



Ayurveda

AAHARAVIDHIVIDHAN – AN OBSERVATIONAL SURVEY STUDY IN PEOPLE OF AGE BETWEEN 21 TO 60 YEARS IN MAHARASHTRA

Ajay Thote*	Assistant Professor, Department of Kayachikitsa, CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra, India *Corresponding Author
Shrikant Deshmukh	Professor & H.O.D., Department of Kayachikitsa, CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra, India
Anilkumar Burley	Professor, Department of Kayachikitsa, CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra, India
Nimesh Sangode	Assistant Professor, Department of Rachana Sharir, CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra, India

ABSTRACT Life expectancy is now reduced than 100 years by making mistakes in taking food, and it may also be responsible for the increase of incidence rate of many diseases before the age of 40 years, very few people will live for more than 100 years having healthy life till the end. How a person eats that matters for long life expectancy rather than what he eats. These are stated in *Ayurveda – Charaka Samhita* thousand years ago, termed as *Aaharavidhividhan*. In this busy life people forget to follow these rules, and thus life expectancy is reduced than 100 years in past few decades. People don't know about the *Aaharavidhividhan* and unknowingly hampering the health which ultimately results in decreased life expectancy. Total 271 people were screened under this observational survey study, and 250 were selected by lottery method of simple random sampling to conclude. At the end of an observational survey study, it was found that 73 % people were following *Aaharavidhividhan* as a whole and it is necessary to educate them to follow these rules for maintaining healthy life which will help to increase the life expectancy.

KEYWORDS : *Aaharavidhividhan, Aahara, Viruddha aahara, Healthy life*

INTRODUCTION

New born baby starts breathing at the time birth and may drink Mother's milk within 3 to 4 hours after birth. Two things are necessary for life one is oxygen and second one is *aahar*; i.e., food. So without oxygen humans cannot live for more than 5 minutes and it is also stated that without food humans can live for 21 days⁽¹⁾ but with food humans can live for more than 36500 days i.e. 100 years. Inhalation of oxygen is involuntary procedure but taking food is the voluntary procedure, and people make mistakes while doing voluntary things. Life expectancy is now reduced than 100 years by making mistakes in taking food, and it may also be responsible for the increase of incidence rate of many diseases before the age of 40 years, very few people will live for more than 100 years having healthy life till the end.

Annam vruttikarana shreshtham⁽²⁾. *Anna*, i.e., diet is very much important in maintaining the health of the body. A person born in any country in this world can live for more than 100 years irrespective of the type of food whichever he/she is taking, as a type of food changes according to the availability of in that surrounding area. It means what a person eats that doesn't matter but how a person eats that matters for long life expectancy. We only heard that some hundred years before life expectancy of people is more than 100 years and they must be following some common rules / procedures of making food or taking food as a secret of healthy 100 years life. This secret or rules are stated in *Ayurveda – Charaka Samhita* thousands year before termed as *Aaharavidhividhan*⁽³⁾. But in this busy life people forget to follow these rules and invite diseases at an early stage of their life which becomes vital in some cases, and thus life expectancy is reduced than 100 years in past some decades. Some peoples don't know about the *Aaharavidhividhan* and unknowingly hampering the health which ultimately results in decreased life expectancy.

Aahara, Nidra, and Brahmacharya are the three upastambha⁽⁴⁾ i.e., pillars of healthy life explained in *Charaka Samhita*. *Aahara* plays very important role in maintaining a healthy life. *Aahara vidhi viadhan* is elaborated in *Charaka Samhita*. Under the heading of *Aaharavidhividhan, Acharya Charaka* explained some rules which to be followed by people for healthy life.

Purpose of Selection of this Topic –

Ayurveda was originated to fulfill the two main purposes, one maintaining the health of the healthy or normal person and second to cure the ailment of the ill persons⁽⁵⁾. First purpose *Ayurveda* will be achieved only by maintaining good health, and good health is

maintained by taking healthy diet according to the *Aaharavidhividhan*. So the purpose of selection of this topic was to know whether the people are following the *Aaharavidhividhan* and if they are not following it then educates them to follow this in future for better healthy life.

AIM AND OBJECTIVES

1. To estimate whether the people in society are following *Aahaarvidhividhan* explained in *Charaka Samhita*.
2. To educates them to follow *Aahaarvidhividhan* in future for healthy and long life..

MATERIAL AND METHODS

Inclusion criteria

1. Age between 21 to 60 years of both genders.

Exclusion criteria

1. Age below 21 years and more than 60 years.

It was an observational survey study with the questionnaire was filled by an individual by reading it himself / herself, and as the study was conducted in Maharashtra, the questionnaire was in the Marathi language. All the questions were of closed typed with dichotomous options⁽⁶⁾ as yes and no. According to the collected data percentage calculation was done as how many people gave Yes answer and how many have given No answer to all ten questions.

Aaharavidhividhan – Questionnaire

- | | |
|--|--------|
| 1) Have you take hot & fresh Food? | Yes No |
| 2) Is the food is containing sufficient amount of Ghee & Oil? | Yes No |
| 3) Have you take quantity of food according to your hunger? | Yes No |
| 4) Have you take next meal after complete digestion of meal taken earlier? | Yes No |
| 5) Have you take <i>Viruddha Aahara</i> ⁽⁷⁾ ? | Yes No |

For example – Milk and Fish, Honey and Ghee (in same quantity), Milk and Banana / any other fruit (Milkshake), Eat curd in night, Drink milk after consumption of Garlic or food containing garlic, Drink milk after consumption of Moth beans, Milk and Mango, Honey and Hot water, Take a breakfast every day before defecation, Less or more cocked rice.

(If you are taking one of the above foods together then give yes answer)
Yes No

- 6) A place to cook food and took food is clean? **Yes No**
 7) Do you required less time to finish meal? **Yes No**
 8) Do you required more time to finish meal? **Yes No**
 9) Do you eat food with full concentration (Full concentration means to not to talk or laugh or watch TV or watch mobile while taking food)? **Yes No**
 10) Have you considered that the food to be good for myself & eaten with a fresh mind? **Yes No**

OBSERVATIONS

Table no. 1 - Age wise distribution

Age Group (years)	No. of participants	Percentage
21-30	114	45.60%
31-40	106	42.40%
41-50	22	8.80%
51-60	8	3.20%
Total	250	100 %

Table no. 2 - Gender wise distribution

Gender	No. of participants	Percentage
Female	107	42.80 %
Male	152	57.20 %
Total	250	100 %

Table no. 3 – Questionnaire of Aaharavidhidhan

Questions	Answers			
	Yes		No	
	Number of participants	Percentage	Number of participants	Percentage
Question 1 Have u take hot & fresh Food?	178	71.20 %	72	28.80 %
Question 2 Is the food is containing sufficient amount of Ghee & Oil?	229	91.60 %	21	8.40 %
Question 3 Have you take a quantity of food according to your hunger?	138	55.20 %	112	44.80 %
Question 4 Have you take next meal after complete digestion of meal taken earlier?	204	81.60 %	46	18.40 %
Question 5 Have you take Viruddha Aahara?	67	26.80 %	183	73.20 %
Question 6 A place to cook food and took food is clean?	246	98.40 %	4	1.60 %
Question 7 Do you required less time to finish food?	89	35.60 %	161	64.40 %
Question 8 Do you required more time to finish food?	51	20.40 %	199	79.60 %
Question 9 Do you eat food with full concentration (Full concentration means to not to talk or laugh or watch TV or watch mobile while taking food)?	76	30.40 %	174	69.60 %
Question 10 Have you considered that the food to be good for myself & eaten with a fresh mind?	208	83.20 %	42	16.80 %

DISCUSSION

Hot & fresh food is better in taste, and it helps to regulate maintain *Jatharagni*. It also plays an important role in proper digestion of food, and it regulates *Kapha dosha* for its regular equilibrium. **71.20 %** participants had hot & fresh food.

Food with sufficient quantity of Ghee & Oil also better in taste, maintain *Jatharagni*, and does proper digestion of food. It also helps to do *Vatanulomana*. *Vatanulomana* helps to do proper defecation. It is important to increase physical health of the person. **91.60 %** participants were having sufficient quantity of oil and ghee in their food.

If one should take a quantity of food according to hunger, then it does not only keep *tridosha* in a normal state but also increases life expectancy. Food is taken in normal quantity also reaches to rectum easily. It helps to maintain the *Jatharagni*. *Agnibhojana* results in *Agnideeptikaraka*⁽²⁾. It gets digested without any difficulty. *Atimatrashana* results in *Amadoshavardhaka*⁽²⁾. *Atimatrashana* means having a quantity of food during meal more than the required quantity. *Ama dosha* may be termed as impurities in the body which can get accumulated in the body while doing *atimatrashana*. Only **55.20 %** participants were taking a quantity of food according to hunger.

Food should be taken when earlier taken food is digested completely. If we take a meal before digestion of food which is taken earlier, then it vitiate the *tri-dosha* in the body and because of this *dhatu* in the body is not formed properly. **81.60 %** participants had next meal only after complete digestion of food which was taken earlier.

If *viruddha aahara* is taken, then it may result in *Kushtha vyadhi* or various skin disorders. **73.20 %** participants did not have *Viruddha aahara*.

If we prepare food at the clean place and also eat it at a clean place, then *Manasika vikara* are not acquired. **98.40 %** participants were having a clean place for preparation of food and also to eat food.

If we took less time to eat a meal then it may enter in respiratory tract, i.e. trachea and results into the serious medical issue. One can also not feel the taste of the food. **64.40 %** participants were not required less time to eat a meal.

If we took more time to eat a meal then one cannot feel comfortable regarding food taken. It also results in increase in the quantity of food eat by a person. Hot food became cold, and it may take more time to digest. **79.60 %** participants were not required more time to eat a meal.

If we took food talking with each other, laughing, talking on mobile phone, watching TV, then the one may face same problems discussed above for less time to eat a meal. Only **30.40 %** participants had a meal with full concentration of mind.

One should eat food considering it is good for me and to be eaten with a fresh mind so that food gets digested easily and physical health to be maintained. **83.20 %** participants were considered that the food was good for them and ate with a fresh mind.

CONCLUSION

At the end of this observational survey study, it was concluded that 73 % people were following *Aaharavidhidhan* as a whole and it is necessary to educate people in society to follow these rules for maintaining healthy life which will help to increase the life expectancy.

Further scope of study

Aaharavidhidhan survey should be done in people of age group between 61 to 100 years, and then the percentage result can be compared in both the groups.

A single question can be taken for survey study such as if people have *Viruddha aahra* then the screening of those people can be made to see whether they are suffering from any skin disorder or not.

Brahmacharya is *shreshtha* as *Ayurvedhaka* so that study can be done on *Brahamcharya palana* by people in society.

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ROLE OF SHASHTI UPAKRAMA IN STANA VIDHRADHI (BREAST ABSCESS): A CASE STUDY

Dr. Yennawar Sandhya M.^{1*} Dr. Bawankar Rupali J.² and Dr. Lonikar S. R.³

¹Asso. Prof., Streerog & Prasutitantra Dept. C.S.M.S.S. Ayurved College, Aurangabad.

²Asso. prof., Rassastra Dept. C.S.M.S.S. Ayurved College, Aurangabad.

³Prof. Shalyatantra Dept. C.S.M.S.S. Ayurved College, Aurangabad.

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***Corresponding Author**

Dr. Yennawar Sandhya

M.

Asso. Prof., Streerog &

Prasutitantra Dept.

C.S.M.S.S. Ayurved

College, Aurangabad.

ABSTRACT

The detail study of breast diseases has been found in Sushruta Samhita. The common breast complications in puerperium are breast engorgement, breast abscess, cracked & retracted nipple, mastitis, failing lactation. Breast engorgement is due to exaggerated normal venous & lymphatic engorgement of the breast which precedes lactation. Acute mastitis is inflammation of breast. When a pregnant lady or a lady in puerperium consumes of wholesome food or allows unwholesome regimen the vitiated dose reach the lactiferous ductules or through vessels reach the breast & form a hard vrana shotha. This type of inflammatory swelling can occur in both a lactating or non lactating breast. If above conditions are not diagnosed properly & not

adequately treated it leads to variable destruction of breast tissues with the formation of a breast abscess. Breast abscess it is a condition with a brawny oedema of the overlying skin marked tenderness with fluctuation, swinging temperature. According to Ayurved breast abscess is correlated with Stana Vidhradhi. Acharya Sushruta has described shashti Upakrama (60 measures) for Vranashopha, Vranavidhradhi & Vrana. Among these pachan, parishek, bhedan, pidan, shodhan & ropan treatment is used for Stana Vidhradhi.

We observed complete relief from signs & symptoms of Stana Vidhradhi within 1 & ½ month. By this case study we conclude that the holistic approach of ayurvedic shashti upakarmas plays an important role in the management of stana vidradhi (Breast abscess) & presented a case study.

KEYWORDS: Vrana, vranashopha, vranashodhan, vranaropan, shashtiupakrama, Breast

abscess and Mastitis.

INTRODUCTION

The common breast complications in puerperium are

- 1) Breast engorgement
- 2) Cracked & retracted nipples
- 3) Mastitis
- 4) Breast abscess 5)Failing lactation

Breast engorgement^[1]

It is due to exaggerated normal venous & lymphatic engorgement of the breast which precedes lactation. This in turn prevents escape of milk from the lacteal system. The primiparous patient & the patient with inelastic breasts are likely to be involved. It's onset after the milk secretion starts i.e. 3rd or 4th day of postpartum.

Acute mastitis^[2]

Inflammation of breasts.

There are two different types of mastitis depending upon the site of infection.

- 1) Infection from a cracked nipple.
- 2) From lactiferous duct.

Responsible organism is predominantly staphylococcus aureus, the nursing mother being the carriers or the infection may come from the nasopharynx of the baby. The onset is acute during 2nd or 3rd week of puerperium.

If above conditions are not diagnosed properly & not adequately treated it leads to variable destruction of breast tissues with the formation of a breast abscess.

Breast abscess^[3]

It is a condition with a brawnyoedema of the overlying skin marked tenderness with fluctuation, swinging temperature.

According to modern science the abscess is drained under local anesthesia by a deep radial incision extending from near the areolar margin to prevent injury of the lactiferous ducts.

After incision of the breast abscess finger exploration is done to break up the wall of the loculi. A corrugated rubber drainage is inserted through a separate incision on the dependent site.

The cavity is loosely packed with gauze which should be replaced after 24 hours by a smaller pack. The procedure is continued till it heals up.

According to Ayurveda breast abscess is correlated with stana vidradhi^[4]

When a pregnant lady or a lady in purperium consumes of wholesome food or allows unwholesome regimen the vitiated dose reach the lactiferous ductules or through vessels reach the breast & form a hard vrana shotha. This type of inflammatory swelling can occur in both a lactating or non lactating breast.

Vrana shotha indicates the inflammatory stage which leads to the causation of localised collection of pus called vidradhi or abscess which once suppured or improperly treated cause ulcer(vrana).

Thus vrana shophya (shotha)---vidradhi---vrana.

The cause may be either intrinsic (due to vitiated dosha) or extrinsic (agantuja) According to acharya Sushruta,

त्वङ् मांसांससरा स्नायुवास्सुस्थिकोष्ठी ममाण्णित्यष्टौ व्रण
वस्तून् अत्र सवा व्रण सस्थनवेशः । (सु.स. २२\३)^[5]

According to Sushruta, there are skin (twak), muscles (mamsa) vessels (sira), ligaments (snayu), bone (asthi), joints (sandhi), abdomen (koshta), & vital structures (marma) are the eight vranavastu (certain tissues or structures) needed to be vitiated for vranashoths to occur.

Out of these skin, muscles & ligaments are involved in breast abscess (stana vidhradhi). Patient with stana vidhradhi visited to our hospital on dated 24/9/2016.

Acharya sushruta has described shashti upakrama (60 measures)^[6] for vranashophya, vranavidhradhi, vrana. Among these pachan, parishek, bhedan, pidan, shodhan & ropan treatment is applied for stana vidhradhi.

By this case study we conclude that the holistic approach of ayurvedic shashti upakarmas plays an important role in the management of stana vidradhi (Breast abscess)& presented a case study.

Among the 60 upakarman, pachan,(suppuration),drainage(visaravna) pidan (squeezing), bhedan,shodhan & ropan of vrana are applied for the presented case study.

CASE STUDY

Her medical history reveals that she was 2nd para with 1 ¼ month sutika(PNC).She was delivered on 16/8/2016at our hospital Aurangabad, with episiotomy. Patient was on request discharge on 22/8/2016 without any complaints

Patient went her hometown. After three weeks of delivery patient was feeling lump in left breast with congestion & mastalgia, so pt. went in private hospital at her home town. At that time pt. was treated by antibiotic with anti- inflammatory drugs for 7 days. Patient complains exaggerated instead of relief in symptoms & advised for partial mastectomy.

Patient was visited on 24/9/2016with above complaints in our hospital. After local observation of left breast it was found that feeling the lump in left breast partial mobile & partial immobile, increased local temperature, congestion with formation of antibioma.

Patient was clinically diagnosed by an ayurvedic approach as a Apakava vranashotha. Asthavidha parikshan of the patient was done

Pt.name:---xxxxx

Age:-29 yrs./female/Hindu by religion. Address:--South city cidco N2 Aurangabad.

Occupation:--House wife

OPD NO.:--30351

Date:-24/9/2016

Chief complaints:---1 ¼ month sutika(PNC)

Feeling lump in breast

Lump was partially mobile & partially immobile. Mastalgia+++

Tenderness+++ Congestion +++ O/H:-- G2P2L2

L1—♂ child 5yrs (fnd)

L2----♂ child 1¼ months (ftnd)

Past History:--No h/o systemic HT, DM, Asthama or any major illness. No h/o any type of allergy. General Examination:- G. C. Good

Temp.—99c	Shabda—sakashta
Pulse—88/min/regular	Sparsha--Anaushna
R/R—20/min	Druk—Normal
B.P.—120/70mmofHg	Akruti—madhyam
Mala---samyak pravritti	Weight—52kg
Mutra---samyak pravritti	

Res. System

Lungs—NAD Heart--NAD

CVS---S1 S2 Normal

CNS---Conscious, well oriented Local examination:--

Darshan pariksha(inspection):---Left breast congestion at 11O' to 12O'clock position above the 2nd ry areola.

