]

So, aim of this article is to put light upon Sattvavajaya Chikitsa in covid-19 protocol in all stages so as to enhance mental, emotional health in covid-19 patient with physical health.

Review of Literature

Acharya charak has described those qualities of good students with dominance of Sattva. This help into improve concentration of mind and body which leads to good physical and mental health. A student with good physical and mental health, spiritual qualities of Sattva is blessed with fearlessness for aberration and strength, which is valuable, asserts of human life. Sattva dominant students can stick to follow the rules of Brahmacharya and acquire higher moral and social virtue. Most of our successful focuses are Sattvika.^[16]

Acharya Sushruta described the Sattvawana is quality of patient, whose disease is easily cured (Sukhsadhya). Sattvawana patients have self-control on their sense which is useful to control pathogenic factor. These patients are aware of disease, they follow rules of Chikitsa and hence Sattvawana Purushas Vhyadhi get cured easily.^[17]

Acharya Vagbhatta described that are Chanda, Bheeru, Krodhi are not treatable because these are the qualities of Avra Sattva. Treatments like Aagnikarma, Ksharkarma, are contraindicated in Bala, Krodhi, Bherru, Stri, and Vrudhha^[18] as they are of unstable mind, incapable to bear pain. If such individuals are treated with these therapies adequate effect of this therapies will not observed.

In Yogdarshan Sattva is described by synonym Chitta. Yogdarshan defined methods to control mind by Ashtang yog, Pratyahara is fifth step of Ashtang yog which is link between body and mind. It works on mind, detache it forms sense organs. Yoga help to control mind by improving self-awareness, control by reducing stress, anxiety, depression and improves self-esteem.^[19]

Sattva of an individual can be determining by observing their behavior, nature, attitude and their involvement in activities. All Acharyas described that importance of Sattva Parikshan as well as effect of Sattva in treatment of diseases.

There are three attributes of nature are described in Shreemad Bhagwad Geeta i.e. Sattva, Rajas, Tamas and they are responsible for bondge of birth and death. These attributes are varying from person to person. Sattva guna gives happiness, stability to mind responsible for knowledge^[20] and health means immunity power of an individual.

Types of Sattva

- 1) Pravara Sattva
- 2) Madhyam Sattva
- 3) Avara Sattva

1) Pravara Sattva

The person of Pravar Sattva comprises quality of Sattva Saar which is having following qualities, Smriti Manto (good memory), Bhakti Manto, Krutadnya Pradhan, Shauchyo, Mahotsaha (entusiastic), Daksha(courage), Dhira(patience), Samarvikrantyo (brave), Tyaktavishada, Suvysvsthit Gathit, Gambhira, Buddhiman(clever), Kalyanaabhinivesha.

2) Madhyam Sattva

A person with Maddhyam Sattva is taken appreciation by other to complete their work. They are motivated by other but they can tolerate pain, can fight any situation.

3) Avara Sattva

A person with Avara Sattva is fear, greef ego, they are panic by small things, and whenever they listen fearful situation, they get panic, depressed, sadness, pallor or death. In Avara Sattva patient shows Tikshna Lakshanas of any Vyadhi even disease condition not that sever, hence in covid -19 patients Sattva Parikshan very useful to treat or its need to increases Sattva of patient for treat covid-19.

Covid -19

The newly identified novel coronavirus, covid -19, was first reported in 2019. which is zoonotic infections thought to have origin from bats & snake. this virus has rapidly spread across the globe leading to many infected people and many deaths.^[15]

Covid-19 is contagious disease caused by severe acute respiratory syndrome corona virus 2 (SARSCOV2). Covid 19 can affect the upper respiratory tract as well as lower respiratory tract. Spreads mainly when an infected person is in close contact with healthy person, Spread through small droplets, aerosols. Common symptoms of covid 19 are fever, dry cough, tiredness, aches & pain, headache, sore throat, diarrhea, conjunctivitis.

Covid-19 affects people in different ways. Most infected people will develop mild to moderate illness. This depends on immunity response of patient to disease.^[21]

The management of covid-19 is symptomatic and supportive.

Importance of Sattvavajaya Chikitsa in treatment of covid-19

Sattva Parikshan is important for access Sadhya-asahyavta of Vyadhi, Sattva Parikshan is described in Ayurveda literature by various Acharyas. Sattva Parikshan is described in Dashvidh Pariksha which is Aatur bala Pariksha means patients Ability to outcome from disease. Therefore, Sattva is most important during this scenario of Covid -19 for help in treatment of covid patients.

Depending upon Sattva, a person suffering from any disease can be divided in two groups; one suffering from severe disease but present with mild disease and another suffering from mild disease presents with severe illness this is due to status of Sattva of that individual.^[22] Hence Sattva Parikshan is important modality in the treatment of covid-19. Ignoring Sattva of patient lead a physician to bad therapeutic decision, this leads to inadequate management of disease which further depends upon prognosis of patient from disease (covid-19).

There are Trividha Chikitsa describe in Ayurveda which has broad aspect of treatment, out of that Sattvavajaya Chikitsa is important for treatment of covid -19. Sattvavajaya means to overcome or control the mind, or method of restraining mind from their objects (Artha).^[23] Having control over Manas such as withdraw it from harmful objects is the main object of Sattvavajaya Chikitsa. Acharya Chakrapani illustrates that Sattvavajaya can be include in both Davavyapasraya as well as Yuktivyapasraya Chikitsa. It will diminish the Rajas and Tamas and increases the Sattva guna, Dhairya, Smriti , indirectly immunity of the person, which is very necessary for the treatment of covid-19. Acharya Charak has been described Pravara Sattva Purusha have stable mental as well as Physical health, that mean Pravara Sattva Purusha has good immunity power (Vyadhikshamtwa). Immunity is very important factor in treatment of covid-19. Indirectly immunity means Sattva of patient that's why Sattva Parikshan is very useful in this covid-19 scenario.