Sparshan (palpation):--↑local temperature Tenderness++

Feeling partially mobile & partially immobile lump Prashana (Question):--Pain, Burning sensation

Lab investigation:-CBC, BT, CT, ESR--- WNL (within normal limit) HIV I/II –negative
HbsAg - negative VDRL—Non reactive

R—WNL (within normal limit) MS—WNL (within normal limit)

According to accharya Sushruta she was diagnosed as apakva stana vidhradhi. Treatment:---

Patient was treated as follows

- 1) Avoid the breast feeding from left breast
- 2) Support the breast
- 3) Excretion of breast milk repeatedly with breast pump.
- 4) Local lepa of kanchanar guggulu.
- 5) Orally kanchanar guggulu.500mg×bd
- 6) Sukshama triphala 250mg ×bd

MATERIAL AND METHODS

- 1) Vranashopha lepa of kanchnara gugulu it help suppuration of apakva vranashopha.
- 2) Vranadhavan with triphala kwath.
- 3) Vranashodhana taila (vranavarti).
- 4) Vranaropan taila (vranavarti) Vranadhavan with Triphala.^[7]

Drug name	Latin name	Rasa	Guna	Virya	Vipaka	Karma
Haritaki	Terminalia chebula	Pancharasa kashayapradhan	Laghu,Ruksha	Ushna	Madhur	Tridoshaghana Rasayan
Bibhitaki	Terminalia bellerica	Pancharasa kashayapradhan	Laghu,Ruksha	Ushna	Madhur	Lekhan Shothaghana
Amalaki	Embelica officinalis	Pancharasa Amlapradhan	Laghu,Ruksha	Sheeta	Madhur	Antioxidant rasayan

Vranashodhan Tail Ingredients^[8]

Drug name	Latin name	Rasa	Guna	Virya	Vipaka	Karma
Arka	Calatropis gigantean	Katu Tikta	Laghu Ruksha Tikshana	Ushna	Katu	Shophaghana krumighana kandughna
Chameli	Jasminum grandiflorum	Tikta Kashaya	Laghu Snigdha Mrudu	Ushna	Katu	Tridoshahara vranashodhan vranaropan
Aragvadha	Cassia Linn	fistula	Madhur	Mrudu Guru Snigdha	Sheeta	Madhur Kaphapittahar
Langli	Gloriasa superba Linn	Katu Tikta	Laghu Tikshana	Ushna	Katu	Kaphapittahar shothahar
Chitrak	Plumbago zeylanica Linn	Katu	Laghu Ruksha Tikshana	Ushna	Katu	Deepan vatakaphahar Shoolaghana krumighana
Patha	Cissampelos Pariera Linn	Tikta	Laghu Tikshana	Ushna	Katu	Vatakaphahar grahi balya vishaghana
Vidang	Embelia ribes Burmf	Katu kashaya	Laghu Ruksha Tikshana	Ushna	Katu	Vishaghana krumighana
Trivrutta	Operculina lurpethum	Katu Madhur	Laghu Ruksha	Sheeta	Katu	Kashayavatahar deepan
Danti	Baliospermum montanum muell	Katu Tikta	Laghu Ruksha Tikshana	Ushna	Katu	Shophaghana krumighana kandughna
Karveer	Nerium indicum	Tikta Kashaya	Laghu Snigdha Mrudu	Ushna	Katu	Tridoshahara vranashodhan vranaropan

Snuhiksheer	Euphorbia nerifolia Linn	Madhur	Mrudu Guru Snigdha	Sheeta	Madhur	Kaphapittahar
Haridra	Curcuma longa Linn	Katu Tikta	Laghu Tikshana	Ushna	Katu	Kaphapittahar shothahar
Daruharidra	Berberis aristata	Katu	Laghu Ruksha Tikshana	Ushna	Katu	Deepan vatakaph ahar Shoolaghana krumighana
Nimba	Azidirachta indica	Tikta	Laghu Tikshana	Ushna	Katu	Vatakaphahar grahi balya vishaghana
Kutki	Pichrorhiza kurroa Royle	Katu kashaya	Laghu Ruksha Tikshana	Ushna	Katu	Vishaghana krumighana
Apamarg	Achyranthus aspera Linn	Katu Madhur	Laghu Ruksha	Sheeta	Katu	Kashayavatahar deepan
Vacha	Acorus calamus Linn	Katu Tikta	Laghu Tikshana	Ushna	Katu	Lekhaniya kaphahar jwaraghana
Patol	Tricosanthes dioka Roxb	Katu Tikta	Laghu Ruksha Tikshana	Ushna	Katu	Varnya dahaghana deepan pachan
Kantakari	Solanum surattense	Katu Tikta	Laghu Ushna Tikshana	Ushna	Katu	Kaphavathar Deepan pachan
Kasis	Ferrous sulphate	Amla Tikta kashay	Ushna	Ushna	Katu	Vatakaphahar vishaghana
Manshila	Arsenic disulphide	Katu Tikta	Lekhan Snighdha	Ushna Ushna	Katu	Lekhana shoshan Vishaghana
Hartal	Arsenic trisulphide	Katu Kashay	Guru Snighdha	Ushna	Katu	Deepan kaphashamak lekhan
Yavkshar		Katu kashay	Laghu Snighdha Tikshana	Ushna	Katu	Deepan pachan
Lavan	Sodium chloride	Lavan	Laghu Snighdha Tikshana	Ushna	Katu	Deepan anuloman

Vranaropan Tail Ingredients^[9]

Drug name	Latin name	Rasa	Guna	Virya	Vipaka	Karma
Udumbar	<i>Ficus racemosus</i>	kashay	Guru ruksha	sheet	katu	Kaphapittahar dahashamak varnay vranaropak vranashodhak
Nygrodh	<i>Ficus</i>	kashay	Ruksha	Sheet	katu	vranaropak vranashodhak Tridoshaghana
Ashavattha	<i>Ficus religiosa</i> Linn	Kashy madhur	Guru ruksha	sheeta	katu	Kaphapittahar varnay vranaropak vranashodhak
Shwetadurwa	<i>Cynodon dactylon</i>	Kashy madhur	Laghu sheeta	sheeta	madhur	Kaphapittahar varnay Raktapittahar prajastapak
Guduchi	<i>Tinospora cardifolia</i> wild	Tikta kashay	Guru snighdha	ushna	madhur	Tridoshaghana dahaprasham Medohar rasayan jwaraghana
Ashwagandha	<i>Withania somnifera</i>	Katu tikta kashay	Snighdha laghu	ushna	katu	Vatakaphahar rasayan shotahar balya
Lajjalu	<i>Mimosa pudica</i> Linn	Kashay tikta	Laghu ruksha	sheeta	katu	Sandhaniya jwaraghana kaphapittahar
Devdaru	<i>Cedrus dcodara</i>	Tikta katu kashaya	Laghu ruksha	ushna	katu	Shotaghana dushtavranaghana krumighana kaphavatahar
Chandan	<i>Santalum album</i>	Tikta madhur	Laghu ruksha	Sheeta	katu	Varnya dahaprashman kandughana kaphapittahar
Prushniparni	<i>Uraria picta</i>	Madhur tikta	Laghu snighdha	ushna	madhur	Tridoshaghana dahashaman grahee deepan
Kapikachu	<i>Mucuna prurita</i>	Madhur tikta	Guru snighdha	Ushna	madhur	Dushtavranaghna vatapittahar balya
Malti	<i>Jasminum grandiflorum</i> Linn	Tikta kashay	Laghu snighdha mrudu	Ushna	katu	vranaropak vranashodhak Tridoshaghana
Tagar	<i>Valeiana wallichill</i>	Tikta katu kashay	Laghu snighdha	ushna	katu	Vishaghana kaphavataghana
Priyangu	<i>Callicarpa macrophylla</i>	Tikta kashay madhur	Guru ruksha	sheeta	katu	Raktapittaghana Jwaraghana Dahaghana kaphapittahar

Dhava	Anogeissus latifolia	kashay	Laghu ruksha	sheet	katu	Kushtaghana kaphapittahar
Daruharidra	Berberis aristata	Tikta kashay	Laghu ruksha	Ushna	katu	Chedan varnay kaphapittahar
Ral	Shorea robusta gaertn	Kashay madhur	Ruksha ushna	sheet	katu	vranaropak Tridoshaghana Varnya krimighana
Kshirivruksha	----	Kashay	Ruksha	sheet	katu	vranaropak vranashodhak Tridoshaghana

OBSERVATION TABLE

Date	Observation	Treatment
24/9/2016 to 30/9/2016 (6 th day) 16(1 st to 5 th day)	Apakva vranashotha(vidradhi) Darshan –Congestion Sparshan—half mobile & half immobile lump Formation of antibioma	Cold shaking Avoid breast feeding(from left breast Support the breast. Excretion of milk. Tab.Kanchnar guggulu ^[10] 500 mg bd Tab.Sukshma triphala ^[11] 250 mg BD.
1/10/2016 to 5/10/2016 (6 th to 10 th day)	Pakva vranashotha(vidradhi) Darshan –Congestion Sparshan— Fluctuation +++ Feeling soft	As above
6/10/2016 (11 th day)	Burst naturally Slough with blood stain +++ Foul smelling Inflammation +++ Edges indurated Tenderness+++ Measurment:7cm in depth 5cm in breadth	Drainage of pus Tab.Clavam 625mg 1bd Tab.Zerodol-sp1bd Tab.Limcee 1od

OBSERVATION TABLE

Date	Observation	Treatment
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	Base: sloughy	
8/10/2016(13 th day)	Formation of dushta vrana Slough with blood stain +++ Foul smelling Inflammation +++ Edges indurated Tenderness+++	Vranadhanvan with triphala kwath Vranashodhan tail varti throughout depth Gandhaka rasayan ¹² 250mg1bd Sukshma triphala250mg1bd
13/10/2016(18 th day)	Slough ++ Inflammation + Edges indurated Tenderness+ Measurment:5cm in depth 3cm in breadth Base: sloughy	Vranadhanvan with triphala kwath Vranashodhan tail varti throughout depth Gandhaka rasayan 250mg1bd Sukshma triphala 250mg1bd
15/10/2016(21 st day)	Slough ↓(Shuddha vrana) Inflammation + Edges soft Tenderness+ Base:granulated	Vranashodhan with triphala kwath Vranaropan tail varti throughout depth Gandhaka rasayan 250mg1bd Sukshma triphala 250mg1bd
23/10/2016 (29 th day)	Slight slough ↓↓ Edges slopping Serous discharge+ Tenderness Microscopic examination of milk	Vranaropan tail varti Gandhaka rasayan250mg1bd Sukshma triphala250mg1bd
31/10/2016 (37 th day)	Slough absent No foul smelling Edges: soft Tenderness ↓↓ Base:Healthy granulated Measurment:2cm in depth 1cm in breadth	Vranaropan taila varti Gandhaka rasayan250mg1bd Sukshma triphala250mg1bd
5/11/2016 (42 th day)	Healthy granulation Wound healthy Measurment:1cm in depth 0.3cm in breadth	Vranaropan taila varti Gandhaka rasayan250mg1bd Sukshma triphala250mg1bd
10/11/2016 (47 th day)	Healthy wound healing	----

RESULT

Left breast abscess was cured & healed completely.

DISCUSSION

Vrana sotha (sopha) indicates the inflammatory stage which leads to the causation of a localized collection of pus (abscess/vidhradhi) which one suppured or improperly treated causes ulcer (vrana) i.e. (vrana shotha – vidhradhi— vrana) causes may be either intrinsic (due to vitiated dosha) or extrinsic (agantuja).

There are 3 stages through which inflammation proceeds. Vranashotha—Amavastha (stage of minor tissue damage) Vranashotha—Pachyamanavastha (stage of acute inflammation) Vranashotha—Pakvavastha (stage of pus formation)

वातादत्ते नास्ति रुजा न पाकः पित्तादत्ते नास्ति कफाच्च पः ।

तस्मात् समस्तान् परपाककाले पच्यते शोफान् त्रय एव दोषः ॥ (सु.स १७/१३)^[13]

In vranasotha pain is caused because of vitiated vata, burning sensation & suppuration is caused by vitiated pitta, swelling & discharge (pus) is caused by vitiated kapha & the area appears red because of involvement of vitiated rakta along with vitiated dosa play an important role in ensuring paka of vrana sotha.

When patient was visited to our hospital she was in pakvavranashotha of left breast so to adopt pakvavranashotha bahya chikitsa i.e. lepa of kanchnar guggulu was applied on left breast. This help in suppuration (pachan) by its katu rasa, laghu guna, ushna virya & katu vipaka.

After pakvavastha it burst naturally & pus had been drained out completely.

Now the abscess is turn into dushta vrana. 60 upakarma of vrana described by acharya Sushrutacharya.

तेषु कषायोवन्तः कल्कः सपस्तैलः

रसादिभ्योऽवचननात्मनः शोऽनरोपणान्न ॥ (सु.स १/९)^[14]

Among those kashaya shodhan tail (cleaning) ropan tail, (healing) karmas was used for further line of treatment.

शोणितोरोपणोश्चव पक्षिः योज्यां प्रकीन त्तः ॥

सवा व्रणानां सामाधयेनोक्तो षपवशषतः ॥ (सु.धच. १/७४)^[15]

Vranadhavan

In this case to treat dushtavarana, dhavan is done by triphala kwath. Due to triphala kwath all debris, dushta kleda pus washed out & disinfection of wound was done.

All types of vrana can be managed by shodhan & ropan vidhi.

व्रणशोणनां नाम प ादद द्धु टद्रव्यपवस्वावाणम् । सु.धच. १७/१८

Vranashodhan taila varti

To convert the dushta vrana into shuddha vrana.

The ingredients in shodhan taila having property kledhghana, dushtavranaghana, tikta rasa, ruksha guna, pachan, katu vipaka, sheeta veerya help to convert the dushta vrana into shuddha vrana.

Vranaropan taila varti

After turning of dushta vrana in shuddha vrana ropan chikitsa was applied.

रोपयन्त व्रणम् इन्त रोपणः ।

यत्रो कषायो रसः । सु.स २६/४३

The ingredients in ropan taila having property of sangrahi sandhaniya, ropan, shothaghana, kaphapittaghana, kledhaghana, krumighana, helps to absorb the secretion from the wound, stimulates nutrition of dhatu helps in opposition of skin flaps & formation of healthy granulation tissues & wound healing takes place.

Abhyantar chikitsa

Gandhak rasayana & Sukshmathriphala both acts as antiseptic by Jantughana, vishaghana, jwaraghana, yogwahee, kaphadoshaghana, and rasayan property.

CONCLUSION

- 1) The holistic approach (shashti upakarama) of ayurvedic system of medicine gives completely relief to the patient from stanavidhradhi.
- 2) Medicine used in the above is cheap, effective & easily available.
- 3) No need to partial mastectomy.

Cosmetic purpose was also achieved.

BEFORE TREATMENT**DURING TREATMENT**



AFTER TREATMENT**REFERENCES**

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A clinical study to evaluate the efficacy of Vrushya Madhuka Yoga in the Ksheena Shukra w.s.r. to oligospermia.**Aakash R. Chaudhari¹, S. M. Yennawar², J. S. Deshmukh³**

1. PG Student Final Year,
2. Asso. Prof. Guide,
3. Prof. HOD.

Dept. of Prasutitantra-Streerog, C.S.M.S.S. Ayurved Mahavidyalaya,
Kanchanwadi, Aurangabad.

*Corresponding Author- aakashchaudhari05@gmail.com; Mob.no. 9665434555

ABSTRACT

Ksheenashukra is a condition in which there is a qualitative and quantitative decrease of shukradhatu. It may be altered and may lead to shukradushti when vata and pitta dosha are vitiated in a body. By definition and symptoms Ksheenashukra it can be correlated with Oligospermia. A study was made to assess the efficacy of VrushyaMadhuka Yoga on seminal parameters without any shodhana procedures at OPD level. As a drug under trail has based on hypothesis that is ingredients Yashtimadhu, Ghrita(Goghrita) and Kshaudra(Madhu)having Vrushya property and it is useful for combatingKsheenashukra. Hence the trial of the drug VrushyaMadhuka Yoga was done on diagnosed male patient of oligospermia from the OPD of CSMSS Ayurved Rugnalaya, Aurangabad with detailed semen analysis. Duration of clinical trial was 90 daysand the patient were followed up after 30 days to evaluate the effect of trail drug. Single case study has been performed and significant result were seen.

KEYWORDS – Ksheenashukra, Oligospermia, VrushyaMadhuka Yoga⁸.

INTRODUCTION

Ayurveda is a science of life. In Ayurveda 7 Dhatus has been described and Sara of all dhatu is considered as Shukradhatu. Now a days sedentary life style, where people prefer to take out side food more often and busy work schedule have made humans more vulnerable to many disease. Its effects on formation of Shukradhatu.

Sushrutacharya stated that Ksheenashukra is caused by vitiation of Pitta and Vata.¹ It is condition characterized by Medhra and Vrushanvedana, Ashatki, Apresaka, Raktadarshan.²According to CharakacharyaKsheenashukra is a condition in which there is a qualitative and quantitative decrease of Shukra characterized by Daurbalya, Mukhashosha, Pandutva, Sadanam, Shrama, Klaibya, Shukravisrga.³Ksheenashukra is one of the Shukra dosh which is the common etiology for Male infertility.⁴Infertility is defined as a failure to conceive within

one or more years of unprotected coitus.⁵ By definition and symptoms Ksheenashukra it can be correlated with Oligospermia. Oligospermia is condition where the sperm concentration is less than 20million/ml. whereas normal sperm count of healthy person is about 120million/ml. and normal ejaculated volume at each coitus is 3.5ml.⁶ Therefore, Oligospermia is one of the prime factors in male infertility. In allopathic treatment of Oligospermia may give positive results, but their prolonged use may cause side effect and may cause impotency.⁷ In modern medical science we have seen very advance technologies like IVF, GIFT, ZEFT, ICSI etc. But it is not accepted widely in India, where poverty is rampant. So it is unable to provide these services to all class of people in society and it may be hardly successful many times. To out come through above mentioned problem, for better results in Ksheenashukra, choose an Ayurvedic drug "VrushyaMadhuka Yoga"⁸ It is having Vrushya property and it is use for combating Ksheenashukra. It is easily available and much cheaper than other drug and minimum or no side effect.

AIM & OBJECTIVES –

AIM -

TO STUDY THE EFFICACY OF VRUSHYA MADHUKA YOGA IN KSHEENA SHUKRAW.S.R. TO OLIGOSPERMIA.

OBJECTIVES–

- ❖ To evaluate the efficacy of VrushyaMadhuka Yoga in the management of Ksheenashukra.

- ❖ To carry out the comprehensive literary work Ayurveda classic, contemporary system of Medicine on Ksheenashukra (Oligospermia).
- ❖ To study detailed pathophysiology of Ksheenashukra. (Oligospermia).

CASE REPORT –

A male patient, aged 30 years presenting with complaints of Maithun-ashakti (libido), Shukra-avisarga (ejaculation of semen), Shrama (fatigue), Daurbalya (weakness), Sadanam (Exhaustion) during sexual intercourse since 7-8 months came in OPD of CSMSS Ayurved Rugnalaya, Aurangabad. Patient had taken initial treatment at private hospital but had no relief and the semen analysis report brought by the patient it is understood that he is suffering from Oligospermia.

Chief complaints –

- Sadanam (Exhaustion)
- Shukra-avisarga (ejaculation of semen)
- Daurbalya (weakness)
- Shrama (fatigue)

Personal history –

- Surgical – Nothing significant
- Allergic - Nothing significant
- Addictions - Nothing significant
- Family history - Nothing significant

Physical examination –

- BP – 120/80 mm of Hg

- PR – 80 / Min.
- RR – 20 / Min.
- Temp. – 98.6⁰ F
- Testicles – Normal (Size & Shape)

Systemic examination –

- CVS – S₁ S₂ normal
- CNS – NAD
- RS – AEBE clear
- GIT – NAD

Lab investigations –

- **Semen analysis**–
Abstinence – 6 days

Physical examination –

Quantity – 1.5 ml
Transparency – Translucent.
Self Liquification – Complete
within 25 minutes
Colour – Milky white
Viscosity – Moderate

Chemical examination –

Fructose – Present.
pH – 7.1

Microscopic examination –**Sperm Count –**

The number of spermatozoa per ml – 1.3 Millions
The number of sperms per ejaculate – 1.9 Millions
Viability – 0 % spermatozoa alive at the end of ½ hr.

Motility Of Spermatozoa

Total Forward Progressive– 5 %

Rapid linear progressive – 0 %

Sluggish linear progressive – 5 %

Non-Progressive - 10 %

Non-Motile – 85 %

Final Diagnosis – Ksheenashukra (Oligospermia).

Treatment given –“VrushyaMadhuka Yoga”.Which contains Madhuka (Yashtimadhu), Ghrita(Goghrita) and Kshaudra(Madhu).

Drug Review –**1. Yashtimadhu**

Botanical name –
Glycerrhizaglabra.
Useful part – Mula (Root)
Rasa – Madhura
Virya – Shita
Vipak – Madhura
Guna – Guru, Snigdha
Karma – Shukravardhak, Medhya, Pittahara.

2. Madhu (Honey)

Ras – Madhura, Kashaya.
Guna – Ruksha, Shita, Laghu.
Karma – Deepana, Varnya, Svarya, Lekhana, Hridya, Vajikarana, Sandhankar, Shodhana, Ropana and Prasadana.

3. Ghrita

Here, ghrita means Goghrita. Goghrit is best among all types of ghrita.

Ghrita is considered food as well as medicine. It is rich in antioxidants and helps in absorption of vitamins and minerals from food.

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Rasa – Madhura (Charak, Sushrut, Bh.P.)
 Virya – Shita (Sushrut, Bh.P.)
 Vipaka - Madhura (Charak, Sushrut, Bh.P.)
 Guna – Guru, Snigdha, Manda, Mrudu, Sheeta

Sevankal – Pratahakali

Anupana – 200 ml of Koshnadugdha.

Duration – 90 Days.

Follow up – Follow up was taken on every 30 days.

Dose – 25gms

Assessment Criteria (Subjective) -

Score → Symptoms ↓	Grade 0	Grade 1	Grade 2	Grade 3
Sadanam (exhaustion)	No exhaustion at all	Slight exhaustion occasionally	Exhaustion during sexual encounter	Exhaustion without sexual encounter
Shukra-avisarga (ejaculation of semen)	Normal ejaculation (self and partner satisfaction)	Early ejaculation after penetration	Prolonged ejaculation after penetration	No ejaculation at all
Daurbalya (weakness)	No weakness at all	Slight weakness occasionally	Weakness during sexual encounter	Weakness without any activity
Shrama (fatigue)	No fatigue	Fatigue not affecting his sexual activity	Fatigue affecting his sexual activity	Fatigue without any activity

Objective criteria –

Value → Semen Analysis ↓	Grade 0	Grade 1	Grade 2	Grade 3

International Journal of Research in Indian Medicine

Total Sperm Count	>40million/ml.	30-40million/ml.	20-30million/ml.	<20million/ml.
Sperm Motility	>50% progressive forward motility	40-50%	30-40%	Non Motile<25%
Sperm Volume	2.0ml or More(1.5ml)	1-1.5ml	0.5-1ml	<0.5ml.

❖ Observation & result(Subjective criteria)

No.	Observation	Before T/t 0 day	30 th day	60 th day	90 th day
0;1	Sadanam (exhaustion)	3	3	2	1
2	Shukra-avisarga (ejaculation of semen)	3	3	2	1
3	Daurbalya (weakness)	0	0	0	0
4	Shrama (fatigue)	1	1	1	1

(Objective Criteria)

No.	Observation	Before T/t 0 day	90 th day
1	Total sperm count	1.3 ml	4.5ml
2	Sperm Volume	1.8 ml	2.0ml
3	Sperm Motility		
	Total Forward Progressive	5%	5%
	Rapid linear progressive	0%	5%
	Sluggish linear progressive	5%	10%
	Non-Progressive	10%	20%
	Non-Motile	80%	60%

Conclusion ;-

The effect of treatment for the subjective criteria such as Sadanam, Shukra-avisarga, Daurbalya, Shrama of ksheenshukra “VrushyaMadhuka Yoga” is significant.

.The effect of treatment for the objective criteria such as Sperm count, Motility and Volume of VrushyaMadhuka Yoga is improved.

The single case study shows that the “VrushyaMadhuka Yoga” has potential action on ksheenaShukra (Oligospermia). It is Easily available and No side effect.

Further study is needed to evaluate it’s efficacy in more patients so that it can prove beneficial to mankind.

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A clinical study to evaluate the efficacy of Vrushya Madhuka Yoga in the Ksheena Shukra w.s.r. to oligospermia.

Aakash R. Chaudhari, S. M. Yennawar, J. S. Deshmukh

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**A CLINICAL TRIAL OF PATHA TRIKANTAKA VRUKSHAKA
KWATHA IN THE MANAGEMENT OF GRANTHIBHUTA
ARTAVADUSHTI**

Dr. Guddi Jaynath Yadav*¹, Dr. Sandhya Yennawar² and Dr. J. S. Deshmukh³

¹C.S.M.S.S Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad.

²Asso. Professor, B.A.M.S., D.G.O B.A.M.S.D.G.O.Ph.D, Prasuti Tantra & Prasuti Tantra & Streerog.

³Professor & HOD, B.A.M.S., D.G.O B.A.M.S.D.G.O.Ph.D, Prasuti Tantra & Prasuti Tantra & Streerog.

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***Corresponding Author**

Dr. Guddi Jaynath Yadav

C.S.M.S.S Ayurved

Mahavidyalaya,

Kanchanwadi, Aurangabad.

ABSTRACT

God has gifted women with rare & unique phenomenon of giving rise of offspring. To fulfil the above aim effectively, nature has conferred special anatomical and physical characteristics in the women which are collectively referred to as "*Streekarabhav*". One among them is the concept of *Rajapravruti* i.e *Artava*. As human life is constantly influenced by the rhythmic phenomenon operative in this universe, the female menstrual cycle which involve dramatic hormonal changes affecting a women's emotional and physical state. The menstrual cycle which involves the shedding of endometrium, which was prepared in anticipation of providing a bed for fertilized gamete, when fails result

into the manifestation of - मासानुमासिक रजः प्रवृत्ती means आर्तव प्रवृत्ती | As per *Brihatrayee* and *Laghutrayee* there are eight types of *Artavadushti* and among them is *Granthibhuta Artavadushti*.

Lakshan of Grathibhuta Artavadushti

“ग्रन्थिभुतश्लेष्मवाताभ्याम्।”¹ सु.शा.२/४

Vataja Artavadushti :- “तेषु वातवर्णवेदनम्वातेन।”¹ सु.शा.२/४

Kaphaja Artavadushti :- “श्लेष्मवर्णवेदनश्श्लेष्मणा।”¹ सु.शा.२/४

Need for Study: Due to addiction of junk food, night shift, physical and mental stress from home and office leads to many diseases. Among these various problems, *Granthibhuta Artavadushti* is remarkable problem to women health having pain and altered colour of menstrual blood. In *Sushrut Sharir Sthana*,

“आर्तवमपि त्रिभिः दोषैः शोणीतचतुर्थैः प्रुथग्दन्द्वाैः समस्तेश्च उपसृष्टम् अबीजम् भवति ॥”^[1]

सु.शा.२/५

The abnormalities of *Artavadushti* is incapable of producing progeny, so to overcome this problem *Shudha Artava* is needed. Keeping this view in mind and to study the effect of drug, Selected this topic for study. **Prevalence:** Prevalence of menstrual disorders has been recorded as high as 87% in India in 2012.^[2]

INTRODUCTION

God has gifted women with rare and unique phenomenon of giving rise of offspring. To fulfil the above aim effectively, nature has conferred special anatomical and physical characteristics in the women which are collectively referred to as “streekarabhav” one among them is the concept of Rajapravrutti i.e. Artava. This phenomenon taking place in cyclic manner and any physical, physiological or mental alteration can disturbs her life as well as her whole family and menstrual disorder is one of them.

The menstrual cycle which involves the shedding of endometrium, which was prepared in anticipation of providing a bed for fertilized gamete, when fails result into the manifestation of “मासानुमासिक रजः प्रवृत्ती means आर्तव प्रवृत्ती |” and menstruation is most important physiological function of women in her reproductive life. According to National Journal of Integrated Research in Medicine (year 2011), volume 2, issue 1, page 38-40, Prevalence of menstrual disorders has been recorded as high as 87% in India.^[1,3]

Normal menstruation (आर्तव प्रवृत्ती) is important for healthy and normal functioning of reproductive system. due to changed in life style of women in terms of Ahara, Vihara, physical and emotional stress increased and this may result in Artava vyapadas. there are 8 types of Artava vyapadas explained in Brihatrayee and Laghutrayee, and among them is “Granthibhuta Artavadushti”.

“आर्तवमपि त्रिभिर्दोषैः शोणितचतुर्थैः पृथग्द्वन्दैः समस्तैश्चोपसृष्टमबिजं भवति,

तदपि दोषवर्णवेदनादिभिविजेयम् I

तेषु कुणपग्रंथि पूतिपूयक्षीणमूत्रपुरीषप्रकाशमसाध्यं साध्यमन्यच्चेति” II^[2]

सु.शा.२/५

Lakshan of Granthibhuta Artavadushti

“ग्रन्थिभुतश्लेष्मवाताभ्याम्।”^[2] सु.शा. २/४

Vataja Artavadushti :- “तेषु वातवर्णवेदनम्वातेन।”^[2] सु.शा. २/४

Kaphaja Artavadushti :- “श्लेष्मवर्णवेदनश्श्लेष्मणा।”^[2] सु.शा.२/४

NEED OF STUDY

Modern science of medicine said that due to increased in addiction of junk food, night shift, physical and mental stress from home and office leads to many diseases. it may causes menstrual disturbance, due to imbalance of hypothalamo-pituitary ovarian-uterine axis which lead to many gynaecological problems. And among these various problems Granthibhut Artavadushti^[1] is remarkable problem to women health having pain and altered colour of menstrual blood.

In Ayurveda Acharya Sushruta explains in Sharir sthana as,

“आर्तवमपि त्रिभिर्दोषैः शोणितचतुर्थैः पृथग्द्वन्दैः समस्तैश्चोपसृष्टमबिजं भवति ॥”^[2] सु.शा.२/५

The abnormalities of *Artavadushti* is incapable of producing progeny, so to overcome this problem *Shudha Artava* is needed. Keeping this view in mind and to study the effect of drug, Selected this topic for study.

Granthibhuta Artavadushti is due to Artava dushti, vata dushti and kapha dushti. So to correct it विरुद्ध Guna yukta Aushadhi chikitsa is used.

Many Aushadhi formulation explained for treatment of Granthibhuta Artavadushti according to Ashtanga Shangraha Sharir Sthana- patha, trikantaka, vrukshaka kwatha is effective in Granthibhutha Artavadushti.

“तथा ग्रंथ्यार्तवे पाठा त्रिकंटकवृक्षकक्वाथम् II”^[4] अ.स.शा १/३८

so Patha, Trikantaka, Vrukshaka kwatha will be effective in treatment of Granthibhutha Artavadushti. keeping this in mind patha, trikantaka, vrukshaka kwatha is selected for study as they subside infertility problems. so, subject entitled “**A Clinical Trial of Patha Trikantaka Vrukshaka Kwatha in the Management of Granthibhutha Artavadushti**” has been selected.

AIM AND OBJECTIVES

Aim

“To evaluate the efficacy of *Patha Trikantaka Vrukshaka kwatha* in the management of *Granthibhutha Artavadushti*.”

Objectives

1. To study details of *Granthibhutha Artavadushti*.
2. To explore the efficiency of *Patha Trikantaka Vrukshaka Kwatha* in the management of *Granthibhutha Artavadushti*.
3. To observe the signs and symptoms of *Granthibhutha Artavadushti* before and after the treatment.
4. To study the side effects of *Patha Trikantaka Vrukshaka Kwatha*.

DISEASE REVIEW OF GRANTHIBHUTA ARTAVADUSHTI

Ayurvedic Disease Review.

Granthibhutha Artavadushti

In Ayurvedika classics most of the menstrual disorders have been described under the heading of Ashta Artavadushti, Asrgdhara, Artava Kshaya.

Defination

Granthibhutha artavadushti is one among the eight types of artavadushti characterized by clotted appearance of menstrual bleeding and anovulation with poly cystic ovaries due to Vata-Kapha dushti. And it leads to infertility in female.^[2]

Samanya nidana of Artavadushti

According to Kashyapa Samhita – atyushna annapana sevana leads to the dooshana of veerya, artava and beeja, ksheenata of jataragni and rasa along with the sanchaya of kapha and pitta doshas^[1] (ka.ka.7/32).

Lakshanas of Granthibhootha Artavadushti

This Granthibhootha Artavadushti is caused by the vitiation of vata and shleshma both together and has features of both the doshas^[2,4] (Su.Sha.2/4) (A.S.Sha.1/14).

Features of vata include

“तेषु वातवर्णवेदनम्वातेन”^[2] | सु.शा. २/४

The menstrual blood vitiated by vata is tanu – thin, rooksha – dry, phenila – frothy, aruna – red in colour, alpa – less in quantity, sarujayukta – associated with pain and chiraat nishicchayate – excreted slowly^[4] (A.S.Sha. 1/24).

Due to vata dushti the artava possess either red or black colour along with different types of vatavedana like toda and bheda i.e. perforating or piercing type of pain^[2] (Su.Sha.2/4).

Features of kapha include

“श्लेष्मवर्णवेदनमश्लेष्मणा”^[2] | सु.शा. २/४

The menstrual blood vitiated by kapha is majjopasamsrushta – mixed with bone-marrow, vibaddha – thick, ambhasi – whitish in colour, unctuous and settles at the bottom when put in water^[4] (A.S.Sha. 1/24).

Due to kapha dushti the artava possess shukla varna – whitish in colour, kandu – itching and visra gandha – pungent smell^[2] (Su.Sha.2/4).

Sadhyasadyata

According to Sushrutha^[2] – Asadhya.

According to vagbhata^[4,5] – Krucchra sadhya.

Chikitsa of Granthibhuta Artavadushti

- Kwatha prepared out of Patha, Tryushana and Vrukshaka (kutaja)^[2] (Su.Sha.2/24).
- Kwatha prepared out of Patha, Trikantaka and Vrukshaka^[4] (A.S.Sha.1/37).

- Kwatha prepared out of Patha, Triphala and Vrukshaka^[5] (A.H.Sha.1/16).

SROTODUSHTI

In Artavadushti there is involvement of Rasa, Rakta, Artavaha.

Samanya Srotodushti Nidana

आहारश्च विहारश्च यः स्यात् दोष गुणैः समः I

धातुभिः विगुणश्चापि स्रोतसां स प्रदुषकः^[9] II

च.वि.५/२३

The ahara and vihara which are doshagunaihi samah – similar to the doshas and dhatubhirvigunah – dissimilar to the dhatus in properties cause morbidity in the srotases.

Rasavaha srotodushti Hetu

Those who indulge in food drinks which are guru, sheetha, astisnigdha, atimatra ahara and atichintana suffer from morbidity of rasavaha srotas^[9] (Ch.Vi.5/23).

Raktavaha Srotodushti Hetu

Those who indulge in food and drinks which are vidahi, snigdha, ushna and liquid and also exposure to Atapa and Anila suffer from morbidity of raktavaha srotas.^[9] (ch.Vi.5/14).

Artavaha Srotodushti Hetu

Those Those who indulge in food and drinks which are vidahi, snigdha, ushna and liquid and also exposure to Atapa and Anila suffer from morbidity of Artavaha srotas.^[1] (kashyapa samhita).

Samprapti

The deranged and aggravated doshas while circulating through the srotas in the whole body, gets obstructed due to an occlusion i.e. Sanga or defects in the srotas i.e. Khavaigunya cause disease manifestation.^[10] (Su.Su. 24/19).

Attinushna annapanna, ruksha, tikshna dravyas sevan



Agnimandhya



Garbhashaya sanchit kapha and
vata dosha prakopa



Granthibhuta artavastrava, yonikandu,
yonivedana, Vikruta varna artavastrava.



Granthibhuta artavadushti

Flow chart No. 3.

Samprapti Ghatakas

Dosha: Kapha, Vata.

Dushya: Rasa, Rakta, Artava

Srotas: Rasavaha, Raktavaha, Artavavaha.

Rogamarga: Abhyantara.

Adhishtana: Garbhashaya, Phalakosha.

Agni: Jataragni and Dhatwagni.

Apana vata

Apana vata help in the evacuation of mala, muthra, shukra, garbha and artava through adhomarga and when it vitiates produces the diseases of basti and guda^[11] (Su.Ni. 1/19).

Vyana vata

Vyana vayu resides all over body and performs functions like rakta samvahana, helps in sweda and asruksravana and performs 5 fold functions like gati, utkshepana, apakshepana, nimesha and unmesha and when it vitiates produces diseases all over the body^[11] (Su.Ni.1/18).

Samanya Srotodushti Lakshana

The 4 types of srotodushti explained are^[9]: (Ch.Vi. 5/24).

- Atipravrutti – enhanced flow.
- Sanga – obstruction.
- Granthi – formation of clots and
- Vimargagamana – flow of contents in wrong direction.

Pratyeka Srotodushti Lakshanas^[12,10]: - (Ch.Su. 28/8-15, Su.Su. 24/9-12)

- Rasavaha

स्त्रोतसां रोधः - Obstruction in srotasa.

सादः - Malaise, depression.

- Raktavaha

असृग्धरः - Menorrhagia.

नीलिका - Discolouration, hyper pigmentation.

पिडका - Acne, pustular eruptions.

- Artavaha^[2]: Su.Sa.Sha.9/14

अल्पार्तव – oligomenorrhea.

कष्टार्तव – Dysmenorrhea.

वन्ध्यता – Infertility.

मैथुनासहिष्णुत्वमः – Dyspareunia.

आर्तवनाश – Absence of Artava.

Chikitsa^[12] (Ch.Su. 28/25)**Importance of vata in chikitsa**

Without the vitiation of vata dosha there will not be manifestation of any type of yoni vyapat.

Hence, it should be treated first followed by the other 2 doshas^[13] (Ch.Chi.30/115).

Chikitsa Siddhantha

Ayurvedic management can be planned based on the pathological factors involved.

For Kapha dosha

According to Bhaishajya ratnavali,^[14] in balaasadushta yoni vikaras or kaphaja yoni vikaras, rooksha and ushna guna dravyas should be used for treatment.

According to Ashtanga Hrudaya,^[5] shleshmanaha, katu, rooksha, kashayadi guna yukta dravyas should be used for treatment.

For vata dosha

According to Charaka Samhitha, for the treatment of apana vayu vikruthi the treatment modalities incorporated should possess Deepana, Grahi, vatanulomana and pakvashayavishodhana properties^[13] (Ch.Chi.28/243).

Rasa pradoshaja vikaras should be treated by all types of langhana and aushadi.

Rakta pradoshaja vikaras should be treated by virechana, upavasa and raktamokshana.

Artava pradoshaja vikaras should be treated by all types of basti, deepan, pachan aushadi.^[2]

DRUG REVIEW**Selection of drugs****Drug introduction**

Sr. No	Name of Drugs	English name	Latin	Rasa	Vipak	Virya	Guna & karma	Parts Used
1.	Patha	Cissampelospariera		Tikta	Katu	Ushna	Laghu, tikshna, Grahi, vatakaphahara, Balya	roots
2.	Trikantaka	Tribulus terrestris		Madhura	Madhura	Shita	Guru, Snigdha, Vatapittahara, Mutrala, Rasayana	fruits
3.	Vrukshaka	Holarrhena antidycentrica		Tikta, Kashya	Katu	Shita	Laghu, Ruksha, Kaphapittahara, Grahi, Dipana	twak

DRUG PREPARATION**Procedure of Drug Preparation**

Preparation of research drug **PATHA TRIKANTHAKA VRUKSHAK KWATHA** is prepared according to reference of Sharangdhar Samhita,^[3] time to time as per needed to patient.

“तथा ग्रन्थ्यार्तवम् पाठा त्रिकण्टकवृक्षक क्वाथम्^[1] II” अ.स.शा १/३८

All the raw material will be purchased from local market.

Drugs used in preparation of Patha Trikantaka Vrukshak Kwatha



Patha



Trikantaka



Vrukshak

PREPARATION



Churna of Patha, Trikantaka, Vrukshak



Water



Mixed Churna and Water



Boiling of Mixture



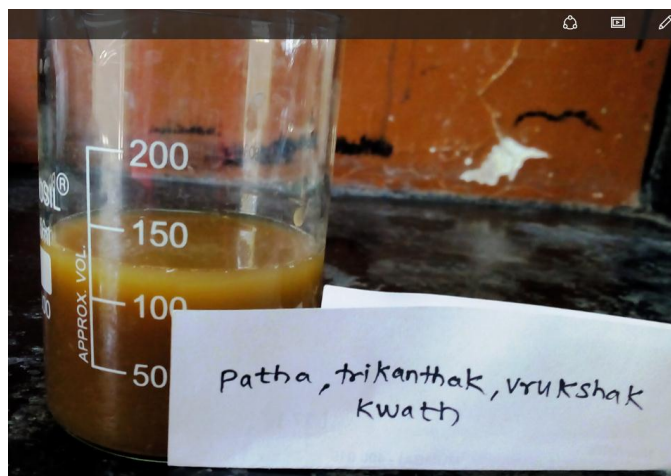
1/8th Part of Mixture Remain



Filtration of Kwatha



Kwatha



CLINICAL STUDY**MATERIALS AND METHODS****Materials**

1. Trial group – diagnose patient of Granthibhuta artavadushti
2. Patha Trikanthak Vrukshak Kwatha
3. Koshna jal.

METHODOLOGY**Selection criteria****Inclusion criteria**

- a) Patients were willing for study of GRANTHIBHUTA ARTAVADUSHTI.
- b) Patients age between 12-50 years.
- c) Both unmarried and married women.
- d) Menses bleeding with clots.
- e) Patients presenting with the pratyatma lakshana of GRANTHIBHUTA ARTAVADUSHTI.
 - Granthibhuta Artava strava (menses bleeding with clots)
 - Yonikandu (itching over external genital region)
 - Yonivedana (Dysmenorrhoea) painful menses
 - Varna of Artava strava (colour of menses bleeding)

Exclusion Criteria

Patients unwillingly participating and associated with other complications such as,

1. Age before 12 yrs and after 50 yrs.
2. Diagnosed cases of Malignancy, fibroids, suspected cases of Ca cervix, polyps, cyst.
3. Diagnosed cases of Haemorrhagic disorders.
4. Diagnosed cases of Pelvic inflammatory disease, venereal disease, diabetes.
5. Patients taking hormonal drugs.
6. Patients with IUCD.