DISCUSSION

Sattva determines confidence, behavior, attitude, enthusiasm of an individual, Pravara Sattva individuals are mostly successful, and they are mentally satble. Sattvik person are helpful, considerate, cooperatives. The mind of Sattvik person is qualified according to his repeated action. Body follows mind so if the mental facilities are pure then one gets divine body, hence the good mental health is important in treatment of covid-19.

The superiority of Sattva is responsible for the perfection of body as well as mind because the physique is merely an out-picturing of the status of Sattva.^[24]

CONCLUSION

Sattva (manas) plays important role in treatment of covid-19 by maintaining of the health of an individual and regulates the body functions by Sattvavajaya Chikitsa.

Sattva is immunity of that individual and good immunity is very essential for treatment of any disease as well as covid-19.

Yoga is method that helps as individual to attain mental and physical health or immunity power. it is mean to be by increasing the dominance of Sattva individual can be free from covid-19. Sattvik person have a clear mind in which truth is reflected without distortion.

The superiority of Sattva is essential to be mental and Physical health.

REFERENCES

1. Shastri G, Amarkasha, 1/5/29 chaukhambha Sanskrit sansthan, Varanasi, Ed- 2008; 70.
2. Sir Monier Williams Sanskrit- English dictionary, Mothilal Banarsidass Publications Varanasi- 1899. reprint 2005.
3. Shastri A.D, Ayurved Tattva Sandipika, Susruta Samhita. Sulra Sthan 1537. Chiaukabha Sanskrit Sansthan, Varanasi, Edition, 2014; I: 156.
4. Tripathi B, Charak Samhita Viman Sihan 8/119, Chaukhamba Surbliarti Prakastan, Varanasi Edition, 2014; 1: 770.
5. G. Shastri H G. Amarkosh, 1529 chaukhambha Sanskrit sansthan, Varanasi: Ed, 2008; 70.
6. Tripathi B, Charak Samhita Sharir Sthan 3/13 Chaukhamba Surbharti Prakashan. Varanasi Eddition, 2014; 1: 868.
7. Gaur B. Charak Samhita, Aishna, Sharir Sthan, 1/18, Rastriya Ayurved Vidyapeetha, New Delhi Edition, 2014; 2: 576.
8. Shastri K. Charak Samhita, Pilhyotani Sutra Sihan 11/20, Chaukhambha Sanskrit Sansthan, Varanasi: Ed, 2013; 1: 153.
9. Tripathi B, editor. Astanga Hridayam, Sharir Sthan 4/13. First elite. Delhi: Chaukhamba Sanskrit Pratishtan, 2009; 390.
10. Tripathi B, Charak Samhita Sharir Sthan 3/13 Chaukhamba Surbharti Prakashan. Varanasi Eddition, 2014; 1: 868.
11. Charak Samhita–Brahmand Tripathi-Charak Samhita Vimansthan 6/3 Varanasi-Chukhamba Surbharti Prakashan- Eddition, 2013.
12. Charak Samhita–Brahmand Tripathi-Charak Samhita Vimansthan 6/3 Varanasi-Chukhamba Surbharti Prakashan- Eddition, 2013.
13. Charak Samhita–Brahmand Tripathi-Charak Samhita Vimansthan 8/94 Varanasi-Chukhamba Surbharti Prakashan- Eddition, 2013.
14. Charak Samhita–Brahmand Tripathi-Charak Samhita Sutrasthan 11/54 Varanasi-Chukhamba Surbharti Prakashan- Eddition, 2013.

15. www.ncbi.nlm.nih.gov/pmc/articles/pmc7361582/.
16. Tripathi B, Charak Samhita vol-1, Vimana Sthan S/8, Chaukhamba Surbharti Prakashan, Varanasi Eddition, 2014; 1: 725.
17. Acharya Priyavrat Sharma, Susruta Samhita, Nibandha Sangraha, Sutra Sthan 23/3. Chaukhambha Orientalia, Varanasi Ed, 2007; 1: 110.
18. Sharma P V, Susruta Samhita. Nibundlsangrohr, Sutra Sthan 1128, Chaukhamba Orientalia, Varanasi Ed, 2007; 1: 50.
19. HR. 3rd ed. Bangalore: VKYP: Yoga, Its basis and applications, 1996.
20. Venna D. The Bhagvad Geeta, 17/8, Books For All, Delhi: Edition, 1999; 264.
21. [www.who.int/emergencies/disease/novel-coronavirus-2019/question-and-answer-hub-q-a-detail/coronavirus-disease-covid-19](http://www.who.int/emergencies/disease/novel-coronavirus-2019/question-and-answer-hub/q-a-detail/coronavirus-disease-covid-19).
22. Shastri A.D. Ayurved Tar Sandipiku Hindi Commentary, Susruta Samhita, Sutra Sihan 35/44, Chaukabha Sanskrit Sansthan, Varanasi, Edition, 2014; 1: 175.
23. Isherwood C. Patanjali Yoga Sutras, 1/44, Sri Ramakrishna Math, Mylapore, Edition, 2011; 52.
24. Gaur B. Charak Samhita, Aishna, Sutra Sthan, 1/54, Rastriya Ayuned Vidyapecetha. New Delhi Edition, 2014; 1: 393.