Withdrawal Criteria

1. Patients willing to discontinue the trial.
2. Patients absent for followup after cycle.

3. Patient develops any allergic condition/ if there is unbearable aggravation of symptoms itself.

Baseline screening

1. Clinical examination
2. Lab investigation
 - a. CBC.
 - b. Urine routine and microscopic.
 - c. BT, CT.

Informed consent

The subject undergoing this study was informed about the nature and purpose of study and written consent from each patient in both groups was done.

Criteria for Diagnosis

1. Diagnosed patients having symptoms which are commonly seen in Granthibhuta artavadushti were selected by **random sampling method** as per inclusion and exclusion criteria and subjected to a careful clinical examination. Then data acquired from selected diagnosed patients were recorded in research proforma along with informed valid consent.
2. Age, Education, Occupation, Habitat, Socioeconomic status etc. particulars were noted. Then patients were inquired about the main complaints with duration.
3. The detail history of past illness, family history, personal history including bowel, sleep, diet, sexual life, agni, koshta, prakruti, hormonal or other drug administration, past menstrual history, obstetric history, etc. were recorded.
4. After general examinations including Astavidha, Dashavidha, and Strotas pariksha was also carried out as systemic examinations. Udar Parikshana was done.
5. Routine investigations of Blood for CBC, BT, CT, urine routine and microscopic were done in laboratory.
6. All the patients were examined monthly once and the changes observed in the symptoms were assessed and recorded.

Management of patients

After the proper diagnosis of patients, patients were randomly selected irrespective of their age, socio-economic, status, religion etc. following line of treatment was given to the trial

group. All the patients fulfilling inclusion criteria were selected for the study with fully informed consent:

- Study: Open randomized trial
- Number of patients: Total 50 patients were selected Randomly for the clinical trial.

Table No. 13: Drug Regimen.

Sr. No.	Topic	Group
1.	Form	<i>Patha Trikantaka Vrukshaka kwatha</i>
2.	Dose (<i>matra</i>) ^[3]	40 ml BD
3.	<i>Kala</i> ^[3]	before meal [<i>Abhakta</i>]
4.	Duration of therapy	3 months
5.	Follow up	After next menstrual cycle
6.	Route of administration	Orally
7.	<i>Anupan</i>	<i>Koshna jal</i>

PROCEDURE OF PATHA TRIKANTHAKA VRUKSHAK KWATHA

Patha Trikanthaka Vrukshaka Kwatha was prepared according to Sharangdhar samhita in Rasa shastra and Bhaishajya Kalpana Dept. procedure of kwatha was thought to patient and then advice them to make fresh kwatha daily and take for 3 months (follow up after every 1 month).

Instruction

1. Spicy and fermented food should be avoided.
2. Avoid anger, fear, sorrows.
3. General advice of proper hygiene and habits were given.
4. Avoid upvasa, adhyshana, ratrijagrana, divaswapna.

ASSESSMENT CRITERIA

- Finally the result of treatment was assessed on the basis of following criteria and its improvement was noted in research proforma.
- Results of the treatment were rule out on the basis of relief in the symptoms of Granthibhuta artavadushti.
- Qualitative assessment of the criteria was carried out by adopting a general scoring pattern. According to severity of each symptom, suitable score was given. The details of general and special scoring pattern are given below.

General scoring pattern

- No complaint – 0
- Mild complaint -1
- Moderate complaint – 2
- Severe complaint – 3

ASSESSMENT CRITERIA

1. Grade of pain (*yoni vedana*).
2. Itching vulva (*yoni kandu*).
3. Granthibhuta Artavastrava (clots in menses).
4. Varna (colour of menses).

A. *Yoni vedana* [Pain]^[1]**Table No. 14.**

Grade	Symptoms	Score
I	No Pain	0
II	Mild (occasional) no interference with daily routine	1
III	Unable to do normal activities.	2
IV	Disturbed sleep due to pain.	3

B. *Yoni kandu* [Itching Vulva]^[1]**Table No. 15.**

Grade	Symptoms	Score
I	Absent.	0
II	Mild [Occasional].	1
III	Unable to do normal activities	2
IV	Disturbed sleep due to itching	3

C. *Granthibhuta Artavastrava* [Clots]^[2]**Table No. 16.**

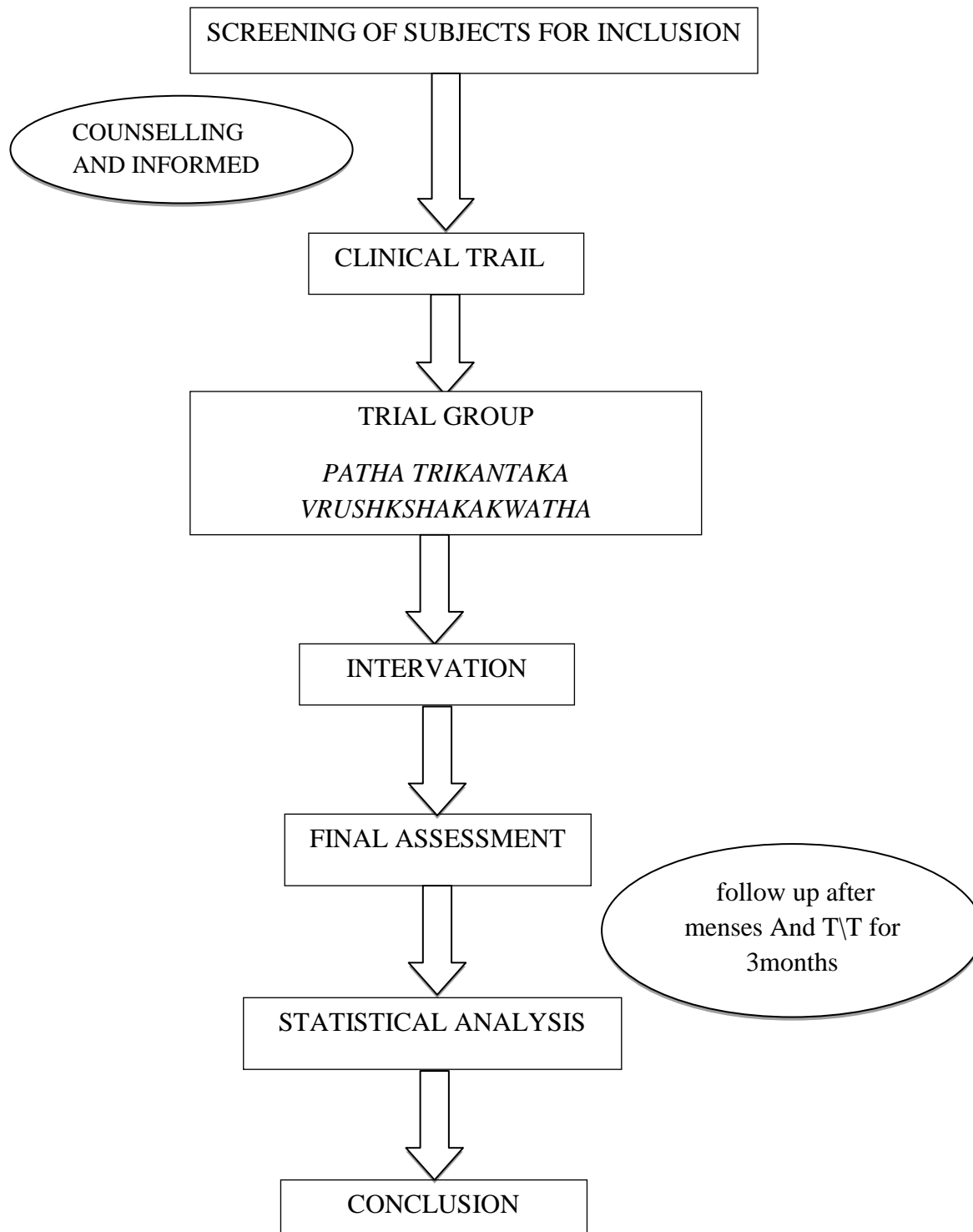
Grade	Symptoms	Score
I	No clots.	0
II	Bleeding with occasional clots. (+)	1
III	Bleeding with more clots. (++)	2
IV	Only clots. (+++)	3

D.Colour [Varna of menses]^[2]

Table No. 17.

Grade	Symptoms	Score
I	Red.	0
II	Brownish red.	1
III	Blackish red.	2
IV	More Blackish red (Tar appearance)	3

FLOW CHART NO.4 STUDY PLAN



ASSESSMENT CRITERIA

1. Yoni vedana
 - Before treatment
 - After treatment
2. Yoni kandu
 - Before treatment
 - After treatment
3. Granthibhuta artavastrava
 - Before treatment
 - After treatment
4. Colour of bleeding
 - Before treatment
 - After treatment

Criteria for the assessment of overall effect of therapy

The data obtained from the above parameters before and after the therapy was utilized for the purpose of overall effect of therapy, and Result of the drug was determined as-

Percentage of relief in symptoms and signs with respect to each of the patient was as follows and classified as per the definition of Cured, Highly Improved, Improved and Unchanged.

Table No. 18.

Efficacy of the treatment	Total assessment
Excellent	>75 – 100% relief in sign and symptoms
Moderate	51- 75% relief in sign and symptoms
Mild	25 – 50% relief in sign and symptoms
Ineffective	0 – <25% relief in sign and symptoms

Presentation of Data

The data collected and compiled from the clinical work is presented in two sections-

1. Observations

It is related to various observations obtained from the research proforma.

2. Result

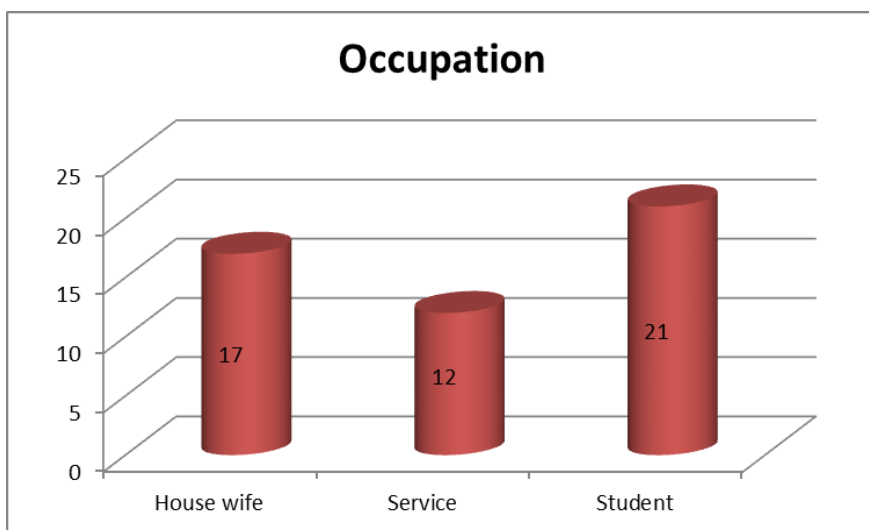
In this section, the effect of therapy evaluated on the basis of improvement in the assessment criteria and the total effect of therapy.

OBSERVATIONS

Registered Patients – In present trial 55 patients were registered, out of which 5 patients dropped out from trial before its completion. So the present study was carried on 50 patients. All the selected patients were thoroughly examined and diagnosed and selected, based on exclusive and inclusive criteria. The assignment revealed the following statistics.

Demographic finding**Table No. 19: Show occupation wise distribution of patient.**

Occupation	No. Of Patients	Percentage
House wife	17	34%
Service	12	24%
Student	21	42%
Total	50	100%

**Figure No. 28.**

Above table reveals that majority of patient i.e 21 (42%) were reported in student, followed by 17 (34%) patients observed in housewife, 12 (24%) patient observed in service doing women.

Table No. 20: Show Religion wise distribution of patient.

Religion	No. of Patients	Percentage
Hindu	45	90%
Muslim	5	10%
Total	50	100%

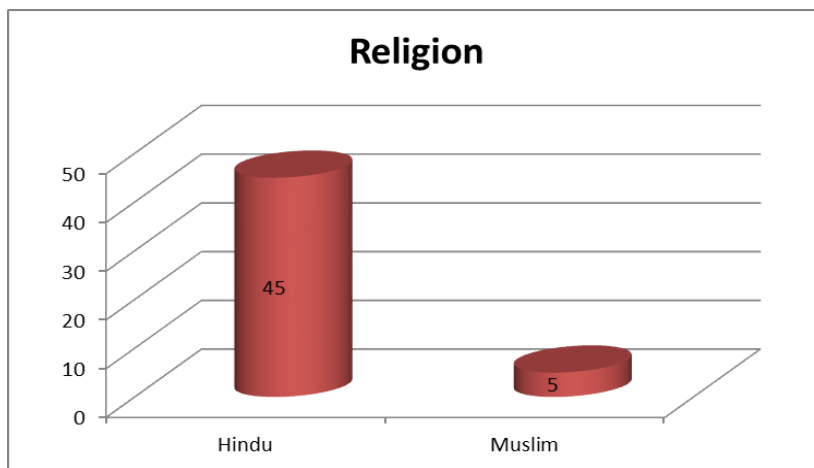


Figure No. 29.

Above table reveals that majority of the patients i.e 45 (90%) were reported in Hindu religion, followed by 5 (10%) Patients observed in Muslim women.

Table No. 21: Show diet wise distribution of patient.

Diet	No. of Patients	Percentage
mixed	31	62%
Veg	19	38%
Total	50	100%

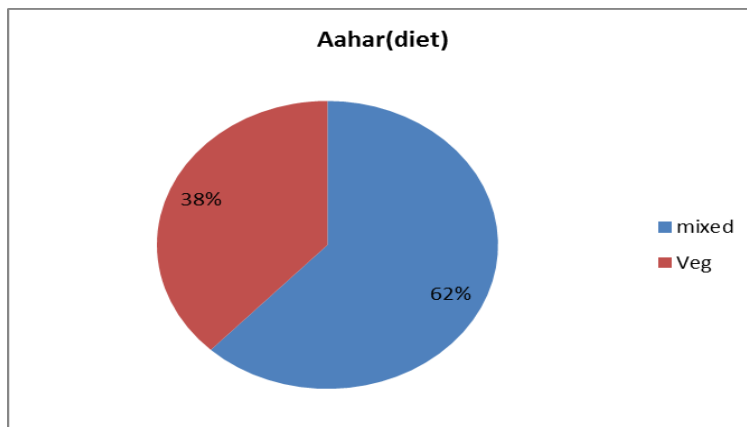


Figure No. 30.

Above table reveals that majority of the patient i.e 31 (62%) were reported in mixed, followed by 19 (38%) patient observed in vegaterian women.

Table No. 22: Show Socio Economic distribution of patient.

Socio Economic	No. Of Patients	Percentage
L.C	4	8%
M.C	35	70%
U.C	11	22%
Total	50	100%

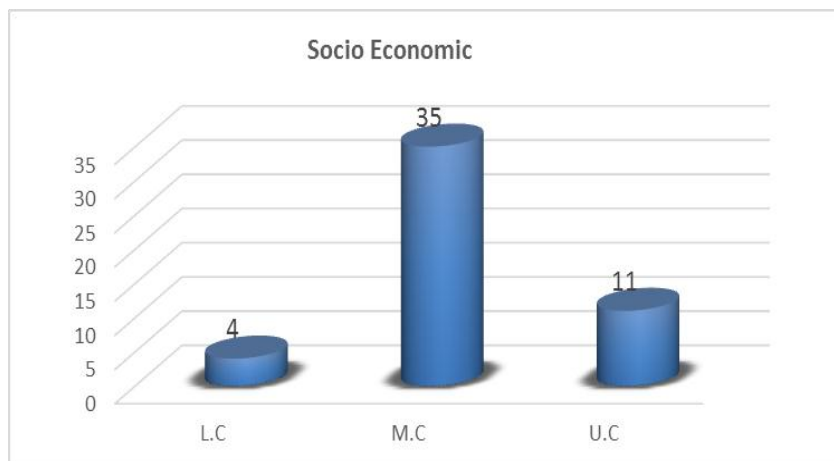


Figure No. 31.

Above table reveals that majority of the patients i.e 35 (70%) were reported in middle class, followed by 11 (22%) patients observed in the upper class, and 4 (8%) patient observed in lower class.

Table No. 23: Show Age wise distribution of patient.

Age	No. of Cases	Percentage
<21 yrs	3	6%
21-25 yrs	19	38%
26-30 yrs	21	42%
>30 yrs	7	14%
Total	50	100%

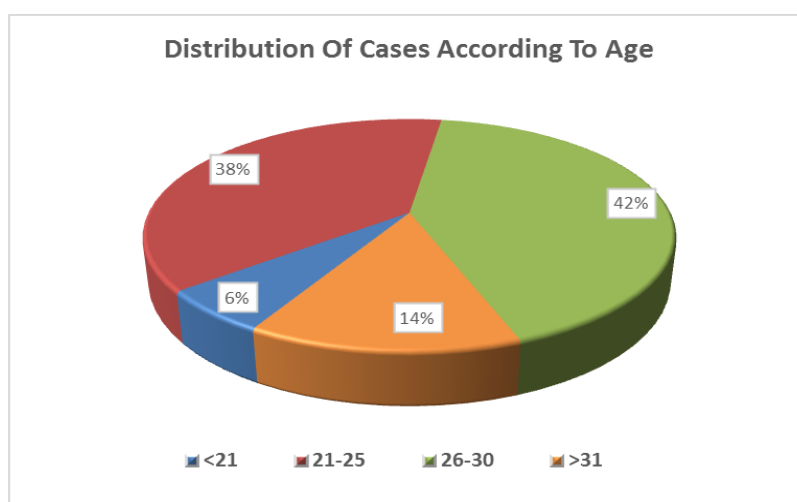


Figure No. 32.

Above table revealed that maximum patients i.e.21 (42%) were from age group 26-30 which is followed by 19 (38%) from age group 21- 25 years, 7 (14%) from age group >30 Years & 3 (6%) from age group < 21 Years.

Table No. 24: Show Marital Status distribution of patient.

Marital Status	No. of Cases	Percentage
Married	28	56.33%
Unmarried	22	43.67%
Total	50	100.00%

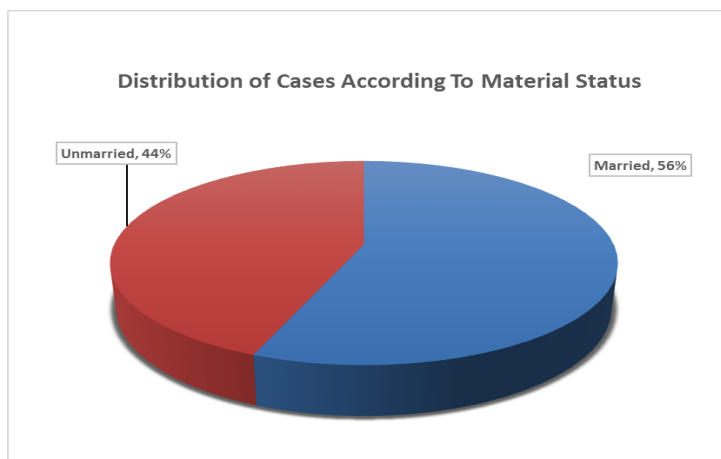


Figure No. 33.

Above table reveals that out of 50 Patients 28 patients i.e. 56.33% were married while 22 patients i.e. 43.67 patients found unmarried.

Table No. 25: Show Prakruti wise distribution of patient.

Prakruti	No. of Cases	Percentage
K-V	1	2%
P-K	13	26%
P-V	1	2%
V-K	18	36%
V-P	17	34%
Total	50	100%

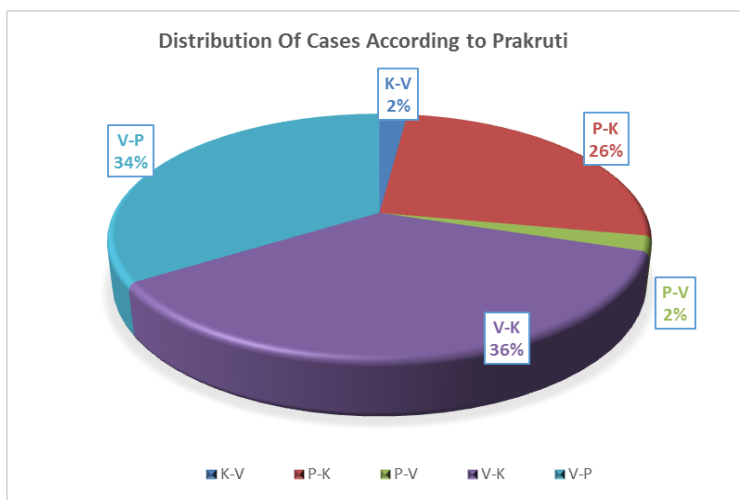


Figure No. 34.

Above table reveals that majority of patient i.e 18 (36%) were reported in vata kapha prakruti, followed by 17 (34%) patients observed in vata pitta prakruti, 13 (26%) patients observed in pitta kapha prakruti, 1 (2%) patients observed in kapha vata prakruti and 1 (2%) patient observed in pitta vata prakruti.

Table No. 26: Show Agni wise distribution of patients.

Agni	No of Patients	Percentage
Tikshna	9	18%
Sama	14	28%
Manda	15	30%
Visham	12	24%
Total	50	100%

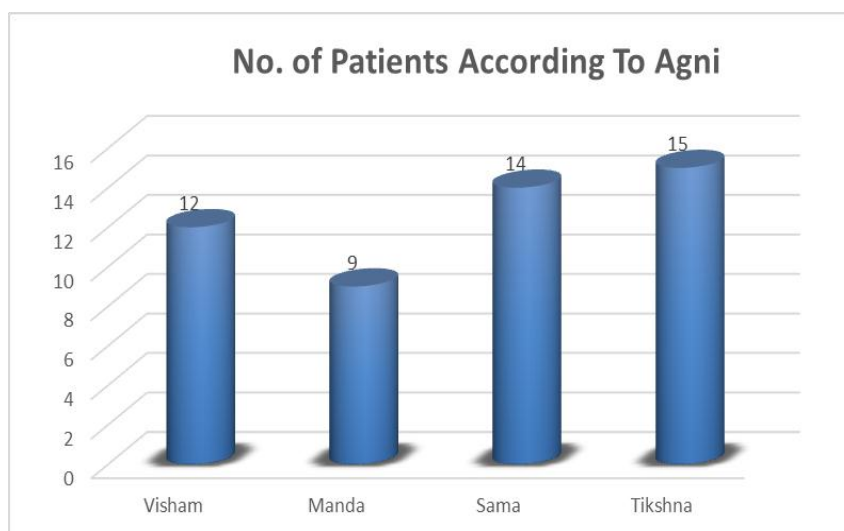


Figure No. 35.

Above table reveals that majority of patients i.e 15 (30%) were reported of Manda agni, followed by 14 (28%) patients observed of Sama agni, 12 (24%) patients were observed of visham agni, and 9 (18%) patients observed of tikshna agni.

Table No. 27 Show duration of Granthibhuta Artavadushti wise distribution of patient.

Duration	No. of Patients	Percentage
1	4	8%
2	27	54%
3	16	32%
4	3	6%
Total	50	100%

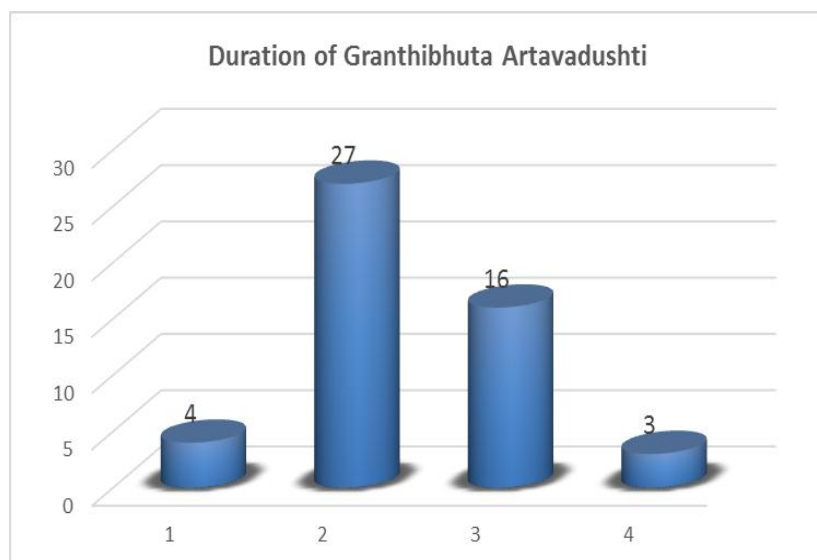


Figure No. 36.

Above table reveals that majority of the patient i.e 27 (54%) were reported with 2 months duration of symptoms, followed by 16 (32%) patients observed with 3 months duration of symptoms, 4 (8%) patients observed with 1 month duration of symptoms and 3 (6%) patients observed with 4 months duration of symptoms.

EFFECT OF THERAPY

Effect of Patha Trikantaka Vrukshaka Kwatha in Granthibhuta Artavadushti

50 patients who completed the full course of treatment and so the effect of Patha Trikantaka Vrukshaka Kwatha therapy in Granthibhuta Artavadushti is quoted from here onwards.

Statistical Analysis

- **Null hypothesis, H_0**

The effect of treatment on all symptoms in Patha Trikantaka Vrukshaka Kwatha in Granthibhuta Artavadushti is not significant.

- **Alternative hypothesis, H_a**

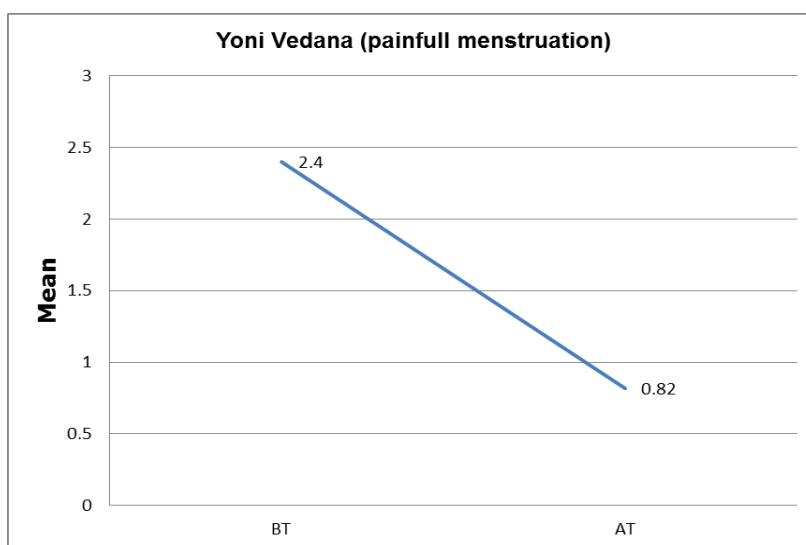
The effect of treatment on all symptoms in Patha Trikantaka Vrukshaka Kwatha in Granthibhuta Artavadushti is significant.

All the values in following tables are calculated by using Wilcoxon Sign Rank Test for subjective criteria. Statistical analysis of every symptom is described separately in the following tables.

Note: - Sample size of research study was 50 but n is less than 50 in following tables because while applying Wilcoxon Sign Rank test we have to exclude the gradation values which are same before treatment and after treatment. We have to consider patients who were having different before and after treatment gradation value.

Table no. 1.

Symptom	Yonivedana (painfull menstruation)
N	50
Mean Score, B.T.	2.4
Mean Score, A.T.	0.82
S.D. (\pm), B.T.	0.606
S.D. (\pm), A.T.	0.56
S.E. (\pm), B.T.	0.085
S.E. (\pm), A.T.	0.079
W	1275
Z	-5.97
P	P<0.05
Result	Significant



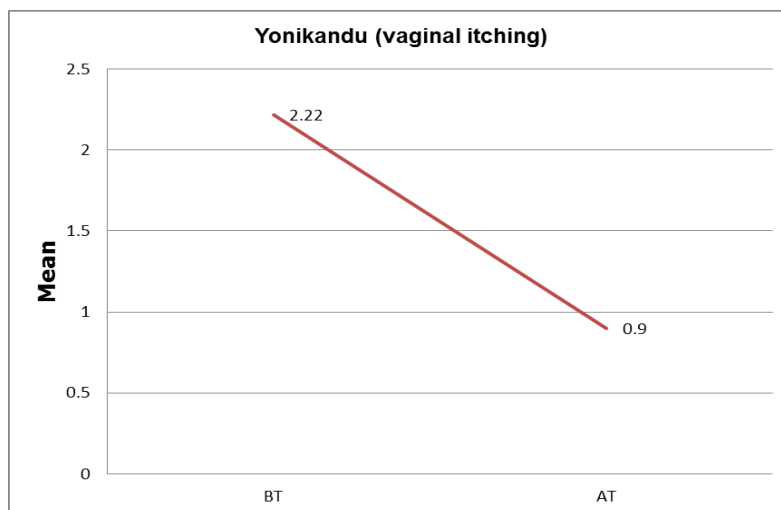
Graph No. 1.

As the p value is lower than the significance level $\alpha = 0.05$, we should reject the null hypothesis H_0 and accept the alternative hypothesis H_a for Yoni Vedana (Painfull menstruation).

Table No. 2.

Symptom	Yonikandu (vaginal itching)
N	50
Mean Score, B.T.	2.22
Mean Score, A.T.	0.9
S.D. (+), B.T.	0.678
S.D. (+), A.T.	0.677
S.E. (+), B.T.	0.096
S.E. (+), A.T.	0.095
W	1275
Z	-5.775
P	P<0.05
Result	Significant

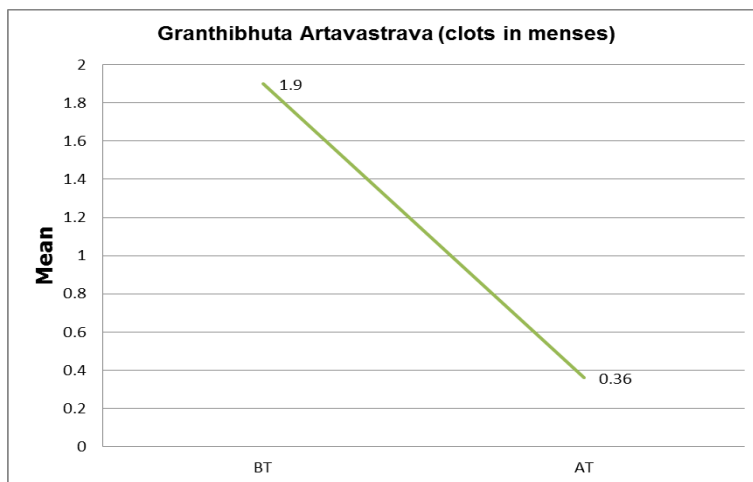
As the p value is lower than the significance level $\alpha = 0.05$, we should reject the null hypothesis H_0 and accept the alternative hypothesis H_a for Yonikandu (vaginal itching).



Graph No. 2.

Table No. 3.

Symptom	Granthibhuta Artavastrava (clots in menses)
N	50
Mean Score, B.T.	1.9
Mean Score, A.T.	0.36
S.D. (+), B.T.	0.762
S.D. (+), A.T.	0.484
S.E. (+), B.T.	0.107
S.E. (+), A.T.	0.068
W	1275
Z	-6.154
P	P<0.05
Result	Significant

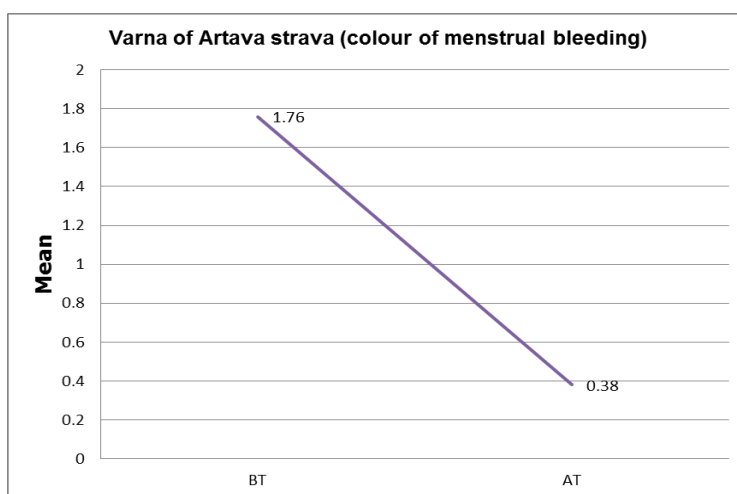


Graph no. 3.

As the p value is lower than the significance level $\alpha = 0.05$, we should reject the null hypothesis H_0 and accept the alternative hypothesis H_a for Granthibhuta Artavastrava (clots in menses).

Table No. 4.

Symptom	Varna of Artava strava (colour of menstrual bleeding)
N	50
Mean Score, B.T.	1.76
Mean Score, A.T.	0.38
S.D. (\pm), B.T.	0.77
S.D. (\pm), A.T.	0.49
S.E. (\pm), B.T.	0.109
S.E. (\pm), A.T.	0.069
W	1275
Z	-6.013
P	$P < 0.05$
Result	Significant



Graph no. 4

As the p value is lower than the significance level $\alpha = 0.05$, we should reject the null hypothesis H_0 and accept the alternative hypothesis H_a for Varna of Artava strava (colour of menstrual bleeding).

ABOVE GIVEN POINTS SHOULD BE WRITTEN IN DISCUSSION

Symptom	Percentage Relief
Yoni Vedana (painfull menstruation)	65.83 %
Yonikandu (vaginal itching)	59.45 %
Granthibhuta Artavastrava (clots in menses)	81.05 %
Varna of Artava strava (colour of menstrual bleeding)	78.4 %

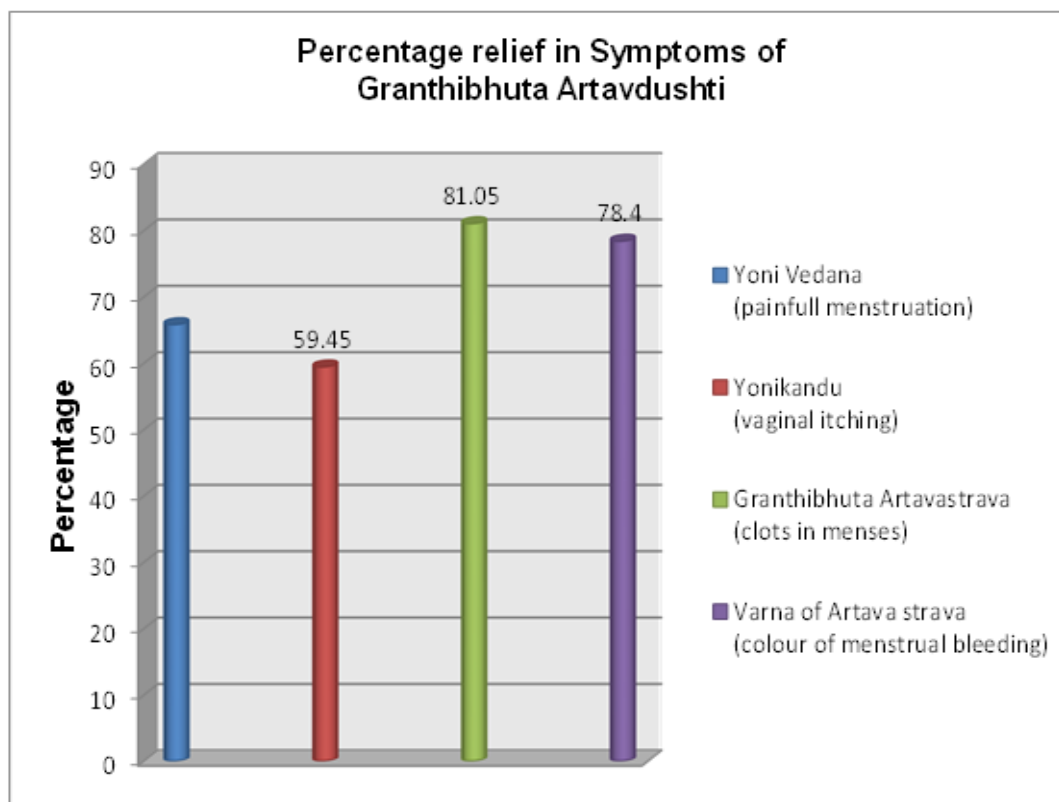
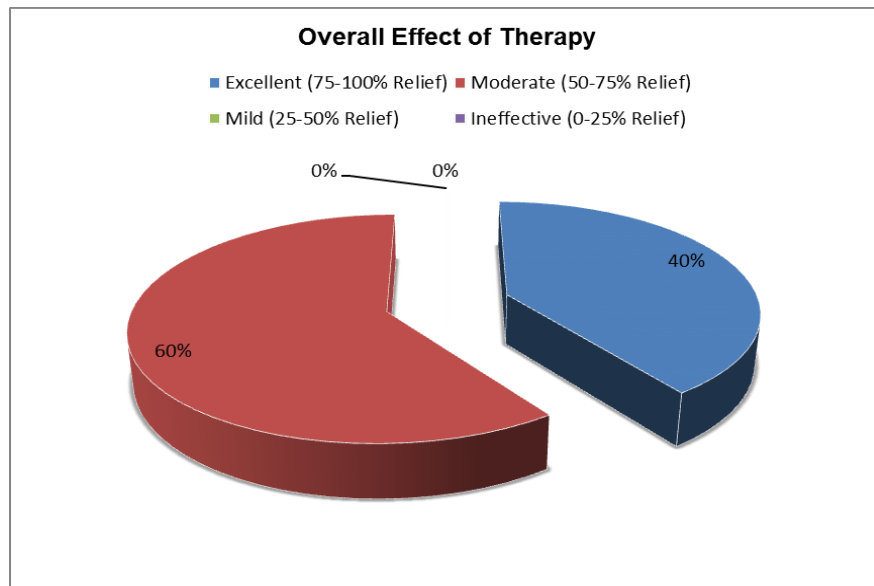
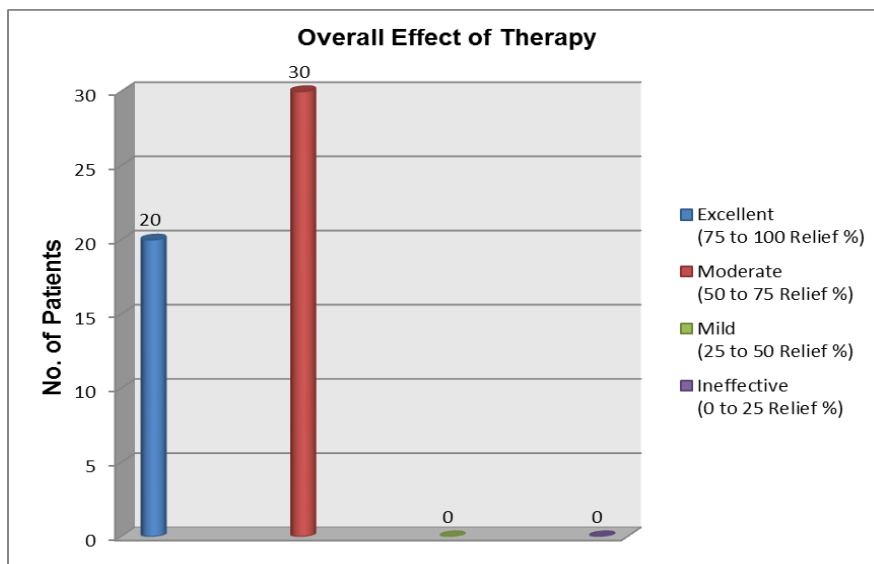


Table No. 5: Overall effect of therapy on 50 patients of Granthibhuta Artavadushti.

Result	Group of Patha Trikantaka Vrukshaka Kwatha	
	Number of patients	%
Excellent (75 – 100 % Relief)	20	40.00 %
Moderate (50 – 75 % Relief)	30	60.00 %
Mild (25 – 50 % Relief)	0	00 %
Ineffective (0 – 25 % Relief)	0	00 %



Graph No. 5.

In Group of Patha Trikantaka Vrukshaka Kwatha out of 50 patients, Moderate relief (50 to 75% relief) was noted in 30 patients i.e. 60%, 20 (40%) patients were reported in Excellent relief (75 to 100% relief), and no one was reported in Mild (25 to 50% relief) and Ineffective (0 to 25% relief) in this study.

RESULT

Effect of the Patha Trikantaka Vrukshaka Kwatha on symptoms observed in Granthibhuta Artavadushti is statistically proved to be significant.

Yoni Vedana (painfull menstruation), Yonikandu (vaginal itching), Granthibhuta Artavastrava (clots in menses), and Varna of Artava strava (colour of menstrual bleeding) are proved statistically significant where $p < 0.05$ i.e. at 95% level of significance.

DISCUSSION

Ayurveda is a science by the use of which, one can throw the light on such a hidden fact. Discussion is one of the important part of research work. It comprises the discussion of result obtained from applied study. Discussion is logical meaning of Observation. If all the points are discussed with proper reasons, then they help to draw proper conclusions. Discussion is the bridge which connect the findings with conclusion. Therefore, discussion is important part of research work.

In Ayurvedic classics mostly the menstrual disorders have been described under the heading of Ashta Artavadushti, Asrgdhara, Artava Kshaya. Granthibhuta artavadushti is one among the eight types of Artavadushti characterized by clotted appearance of menstrual bleeding due to Vata Kapha dushti and it leads to infertility in female. Also the modern treatment itself has various complications and recurrence is common. Owing to the complexities in the management of modern science, it is basic need of time to develop a dependable and easily available therapeutic intervention which should be effective, safe and without complications or side effects. With this background, this research project is carried, entitled-

“A clinical trial of patha trikantaka vrukshaka kwatha in the management of granthibhuta artavadushti.”

In order to achieve this, aim the study has been devided into 3 catagories

- ❖ Discussion on conceptual study.
- ❖ Discussion on mode of action of drug.
- ❖ Discussion on the clinical study.

CONCEPTUAL DISCUSSION

In Ayurvedica classics most of the menstrual disorders have been described under the heading of Ashta Artavadushti. Granthibhuta Artavadushti is one among the eight types of

Artavadushti characterized by clotted appearance in menstrual bleeding due to kapha vata dushti and it leads to infertility in female according to Acharya Sushrut. According to Kashyapa Samhita atyushna annapana sevana leads to the doshana of veerya, artava and beeja ksheenata of jataragni and rasa along with the sanchaya of kapha and vata doshas and this vitiation of vata and kapha in Granthibhuta artavadushti leads to Yonivedana, Yonikandu, Granthibhuta artava strava, vikruti in varna of artava strava.

According to modern science hormonal imbalance affects reproductive system of female and group of symptoms observed such as dysmenorrhea, clots in menses, vaginitis, abnormal colours of menstrual flow. And if its persist then leads to infertility. In modern science hormonal therapy are used for the treatment of menstrual disorders. Due to long time use of hormonal therapy causes many side effects such as irregular menses, weight gain, mental disturbance. So present study is attempt to provide on effective Ayurvedic remedy.

Before studying detail description of Granthibhuta artavadushti, we have to focus on Artava utpatti, karma, guna. Artava is upadhatu of Rasa dhatu. So any default in Rasa dhatu hamper on artava utpatti. Rasa dhatu affected due to jataragni mandhyatava and with vitiated doshas hamper the formation of Ahara rasa by producing Ama. So proper artava utpatti can be achieved by maintaining normalcy of the agni.

Mula sthana of artava srothas is Garbhasaya and artavavahini dhamani and expulsion of artava is done by Apana vata so, any deformity occur to artava srothas and apana vata its lead to Artavadushti. Artavavaha srothas obstructed by the vikruti of Apana vata and kapha result in Granthibhuta artavadushti.

In Ayurvedic treatment of Granthibhuta artavadushti, both Shodhana and Shamana chikitsa has been explained i.e maintain normalcy of agni and vata removing the kapha is the basic line of treatment. Main cause of Artava dushti is Agni mandhya and this lead to formation of Ama, so in treatment of Artavadushti dravyas having virudha guna is used i.e. pitta vardhak dravyas. Pitta vardhak dravyas stimulate agni which help in digestion of Ama, lead to formation of Ahara rasa which later on forms the Rasa dhatu from which Artava is formed. These pitta vardhak dravyas help in increasing the quantity of Artava, as the Artava is also pitta pradhana. As the basic concept of “Samanyam vrudhikaranam” intake of samana guna causes the increase of same guna. Hence the pitta vardhak dravyas are given prime

importance in producing Artava. Keep this in mind Tikta, Madhura, Kashya rasa, Katu, Madhura vipak, ushna, Sheeta virya use in Artavadushti.

Discussion of drug review

Patha Trikanthaka Vrukshaka Kwatha is use in the treatment of Granthibhuta Artavadushti is described in classical ayurvedic text of Ashtang Hrudhya Samhita. Detail study of drugs as follow.

1. Patha

Sr. no	Properties	Action
Rasa	Tikta	Pitta kapha samaka, vata vardhaka, Kanduhara, dhatu soshana.
Vipak	Katu	Ruksha, Laghu, enhances vata, subsides Kapha.
Virya	Ushna	Vatahara, Kaphahara and pitta vardhaka, deepana, pachana, daha janana.
Guna and Karma	Laghu, Tikshna, Grahi, Vatakaphahara, Balya	<ul style="list-style-type: none"> • Laghu - Kaphahara, vata vardhaka, it reduces the tissue weights and malas and clears the channels of the body i.e. sroto sodhana, improves the digestion. On the psyche (manas) it has positive effects by improving activeness and providing inspiration. • Tikshna – pitta vardhaka, kapha-vata hara, reduce tissue weight, enhances the excretion of malas. • Grahi – digest Ama, and absorbs fluid. • Vata-kaphahara • Balya

2. Trikanthaka

Sr. no.	Properties	Action
Rasa	Madhura	Vata-pitta samaka, kapha vardhaka, dhatu vardhana, ojo vardhana, indriya prasadana, balya.
Vipak	Madhura	Kapha vardhaka, vata-pittahara, improve Sukrala dhatu.
Virya	Sheeta	Pittahara, vata-kapha vardhaka, rakta prasadana, balya.
Guna and karma	Guru, Snigdha, Vatapittahara, Mutrala, Rasayana.	<ul style="list-style-type: none"> • Guru – Vatahara, kapha vardhaka, nourishes all the dhatus, on the psyche (manas) it impose inhibitory effects on receptive capacity. • Snigdha – Subside vata and aggravates Kapha, provides tonicity to tissues, regularize the movement of malas, act as vajikarana, balya. More effective in vata vyadhis. • Rasayana - Rasayana prevent ageing, increase longevity & immunity, improve mental function, vigor and vitality of the body. • Mutrala • Vata-pittahara

3. Vrukshaka

Sr. No	Properties	Action
Rasa	Tikta, Kashya	Tikta – pitta-kapha samaka, vata vardhaka, kandu hara, lekha, dhatu soshana. Kashaya – pitta-kaphahara, vata vardhaka, sthambhana, rakta prasamana, lekha.
Vipak	Katu	Ruksha and laghu, enhance kapha, vata-pitta hara.
Virya	Sheeta	Pittahara, vata-kapha vardhaka, rakta prasada, balya.
Guna and Karma	Laghu, Ruksha, Kapha-pittahara, Grahi, Deepana	<ul style="list-style-type: none"> • Laghu - Kaphahara, vata vardhaka, it reduces the tissue weights and malas and clears the channels of the body i.e. sroto sodhana, improves the digestion. On the psyche (manas) it has positive effects by improving activeness and providing inspiration. • Ruksha – Subside kapha and aggravates vata, reduces the quantity of excreta, Sthambhana, soshana, rukshana. • Grahi – digest Ama and absorbs fluids. • Deepana – stimulate agni and pachana of Ama. • Kapha-pitta hara.

Effect of drug on Granthibhuta artavastrava

1) Yoni vedana is mainly due to the involvement of vata prakopaka and srotoavarod.

a. Patha

- Vatahara and srotosodhana is line of treatment for vata dominant dosha avastha and srotoavarod. Patha has vatahara karma, which help in reduction of vitiated vata dosha in entire body (sarvadehik) ultimate result in subsidence of yoni vedana.
- Ushna virya of patha lead to vatahara
- Laghu guna, ushna virya has the property of srotosodhana and improve digestion and thus use for the treatment of srotoavarod and agnimandhya.

b. Trikanthaka

Madhura Rasa and sheet, snigdha, guru Guna is vata shamak, bruhaniya, Dhatu vrudhikar. Due to Madhura vipak it act as vata shamak, Dhatu vardhan, Balya and sheet veerya it act as vataghna, Pittaghna. Thus help in samprapti bhanga.

c. Vrukshaka

Laghu guna and shita virya is vata shamak and srotosodhana, thus help in subsidence of yoni vedana.

2) Yoni kandu is mainly due to the involvement of ruksha guna of vata and shleshma guna of kapha prakopa.

a. Patha

Ushna virya and vatakapahara, snigdha, guru Guna is vata shamak, bruhaniya, Dhatu vrudhikar. Due to ushna virya it act as kapha shamak, Dhatu vardhan. Thus help to subside yoni kandu.

b. Trikanthaka

Madhura Rasa and shita virya, snigdha, guru Guna is vata shamak, bruhaniya, Dhatu vrudhikar. Due to Madhura vipak it act as vata shamak Dhatu vardhan, Balya and sheet veerya it act as vataghna. Due to vata shamak, ruksha guna of vata subside – act on yoni vedana.

c. Vrukshaka

Shita and laghu guna is vata shamak, effect on ruksha guna of vata and therefore it act on yoni kandu.

3) Granthibhuta artavastrava is mainly due to the involvement of vata and kapha dosha.

a. Patha

- Ushna virya and vatakapahara karnma is vata shamak, bruhaniya, Dhatu vrudhikar. Katu vipak has property of bhedana karma, thus act on granthibhuta artava and bhanga samprati.
- Patha use for the treatment of artavabhedhana as per samhita, so use in granthibhuta artavadushti.
- Grahi guna and ushna virya improve digestive system and therefore jataragni improve agnimandhya and produce suddha rasa, rakta. As artava is uppadhatu of rasa and rakta. Suddha artava is produce.

b. Trikanthaka

- It has lithotryptic activity so use as bhedana karma in granthibhuta artavastrava.

c. Vrukshaka

Deepana and grahi guna has the property of ama pachana and stimulate agni which result In shuddha rasa and rakta dhatu utpatti and as artava is uppadhatu of rasa and rakta, shuddha artava is form.

4) Vikrut varna of artavastrava

a. Patha

Tikta rasa, katu vipak, ushna virya, grahi guna has a property of pachana of ama and therefore act on agnimandhya and produce suddha rasa, rakta. As artava is upadhatu.

b. Trikanthaka

Madhura rasa and vipak, guru guna has property of dhatu vardhana, so help in nirmiti of shuddha artava.

c. Vrukshaka

Deepana and grahi guna has the property of ama pachana and stimulate agni which result in shuddha rasa and rakta dhatu and as artava is upadhatu of rasa and rakta, shuddha artava is form.

Karya on Dosha

Due to Tikta – Rasa, Madhur – Vipaka, Ushna sheeta & Virya, this preparation performs the following functions. It pacifies the following property of Dosha.

Kapha - Guru, Snigdha, Manda, Slakshna, Sthira.

vata- ruksha, laghu, etc.

This preparation is Kapha-vatanashaka and works mainly on shleshmaka Kapha, appana vayu.

Samprapti Vighatana

Kapha-vata are the chief Dosha involved in this disease. We must use the drug which is having Ruksha Guna, ushna virya and Madhura, Tikta, katu Rasa. Tikta-katu Rasas are present in this preparation, this drug reduces the shleshmaka kapha and prakrut appna vayu nirmiti and decrease ruksha guna of vayu.

Thus this drug act on granthibhuta artavadushti by carrying following functions.

Agni-Vardhana

Samakapha and vata Pachana srotoshodhana

Rasa rakta Prasadana

As rasayana property act on Dhatu –rasa, rakta etc.

This proves the whole mode of action of kwatha in Granthibhuta artavadushti. As per observation collected in this thesis this yoga has property of total Samprapti Vighatana of Granthibhuta artavadushti. These drugs are very cheap, easily available and effective in Granthibhuta artavadushti. The symptoms of Granthibhuta artavadushti are due to disturbance in shleshmaka kapha, ruksha guna of vata and vikruti in appana vayu. It means this drug acts mainly on ruksha, strotoavarodha and sleshmaka kapha. Kwatha has Deepana - pachana, Tridosahara (especially kapha vata Doshahara) properties. It also responsible for breakdown the samprapti of the disease.

Discussion on material and method

Discussion on inclusion criteria

Female patients suffering from Granthibhuta Artavadushti within reproductive age group of 12 to 50 years were selected because due to present life style menstrual disorder is more prevalent in reproductive age.

Discussion on exclusion criteria

Female patients with any other systemic disorders were excluded to avoid the interference in the action of the drug and also to avoid complication.

Discussion on Diagnostic criteria

Female patient having complaints of Yonivedana, Yonikandu, Granthibhuta Artava strava and abnormal menstrual colour.

Discussion on investigation

Basics Investigation done in menstrual disorder are

1. Haemogram – Hb done to rule out patient suffering from anaemia. Because in anaemic patient menstrual flow is heavy and due to it anticoagulants have no enough time to work and so enables to form clots.
2. BT and CT – It's to rule out normal level of bleeding time and clotting time.
3. Urine – to rule out any urinary infection.

Discussion on Drug and Dose

- Aushadha kalpana selected for the study is Kashaya Kalpana.
- Dose was decided as per the reference in classical texts.
- Aushadha sevana kala was decided as twice daily before meal

- Duration of treatment was decided as 90 days, which is the standard for any gynaecological treatment related to menstrual disorders as per modern science.

Discussion on Statistical methods

As the data is distributed in before and after treatment and sample is small Wilcoxon signed ranked test is applied for non parametric data.

Clinical discussion

Discussion on patients

This study was conducted on 50 female patients. A drug or a clinical study can be considered effective only when it provides symptomatic relief and tacksels the disease at the samprapti level itself. With this view the drug selected in the study showed improvement at different stages of disease as well as symptoms.

Plan of selection of drug

Drugs were selected on the basis of their properties keeping in mind their probable probable mode of action. To evaluate the action of Patha Trikanthaka Vrukshaka Kwath on Granthibhuta Artavadushti and its different manifestations Patha Trikanthaka Vrukshaka Kwath 40ml BD was administered orally for a period of three months i.e.90 days.

Observation seen in patients

Age

Menstrual disorders mainly occur in reproductive age group. In the present study 21 (42%) belonged to the age group of 26-30years, 19 (38%) from the age group of 21-25years, 7 (14%) from the age group more than 30years and 3 (6%) from the age group of less than 21years. As women in this age group are more conscious for pregnancy also family burdens, children and personal problems are there which might affect the personal life of a woman due to which menstrual cycle is disturbed and leading to Granthibhuta Artavadushti.

Occupation

Maximum 21(42%) patients were students, 17(34%) patients were house wife, and 12(24%) patients were under going service.

Majority of the patients were students. They are more prone to stress and hormonal imbalance. So this psychological and physiological state may affect artava utpatti.

Religion

Out of 50 patients maximum 45 (90 %) patients were from Hindu community, 5(10%) were from Muslim community. Due to strong panchan agni in muslim patient, they are least affected.

Ahara

Out of 50 patients 31 (62%) of patients were mixed type of diet, while 19 (38%) patients were taking vegetarian diet. So it can be said that patients were taking mixed type of diet are more prone to Granthibhuta Artavadushti.

Socio-economic status

The majority of the patients i.e 35 (70%) were reported in middle class, 11 (22%) patients observed in the upper class, and 4 (8%) patients were in lower class. It may be presumed that people of lower class and middle class are not having proper diet and unhygienic environment. So the chances of malnourishment are higher in lower and middle class the ladies of other classes. Middle and lower class people undergo lot of stress in many phases of day to day life. We know that stress itself is a cause for many disorders.

Marital status

Out of 50 patients 28 (56.33%) patients were married while 22 (43.67%) patients were unmarried. It can be said that the change in Desha, Ahara, Vihara after marriage, disturbs menstrual cycle which in turn lead to Granthibhuta Artavadushti and in some married women psychological and economical stress and disturbances in marriage may lead to Granthibhuta Artavadushti.

Prakruti

Maximum distribution of patient i.e 18 (36%) of them were seen from the vata kapha prakruti, 17 (34%) patients from vata pitta prakruti, 13 (26%) patients from pitta kapha prakruti, 1 (2%) patients were kapha vata prakruti and 1 (2%) patient were pitta vata prakruti. Increasing number of vata kapha prakruti is seen in the study may be because of the close proximity of these doshas with the disease entity.

Agni

Out of 50 patients 15 (30%) patients were found having Mandagni. As mandagni is primary cause of all vyadhi it is also may cause Granthibhuta Artavadushti. So it can be said that women having mandagni are more prone to Granthibhuta Artavadushti.

Duration of Granthibhuta Artavadushti

Out of 50 patients 27 (54%) with 2 months duration of symptoms, 16 (32%) patients with 3 months duration of symptoms, 4 (8%) patients with 1 month duration of symptoms and 3 (6%) patients with 4 months duration of symptoms.

Discussion on Effect of therapy on subjective criteria**Yonivedana**

The pain during menses subsided with 65.83 % and P value being < 0.05. Show highly significance.

Yoni kandu

Yonikandu i.e vaginal itching subsided with 59.45% and P value being < 0.05. Shown highly significane.

Granthibhuta Artava Strava

Granthibhuta Artava Strava i.e. clotted appearance in menses subsided with 81.05% and P value < 0.05. show very highly significance.

Varna of Artava Strava

Varna of artava Strava i.e abnormal menstrual colour subsided with 78.4% and P value < 0.05. show very highly significance.

Discussion on overall effect of therapy

Out of 50 patients, Moderate relief (50 to 75% relief) was noted in 30 patients i.e. 60%, 20 (40%) patients were reported in Excellent relief (75 to 100% relief), and no one was reported in Mild (25 to 50% relief) and Ineffective (0 to 25% relief) after treatment.

Yoni Vedana (painfull menstruation), Yonikandu (vaginal itching), Granthibhuta Artavastrava (clots in menses), and Varna of Artava strava (colour of menstrual bleeding) are proved statistically significant where $p < 0.05$ i.e. at 95 % level of significance.

Other Observations

It was observed that there were no adverse effects of the treatment in any of the patients. All the patients tolerated the treatment very well.

This drug was also try on the patient having malignancy of reproductive organ. As per study chemical constituent of saponin In drug prevent the spread of malignancy.

Additional benefits are as a result of the action of the drugs on Agni there by preventing the agnimandhya. Also the nidana parivarjana may be one of the reasons for the betterment of the treatment.

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16. Cha.Chi.1/1/7-8,1/1/79.
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Need of Present Research Work

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2. Howkins and Bouvne, Shaw's textbook of Gynecology, Elsevier publications, 13th Edition By Padubidri & Shrish Dafatry (Reed Elsevier India Pvt. Ltd. Delhi) (Chapter No. 5 Pg. No. 56).
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2. A.Hr.Sha.3/11,9/11 pg no.32,122.
3. A.Hr.Su.12/64.
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7. Bh.pr.Pu.3.
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28. Sha.Pu.5/16.
29. Ka.Khi.9/17.
30. Ch.Chi.14/17.
31. Su.Su.14/6.
32. Su.Su.14/10.
33. Cha.Chi.14/7.
34. A.Sa.Sha.1/10.
35. A.Sa.Sha.1/10.
36. Bh.P.Pu.3/107 pg no.59.
37. Cha.Chi.15/17.
38. Bh.P.Pu.3.
39. A.Sa.Sha.5/98.
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11. Ch.Vi.8/154.
12. Su.Chi.40/20.
13. A.Hr.Su.20/2.
14. Ch.Si.9/89-92.
15. Ch.Si.9/92,Su.Chi.40/28-36.
16. A.Sa.Su.29.
17. Su.Chi.40/28-36.
18. A.Hr.Su.20/9.
19. Ch.Si.2/22.
20. Su.Sha.6/28.
21. A.Sa.Su.29/2.

ROLE OF PANCHAKARMA IN MUTRAKRUCCHA (CHRONIC UTI): A CASE STUDY

Dr. Yennawar Sandhya M.^{1*} and Dr. Bawankar Rupali J.²

¹Asso. Prof., Streerog and Prasutitantra Dept. C.S.M.S.S. Ayurved College, Aurangabad.

²Asso. Prof., Rasshastra Dept. C.S.M.S.S. Ayurved College, Aurangabad.

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***Corresponding Author**

**Dr. Yennawar Sandhya
M.**

Asso. Prof., Streerog and
Prasutitantra Dept.
C.S.M.S.S. Ayurved
College, Aurangabad.

ABSTRACT

Dysuria is a common symptom in gynecology. Dysuria means difficulty in passing urine. According to Ayurveda dysuria is correlated with mutrakruccha. So, difficulty or pain in micturition is called mutrakruccha. There is a pain while passing urine & also obstruction to the passage of urine. This is a chronic disease. This is due to urinary tract infection (UTI) & is associated with urethritis & cystitis. Causes for cystitis due to infection with E-coli, tuberculosis, stone, radiation cystitis, and Papilloma or carcinoma. In this condition painful micturition especially at the end of the act. Avoid all the etiological factors. Abhyanga, snehana, swedana, niruha anuvasan basti, avagaha, parishek uttarbasti is the general line of treatment. Use of mutral

herbes. So we decided to use the abhyantar chikitsa, panchakarma, sthanik chikitsa in dysuria (mutrakruccha) according to 26/45 & presented a case study. By this case study we conclude that the holistic approach of Ayurveda panchakarma and Sthanik chikitsa plays an important role in the management of dysuria (mutrakruccha).

KEYWORDS: Mutra kruchha, Mutradaha, Varnvar mutrapravrutti, Uttar basti, Abhyantar chikitsa.

INTRODUCTION

Dysuria^[1] is a common symptom in gynecology. Dysuria means difficulty in passing urine. According to Ayurveda dysuria is correlated with mutrakruccha.

मूत्रकृच्छ्रे मूत्रं कृच्छ्रेन् वहति । चक्रदत्त

मूत्रस्य कृच्छ्रेण महता दुःखेन प्रवृत्तिः॥^[२]

मा.निदान

So, difficulty or pain in micturition is called mutrakruccha. There is a pain while passing urine & also obstruction to the passage of urine. This is a chronic disease. This is due to urinary tract infection (UTI) & is associated with urethritis & cystitis.

Cystitis= Inflammation of bladder.

Causes for cystitis due to infection with E-coli, tuberculosis, stone, radiation cystitis, and Papilloma or carcinoma. In this condition painful micturition especially at the end of the act.

Urethritis= Inflammation of urethra.

Here the pain is scalding during the act. This is due to specific or non-specific organism, tender carbuncle 'prolapse of urethral mucosa, kraurosis, urethral carcinoma.

Patient of 48 year female having the same complaint i.e.

- | | | |
|---|---|----------------|
| *Burning micturation (Mutradaha) | } | since 14 years |
| *Frequency of micturition (Varanvar Mutrapravrutti) | | |
| *Burning & itching of vulva vaginal region. | } | since 10 years |
| *White discharge | | |
| *Insomnia (Nidranasha) | | |
| *Irritability (Manovaichitya) | | |

Visited to our OPD of Stree rog department on 14/12/2017

We observed and clinically diagnosed patient by Ayurvedic approach as a Mutrakrucha.

According to Acharya Charaka cha.chi.26/33 & cha.chi.26/43 Samanya chikitsa sutra for mutrakrucha was adopted.

ApréÉÍÉ xLÉWÏLÉÂWoÉLxiÉ xLÉWÉmÉLÉWÉ·ÉU oÉLxiÉ xÉMúLÉ]
 ÍxjÉUÉIS ÍpáúÉÍÉ WUÉÉ ÍxÉkSÉLÉ S±ÉS'xÉÉÉÉLÉsÉ qÉ\$ÉMúCNIÉ ||^[3] cÉ.ÍcÉ.26/45

To avoid all the etiological factors. Abhyanga, Snehana, Swedana, Niruha Anuvasan basti, Avagaha, Parishek Uttarbasti is the general line of treatment, use of mutral herbes was adopted & presented a case study.

CASE STUDY

Patient name:--XXX

Age:--48 years

Address:--Plot no.36, Dashmesh nagar, Aurangabad.

O.P.D.NO.----- 38849

DIAGNOSIS

Chronic UTI with PID C/O *burning micturition (Mutradaha)

*Frequency of micturition (Varanvar mutrapravrutti) } since 14 years
 *Burning & itching of vulva vaginal region. }
 *White discharge } Since 14years
 *Insomnia (N idranasha) }
 *Irritability (Manovaichitya) O/H: ---G2 P2L2A0 }

G1== ♀ --22years } L.S.C.S.
 G2= = ♂--15 years }

Sterilization done before 10 years

K/C/O: -- Hypertension

Having antihypertensive treatment since 15 years.

Ashtavidha parikshan^[4]

- 1) Nadi 82/min (regular)
- 2) Mala –Grathil
- 3) Mutrasadaha (burning)
- 4) Jinhva -----sam
- 5) Shabda—sakashta
- 6) Sparsha ----- feeling feverish every time
- 7) Drukaksheena (due to pain)
- 8) Akrti -----sthula

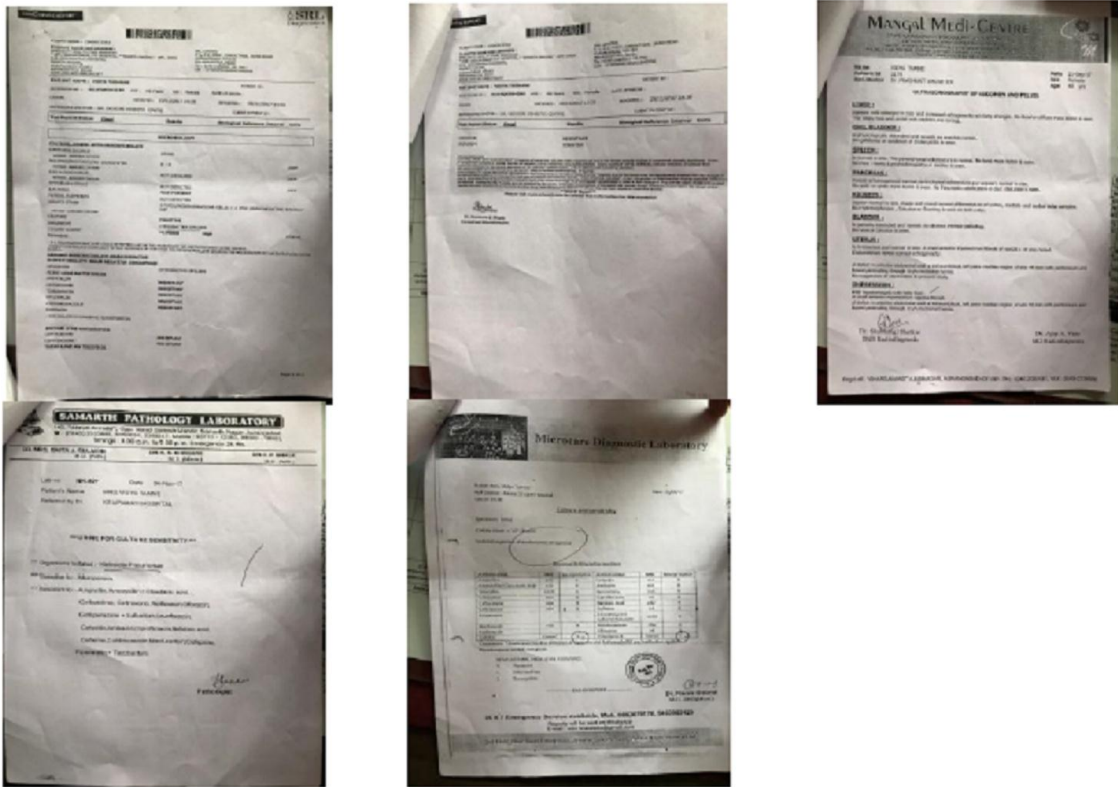
Prakruti:--Kaphapitta P/A:-- All over tenderness

Abdominal laxity Incisional herniation +

LIVER } NAD
 SPLEEN }

CHEST < NAD

INVESTIGATION



MATERIAL AND METHODS

We decided to use abhyantar chikitsa, panchakarma, and sthanik chikitsa as follows—

A) Abhyantar chikitsa:--14/12/2017

1. Hingvasthak churna^[5]- 500mg b.d.
2. Aampachak vati^[6] -500 mg b.d.
3. Chandraprabha vati^[7] -500 mg b.d.
4. Punarnava mandur^[8] –250 mg b.d.
5. Avipattikar churna^[9]-2 gm * Hs with luke warm water
6. Chandanasava^[10]–20 ml b.d. after meal

B) Panchakara & sthanik chikitsa

1. Sarvanga snehan^[11]
2. Swedan^[12]
3. Yoga basti^[13]
4. Utterbasti^[14]
5. Shirodhara^[15]
6. Nasya^[16]
7. Panchavalkal kwath yoni dhavan^[17]

8. Chandanbala lakshadi taila uttarbasti^[18] (mutramarga)
9. Tankan & honey yonipratisaran
10. Chandanbala lakshadi taila & jatyadi taila yoni pichu^[19] under all aseptic Precautions' in minor OT

20/12/2017

burning micturition (Mutradaha) ↓
 Frequency of micturition (Varanvar mutrapravrutti) ↓
 Burning & itching of vulva vaginal region. ↓
 White discharge ↓
 Insomnia (N idranasha) ↓
 Irritability (Manovaichitya) ↓

28/12/2017— 15th day

burning micturition (Mutradaha) ↓↓
 Frequency of micturition (Varanvar mutrapravrutti) ↓↓
 Burning & itching of vulva vaginal region. ↓↓
 White discharge ↓↓
 Insomnia (Nidranasha) ↓↓
 Irritability (Manovaichitya) ↓↓

Repeat cycle (2nd cycle) - **13/1/2018-** up to **19/1/2018**

burning micturition (Mutradaha) ↓↓↓
 Frequency of micturition (Varanvar mutrapravrutti) ↓↓↓
 Burning & itching of vulva vaginal region. ↓↓↓
 White discharge ↓↓↓
 Insomnia (N idranasha) ↓↓↓
 Irritability (Manovaichitya) ↓↓↓

3rd cycle - **10/3/2018** to **16/3/2018**

burning micturition (Mutradaha) ↓↓↓↓
 Frequency of micturition (Varanvar mutrapravrutti) ↓↓↓↓
 Burning & itching of vulva vaginal region. ↓↓↓↓
 White discharge ↓↓↓↓
 Insomnia (N idranasha) ↓↓↓↓

Irritability (Manovaichitya) ↓↓↓↓

Chandanbalalakshadi taila^[19]

Drug name	Latin Name	Rasa	Guna	Virya	Vipaka	Karma
Devdaru	Cedrus deodara	Tikta katu kashay	Laghu Ruksha	Usha	Katu	Krumighana, dushtavranaghana, shothaghana, kaphavatahar
Ashwaganda	Withnia somnifera	Katu tikta kashay	Laghu Snigdha	Usha	Katu	Vatakaphahar, Shothahar, balya
Haridra	Curcuma longa linn.	Katu	Laghu tikshna	Usha	Katu	Kaphapittahara, Shothahar
Daruharidra	Berberis aristata	Katu	Laghu Ruksha tikshna	Shita	Katu	Shulaghana, krumighana, vatakaphahar
Bala	Sida cardifolia	Madhur	Laghu Snigdha	Shita	Katu	Vatapittahar, balya, bruhan
Raktachandn	Santlum album	Tikta Madhur	Laghu Ruksha	Shita	Katu	Varnya, dahaprashaman kandughana
Ushir	Vetiveria zizanoides	Tikta Madhur	Ruksha Laghu	Shita	Katu	Kaphapittahar pachan stambhan
Laksha	Coccus lacca	Kashay	Laghu	Shita	Katu	Stambhan shonitsthapan
Rasna	Aipinia officinarum	Tikta	Guru	Ushna	Katu	Antifungal, antibacterial
Kachura					Katu	
Sariva	Hemidesmus indicus	Madhur Tikta	Guru Snigdha	Shita	Madhur	Tridoshar, grahi, jwaraghana kandughana, pramehahara
Vidnamak	Sodium chloride	Lavan	Picchil	Ushna	Katu	Pachan Dipan Vatanuloman
Saindhav namak	Sodium chloride	Lavan	Picchil	Ushna	Madhur	Dipin pachan, anuloman.

Panchavalkal^[17]

Drug name	Latin Name	Rasa	Guna	Virya	Vipaka	Karma
Nyrodha	Ficus benghalensis	Kashay	Guru Ruksha	Shita	Katu	Pittakaphahara Vranaropan – shodhana
Udumbar	Ficus glomerata	Kashay	Guru Ruksha	Shita	Katu	Kaphapittahara mutrasangrahaniya stambhak, varnya
Ashwatha	Ficus religiosa linn.	Kashay Madhur	Guru Ruksha	Shita	Katu	Kaphapitahar, vranashodhan
Parish	Thevetia populnea	Kashay	Laghu Snigdha	Shita	Katu	Kaphapittahara mutrasangrahaniya
Pluksha	Ficus lacor	Kashay	Ruksha Guru	Shita	Katu	Kaphapittahara mutrasangrahaniya

Jatyadi taila^[20]

Drug name	Latin Name	Rasa	Guna	Virya	Vipaka	Karma
Chameli patra	Jasminum grandiflorum	Tikta Kashay	Laghu snighdha, mrudu	Ushna	Katu	Tridoshahara Vranaropan – Vranashodhana
Nimba patra	Azadirachta indica	Tikta	Laghu Tikshna	Ushna	Katu	Vatakaphahar, vishaghana, vranashodhan vranaropan
Patol patra	Tricosanthes dioka Roxb	Katu Tikta	Laghu ruksha tikshna	Ushna	Katu	Varnya, dahashaman, kaphavatahar
Karanj patra	Pongamia Pinnata	Tikta katu kashay	Laghu tikshna	Ushna	Katu	Shothahar, Bhedan
Kutki	Pichreohiza kurroa royle	Katu Kashay	Laghu, Ruksha Tikshna	Ushna	Katu	Vishaghana, Krumighana jwaraghana dahaprashmana
Padmak	Prunus puddum roxb	Kashay tikta	Laghu snighdha	Sheet	Katu	Kaphapittahar, vedanasthpan varnya

Laghu panchamula

Drug name	Latin Name	Rasa	Guna	Virya	Vipaka	Karma
Bruhati	Solanum indicum Linn	Katu tikta	Laghu Ruksha	Ushna	Katu	Kaphavatahara Krimighana kandughana
Erandamula	Ricinus Communis Linn	Madhur Katu Kashay	Snigdha sukshama	Ushna	Madhur	Kaphavatahara shulaghana
Kantakari	Solanum surattense	Katu Tikshna	Laghu Ruksha	Ushna	Katu	Kaphavatahar, shothahar, mutral, Mutrakruchahar
Prushnaparni	Uraria pictadesv	Madhur Tikta	Laghu Snigdha	Ushna	Madhur	Tridoshahar, dahaghana, jvaraghana
Shaliparni	Desmodium Gangeticum	Madhur Tikta	Guru Snigdha	Ushna	Madhur	Tridoshahar, Balya, Krumighana, Jvaraghana
Gokshur	Tribulus terrestris	Madhur	Guru Snigdha	Shita	Madhur	Vatapittahar, mutral vrushya Rasayan.

Bruhat panchamula

Drug name	Latin Name	Rasa	Guna	Virya	Vipaka	Karma
Bilva	Aegle marmelos	Kashay tikta	Laghu Ruksha	Ushna	Katu	Vatakaphahara, Dipan, Pachan, Grahi.
Gambhari	Gmelina arboreal inn.	Tikta Kashay Madhur	Guru	Ushna	Katu	Vatapittahar, shothhar Dipan, Pachan, Medhya
Patla	Stereospermum sauveolens	Tikta Kashay	Laghu Ruksha	Anushna	Katu	Tridoshahar, Hridya, Kanthya
Agnimantha	Clerodendrum phlomidis	Tikta Katu Kashay Madhur	Ruksha Laghu	Ushna	Katu	Kaphavatahar shothahar, Dipan
Shonak	Oroxylum indicum	Madhur Tikta Kashay	Laghu Ruksha	Ushna	Katu	Kaphavatahar Dipan, Grahi.

RESULT

Complete relief in Mutrakruchata i.e. all sign & symptoms which was suffering since 14 years.

Morning : 8 to Evening : 8 Phone : 2335381		BHIDE LABORATORY DR. R. B. BHIDE M.D.	
<small>KASLIWAL BUILDING, KIRANA CHAVDI, SHAHAGUNJ, AURANGABAD - 431001. BRANCHES : TILAK NAGAR, NEAR ROPLEKAR HOSPITAL, AURANGABAD. TEL : 2340398</small>			
Name : Mrs. Tamne Vidya	BSLT/32492	Age :	Sex : Female
Ref. by :	No : 57895	Date :	20-Feb-2011
<u>EXAMINATION OF URINE</u>			
GENERAL EXAMINATION			
Volume examined	: 30 ml	Colour	: Yellowish
Appearance	: Clear	Deposit	: Nil
Reaction	: Acidic	Sp. Gravity	: qns
CHEMICAL EXAMINATION			
Albumin	: Traces	Sugar (red Subst)	: Nil
Bile Pigments	:	Acetone	:
Bile Salts	:	Aceto Acitic Acid	:
Urobilinogen	:	Occut Blood	:
MICROSCOPIC EXAMINATION (Centrifuged deposits)			
Pus cells	: 0 to 1 / hpf	Casts	: Nil
R.B.Cs.	: Nil / hpf	Crystals	: Nil
Ep. cells	: 2 to 3 / hpf	Bacteria	: Nil
Macrophages	: Nil	Yeast	: Nil
Trichomonas	: Nil	Amorphous Deposits	: Nil
Haemoglobin	:		

R. B. Bhide

DISCUSSION

मूत्रकृच्छ्रात् खलुः मूत्रमैत्रं नैस्येत् खलुज्ज्वलं मूत्रमैत्रं नैस्येत्
 कृच्छ्रात् कृच्छ्रात् मूत्रमैत्रं नैस्येत् नैस्येत् कृच्छ्रात् मूत्रमैत्रं नैस्येत् [21] च. ई. 26/33

According to Acharya Charak, aggregated tridoshas specially apan vayu gets lodged in basti (urinary bladder) region, causes constriction & irritation in mutramarga (urethra) causes mutrakruchha. According to modern science, infection of urinary tract by bacteria can also cause dysuria (mutrakruccha). These bacteria causes bladder irritation by inflammation results into cystitis & urethritis with complaints of burning micturition, frequency of urination, urgency & sensation of incomplete passage etc.

Inshort,

Samprapti factors

Dosha - Vata dominant - tridosha

Dushya – Mutra, Udak

Adhishtan - Basti, Mutramarga, Pakvashaya.

Srotas - Mutravaha.

Having same complaints patient was visited to our hospital. In this case study the treatment was followed by Acharya Charaka as follows-

Abhyantar chikitsa



Dipan, pachan, Anuloman

Gokshur based formulations

Shilajit preparation.

Panchakarma



Snehana (bahya parimarjan)

Swedan

Yog basti

Uttar basti (Mutramarya)

Shirodhara

Nasya

Dipan: It was done by Hingvashtak churna. (2 gm---2gm before meals with anupan Goghrita).

The contains in this drug are agneya mahabhutatmak, katu amala lavan rasa pradhan, laghu ushna tikshna viryatmak which stimulate & strengthen jatharagni.

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

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

Chandraprabha vati: Acts as follows with its main ingredients.

Dose—500mg b.d. with anupan chandanasava

- Suvarnamakshik and loha helps in pitta shaman, raktavardhak.
- Shilajatu—Rasayan, normalize the dhatu pariposhan karma.
- Guggulu—relaxes the sympathetic & parasympathetic nerve stimulation anti-inflammatory balya rasayan.
- Khadisakhar—Hrudya, prasadan.
- Karpur ---Vishaghana, krumighana.
- Kachura, ela, vekhand, --Pachak, shamak, mutral, krumighana result into reduce the bladder infection.

Chandanasava--- Acts as agnivardhak, balakarak, dahaghana, shulaghana.

The disease of other parts of the body caused by vitiated vata can be relieved by treating it at the level of its root i.e. pakwashaya. With help of basti. According to Ayurveda mutra nirmiti takes place in pakwashaya.

मूत्रनिर्मितिः पाकवाशयात् ।
 इति ॥ ३/२१.२११ ॥^[22]

Vessels arising from large intestine called ‘Mutravaha nadya’ fill the urinary bladder like the rivers feed water to ocean on earth. They are so minute that they are not perceived. These vessels arise from Amasaya & convey fluid to bladder day and night. Thousands of this vessels provide water which excludes from vessels to inside bladder posterior urine is filled is “Upasnehana” meaning by exudation.

इति ॥ ३/२१.२११ ॥ (QsWhé)

In large intestine, kitta gives origin of two mala of food. Separation of these mala is done in large intestine.

So, Among the measures adopted in the management of vatavyadhi Anuvasan, aasthapan, and uttarbasti are considered to be supreme devices. They act locally as well as systematically. It is regarded as a half of the treatment.e.is ardhachikitsa in vata vyadhi. It is also effective in pitta, kapha, & raktaj disorder.

Panchakarma

- 1) **Snehan (Bahya parimarjan):** Vata is located mainly in the tactile sensory organ lodged in the skin, hence sarvanga snehan (bahya parimarjan) was beneficial to skin &

vaadosha. Snehan (oleation) loosens the morbid doshas to certain extent.

- 2) **Swedan (sudation):** The qualities of swedan like ushna, tikshna, sara, drava, snighdha, helps in flushing out the wastage & toxins from the body through perspiration.
- 3) **Yogabasti:** Act locally as well as systematically help to normalize the vitiated apan vayu & mutranirmiti.
- 4) **Uttar basti:** By jatyadi taila and chandanbalalakshadi taila in bladder. These oils reducing the inflammation of the bladder & urethra by tikta katu kashaya rasa, laghu, ruksha guna, ushna virya, pachan, tridosahar, krumighana, shotaghana, dahaprashamana, kandughna, vishaghana, vedanasthapan, shodhan & ropan properties & get relief from burning micturition, frequency of micturition & repeated UTI.
- 5) **Shirodhara:** Help to reduce vitiated doshas, the irritability & provides the sound sleep to the patient.
- 6) **Nasya:** (Panchavardhendriya taila) stimulate the function of sensory & motor organs & refresh the patient.
- 7) **Yonidhavan:** (With Panchavalkal kwath) Kashaya rasa, sheeta veerya, Ruksha guna, shothahar, pittakaphahar, medohar, reduces the inflammation of yoni results in relief the patient from white discharge, itching of vagina.

CONCLUSION

Thus we conclude that the holistic approach abhyantar chikitsa, panchakarma, sthanik chikitsa gives complete relief to the patient from all signs & symptoms of mutrakrucha.

Medicines used in the above case are cheap, effective & easily available.

Treatment was cost effective.

Patient was happy from bottom of heart.

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SCIENTIFIC REVIEW OF MONTHLY DIETIC REGIMEN IN GARBHINI (PREGNANCY) ACCORDING TO AYURVEDA

Dr. Yennawar S.M.*

Associate Professor, Department of Prasuti Tantra and Streerog, CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad *Corresponding Author

Dr. Thote A.S.

Assistant Professor, Department of Kayachikitsa, CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad

Dr. Sangode N.P.

Assistant Professor, Department of Rachana Sharir, CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad

ABSTRACT Pregnancy is a physiological condition in a woman's life. It is a natural phenomenon hence does not require any treatment. Treatment is done only if there is any pathological condition or disease. Paricharya means the Ahara – Vihara which are followed by pregnant woman in order to keep all the body functions normal and healthy. Garbha (fetus) is completely dependent on mother for nutrition and growth. So whatever diet the pregnant woman consumes performs three functions – Nourishment of the woman's body itself, Formation of milk, and Nourishment to the fetus. After following the dietetic regimen from 1st to 9th month, the woman remains healthy and delivers the child possessing good health, energy, strength, voice, compactness, much superior to other progeny. If garbhini paricharya is not followed by garbhini then the chances of Garbhavyapadas and Garbhopadravas are increased. So to reduce the above complications, dietetic regimen plays an important role which was explained by different Acharyas in Ayurveda.

KEYWORDS : Garbhini, Paricharya, Pregnancy, Dietic regimen, Ayurveda.

INTRODUCTION

Pregnancy is a physiological condition in a woman's life. It is a natural phenomenon hence does not require any treatment. Treatment is done only if there is any pathological condition or disease.

Paricharya means the Ahara – Vihara which are followed by pregnant woman in order to keep all the body functions normal and healthy.

The main aim of Paricharya is

- Anupaghata – to avoid abortion
- Paripurntwaya – for appropriate growth and nourishment of fetus and up to full term pregnancy.
- Sukhaprasavaya – for normal labour without any complication from the point of view of both mother and baby.

In an initial stage when its specific body parts though present are not explicit, it obtains its substances by attracting moisture and osmosis. After wards when the body parts are conspicuous, a part of nourishment is obtained by upasneha (moisture) permeating through pores of skin situated in hair roots of the body and a part through the passage of umbilical cord – placenta – to the mother's heart. The mother's heart immerses the placenta with blood through running and oozing vessels. Mother's diet contains all the shadarasa, thus the rasa derived from this diet gives strength and complexion to the fetus and the fetus deriving its substances from this rasa remains alive and develops in the uterus.

According to Acharya Sushruta,
रसजं पुरुषं विद्यात् रसं रक्षेत् प्रयत्नतः ।
अन्नपानाच्च मतिमान् आचाराच्चाप्यतद्रितः ॥

सु. सू. १४ / १२

Ahara rasa is mainly responsible for the creation of purusha. The diet plan and daily habits of the pregnant woman should not disturb the normal ahara rasa and it must be the main concern during pregnancy.

For the production of Nirama ahara rasa, the most important thing is normal 'Jatharagni' and 'Dhatvagni', leading to stronger dhatu consequently.

Garbha (fetus) is completely dependent on mother for nutrition and growth. So whatever diet the pregnant woman consumes performs three functions

- Nourishment of the woman's body itself
- Formation of milk
- Nourishment to the fetus

स्त्रिया ह्यापन्नगर्भयास्त्रिधा रसः प्रतिपद्यते ।
स्वशरीरपुष्टये, स्तनाय, गर्भवृद्धये च ॥
स तेनाहारेणोपष्टब्धः परतन्त्रवृत्तिर्मातरमाश्रित्य वर्तयत्यन्तर्गतः ॥

च. शा. ६ / २३

यदन्नपानं प्रायेण गर्भिणी स्त्री निषेवते ।
रसो निवर्तते तादृकं त्रिधा चास्याः प्रवर्तते ॥
मातृपुष्ट्यर्थमेकांशो द्वितीयो गर्भवृद्धये ।
तृतीयः स्तनपुष्ट्यर्थं, नार्या गर्भवृद्धये ।
का. सं. सू. लेपाध्याय

गर्भिन्यास्तु त्रिधा कार्ये रसोऽभिनिवर्तते ।
गर्भात्या (भ्रत्वा) य स्तन्यत्वाय रसत्वाय चेति ॥

भे. शा. ४ / ३३

We cannot change the Atmaja, Matruja, and Pitruja bhava of Garbha by diet but the Rasaja and Satvaja bhava can be improved by Garbhini Paricharya explained in Ayurveda.

According to modern view, during pregnancy increase the calorie requirement due to increased growth of maternal tissues, fetus, and placenta and increased basal metabolic rate. The requirement extent of 300 over the non-pregnancy state.

So here Ayurveda plays an important role by dietetic regimen for healthy child and mother.

MATERIALS AND METHOD

TABLE NO. 1 – Month wise drug regimen during pregnancy

Month	Charaka	Sushruta	Ashtanga Sangraha	Harita	Bhela
1	<ul style="list-style-type: none"> Non medicated Milk according to Agni and Shareer Bala. Congenial Diet in Morning and Evening 	<ul style="list-style-type: none"> Sweet Cold Liquid Diet 	<ul style="list-style-type: none"> Medicated milk. Ghruta medicated with Shalparni. Ghruta medicated with Palash – for first 12 days. Anupan – Gold and Silver boiled water. 	<ul style="list-style-type: none"> Yashtimadhu, Parushak, Madhuk Pushpa, all along with Navneet (Butter) and Honey. Milk medicated with Madhura Dravya (Sweetened milk) 	

			<ul style="list-style-type: none"> Sweet, cold, liquid diet. Massage and Rubbing should be avoided. 		
2	Milk medicated with Madhura dravya	Milk medicated with Madhura dravya	Milk medicated with Madhura Dravya	Sweetened milk treated with Kakoli	
3	Milk medicated with Honey and Ghruta	Shashti rice with milk	Milk medicated with Honey and Ghruta	Krushara	
4	Milk with Butter (Quantity – 1 Aksha)	<ul style="list-style-type: none"> Shashti rice cooked with curd. Milk with Butter. Meat of wild animals. 	Milk with 1 Aksha Butter	Medicated cooked rice	Milk with Butter
5	Ghruta prepared with butter extracted from milk	<ul style="list-style-type: none"> Medicated cooked rice. Meat of wild animals. Hrudya food with milk or ghruta. 	Ghruta	Rice cooked with milk and Sweetened	Milk Yavagu
6	Milk or Ghruta medicated with Madhura dravya	Ghruta medicated with Shwadanshra and Yavagu	Milk and Ghruta medicated with Madhura Dravya	Sweet curd	Milk, Ghruta
7	As above	Ghruta medicated with Pruthakparni. Dalhan – Vidarigandhadi	Milk and Ghruta medicated with Madhura Dravya	Ghruta khanda (A sweet dish)	
8	Rice Gruel prepared with milk mixed with ghruta	<ul style="list-style-type: none"> Asthapan Basti with Badaradi Kwatha. Milk medicated with Madhura Dravya siddha tail – Anuvasan Basti. Yavagu, Meat of wild animals till delivery 	<ul style="list-style-type: none"> Yavagu mixed with milk. Asthapan Basti of Badaradi Decoction. Anuvasan basti with oil medicated with milk and Madhura Dravya. Snigdha Yavagu and meat of wild animals till delivery. 	Ghevar Ghrutapurak (A kind of sweet preparation)	
9	<ul style="list-style-type: none"> Anuvasan Basti with oil medicated by Madhura Dravya Yonipichu of medicated oil (Vaginal tampon) 	<ul style="list-style-type: none"> Asthapan Basti with Badaradi Kwatha. Milk medicated with Madhura Dravya siddha tail – Anuvasan Basti. Yavagu, Meat of wild animals till delivery 	Vaginal Tampon of oil medicated with Madhura dravya.	Varieties of Cereals	Anuvasan Basti of oil medicate with Kadamba and Mash. Followed by Yavagu.

TABLE NO. 2 – Scientific view of drugs

Dravya	Latin Name	Rasa	Virya	Vipaka	Guna	Karma
Palash	Butea monosperma	Katu, Tikta, Kashaya	Ushna	Katu	Laghu, Snigdha	<ol style="list-style-type: none"> Palash Seed + Takra – Acts mainly on threadworm, Round worm, killing them. Hence Iron and food is digested properly. Takra being Amla – Rasaprinan and Raktavadhaka hence increases Lactobacillus and increases absorption of Iron and nutrients. It is Krimighna and Grahi, hence reduces the risk of abortion. Palash – Helps for good digestion hence to produce Nirama Ahara Rasa and Nirama and healthy garbha. Kinhuk (Palash Flower) – Kapha pittaghna, hence reduces risk of abortion. Palash patra paste – Kapha pittaghna, pramehanashaka, helpful in gestational diabetes (DM in pregnancy), due to Grahi quality useful in Polyhydrominos. Palash patra + Milk – Punsavanartha.
Shaliparni	Desmodium gangeticum	Madhura, Tikta	Sheeta	Madhura	Guru, Snigdha	Acts on all tridoshas, regulates them, Vishghna, Rasayana, Balya, Brumhana, Dhatupushtikarak.
Yashtimadhu	Glycyrrhiza glabra Linn	Madhura	Sheeta	Madhura	Guru, Snigdha	It contains glyceretic acid which has Anti-inflammatory activity. Diacetate – this has action similar to that of hydrocortisone.
Gokshur	Tribulus terrestris	Madhura	Sheeta	Madhura	Guru, Snigdha	Decreases albuminurea, useful in oedema, prevents pre eclamptic condition. Medhya, Balya, Rasayana, Hrudya, Garbhasthapaka, reduces burning micturition, UTI in pregnancy.
Aparajita	Citoria ternate	Katu, Tikta, Kashaya	Sheeta	Katu	Laghu, Ruksha	Medhya, Anti-inflammatory, good for eyes, regulates all three doshas. It is a well-known nervine tonic.
Brihi Shali Shashti			Sheeta	Madhura	Snigdha, Laghu	Sheeta, Sthira, easy to digest, Grahi.
Gold	Aurum	Madhura, Kashaya, Tikta	Sheeta	Madhura		Vatapittaghna, slightly Kaphakara, kills infection, Rasayana, Medhya, Balya, Vishahara, Hrudya, Netrya, Kshayanashaka, Ojovardhaka.

Silver	Argentum	Amla, Madhura, Kashaya	Sheeta	Madhura		Regulates Vata-Pitta, Medhya, Balya, due to its Amla Rasa it acts as a Raktavardhaka, healthy for majja dhatu, helpful in anemia.
Tin	Stannum	Tikta Sushruta – Lavana	Ushna Ruksha	Katu		It is Kapha-Vata shamaka as of its Tikta Rasa, Ojovardhaka, decreases oedema, has action on urinary system.
Lead	Plumbum	Tikta, anurasa - Madhura	Ushna Snigdha	Madhura		Reduces Vata-Kapha, useful in Dhatukshayajanya Vataprakopa, works on Urinary system, Reproductive system and muscles, useful in constipation.
Zinc	Zincum	Kashaya, Tikta	Sheeta	Katu		Ork mainly on Rasa Dhatu, reduces Kapha-Pitta.
Hingul	Cinnebar	Tikta	Ushna	Madhura		Works on Tri-doshas, Rasayana action, Agnideepaka. Medicines – uvarnamalini Vasant, Madhumalini Vasant – Balya and Garbhaposhaka.
Iron	Ferrum	Tikta, Madhura, Kashaya	Sheeta	Katu		Raktavardhaka, Kapha-pitta shamaka, Trushnashamaka. Due to its Tikta, Kashaya rasa and Ruksha guna, it decrease Kapha. Due to its Tikta, Madhura, Kashaya rasa and Sheeta virya it decreases Pitta dosha. Because of Katu vipaka, it creates mild constipation.
Milk (Cow)		Madhura	Sheeta	Madhura		Jeevaneeya, Rasayana, Medhya, Balya, Stanyakara, Cures Jeerna Jwara, Mutrakrucchra, Raktapittaghna, reduces thrust and hunger, also Daridryanashaka.
Curd		Amla		Amla	Guru, Ushna	Vataghna, Ruchivardhaka, Agnivardhaka, Raktavardhaka, Abhihyandi quality i.e. reaches sukshma strotasa.
Navneet (Butter)		Madhura, alpa Kashya, Amla	Sheeta		Sheeta	Grahi, Deepaka, Raktapittanashaka.
Ghruta (Cow)		Madhura	Sheeta	Madhura	Sheeta	Smruti, Grahanshakti, Dnyanshakti, Agnibala, Ayushya, Shukra vardhaka. Healthy for eyes, Swara Madhuryadayaka, helpful in Vihinmada, Viryavardhaka, Vayathapana.
Honey		Kashya Madhura			Guru, Ruksha, Sheet	Yogavahi, Vatakara, Vranahodhana, Ropana, Sandhana.

DISCUSSION

1st to 3rd Month

During 1st three months (1st trimester) of pregnancy, pregnant woman prominently experiences Nausea, and Vomiting. In this condition she cannot take her normal diet. Due to vomiting, Rasa kshaya is seen. Hence drava ahara (liquid diet) helps to increase the rasa dhatu, results in prevention of dehydration and further produces Nirama ahara rasa.

प्रथमे मासि कललं जायते ।

सु. शा. ३ / १४

अव्यक्तः प्रथमे मासि सप्ताहात्कलली भवेत् ।

अ. ह. शा. १ / ३६

According to Acharya Sushruta and Vagbhata, in the first month embryo is in the shape of kalala (liquid state) so according to Acharya Charaka,

सर्वदा सर्वभावानां सामान्यं वृद्धिकारणम् ।

च. सू. १

The similar properties enhance the respective qualities inside the body.

समान गुणाभ्यासो हि धातूनां वृद्धिकारणम् इति ।

च. सू. १२

Hence prescribes the liquid diet.

MADHURASA

तत्र मधुरोरसः शरीरसान्याद्रसरुधिर मांसमेदोस्थ मज्जोजः शुक्रभिवर्धन आयुष्यः षडिन्द्रियप्रसादनो बलवर्णकरः पित्तविषमारुतघ्न तृष्णादाहप्रशमनस्त्वच्यः केश्यः कण्ठो बल्यः प्रीणनो जीवनस्तपर्णो बृंहणः स्थैर्यकरः क्षीणक्षतसन्धानकरो घ्राणमुखकण्ठोष्ठ जिह्वाप्रल्हादनो दाहमूर्च्छाप्रशमनः षट्पदपिपीलि-कनिमिष्टतमः स्निग्धः शीतो गुरुश्च ॥

च. सू. २६/४३-१

Madhur rasa has snigdha, sheeta, guru, kaphavardhaka, vata-pitta shamaka properties. Madhur rasa will be entire oral cavity with its sweet taste, a feeling of generalized well beingness, pleasure and strength to body organs. These properties help to maintain the proper condition of Garbhini and Garbha. As fetus is dominated by kapha, naturally it would need more unctuous substances to replenish the kapha. Madhura rasa did this.

According to modern science it is claimed that Madhur rasa (sweet) will nourish all the tissues because glucose is stored in the muscles as glycogen and circulating all over the body as glucose in the blood. The cerebral cortex contains maximum quantity of glucose and its depletion results in death during hypoglycemic attack. As well as it has anabolic property help to keep the mother and baby healthy.

Amla rasa

अम्लो रसो भक्तं रोचयति, अग्निं दीपयति, देहं बृंहयति, ऊर्जयति, मनो बोधयति, वातमनुलोमयति, हृदयं तर्पयति, आस्यमास्त्रावयति, भुक्तमपकर्षयति, क्लेदेयति जरयति, प्रीणयति, लघुरुष्णः स्निग्धश्च ।

च. सू. २६/४३-२

Amla rasa (sourness) is claimed to be hridya (good for heart and mana) (हृदयाय मनसो हितम् हृद्यम् ।). It is rich in vitamin C.

तत्रं लघु कषायाम्लं दीपनं कफवाताचित् ।

The deepan property strengthens Jatharagni and help to maintain nirama ahara rasa that is why Acharya Harita prescribes Takra pan in 1st month of pregnancy.

Sheeta ahara reduces the pitta prakopa hence it reduces the risk of Garbhavyapada i.e. Garbhastava (abortion or miscarriage).

According to Ashtang Sangraha, Palash siddha ghruta is to be prescribed in 1st month.

Actually various parts of palash are useful in pregnancy a follows:

1. Palash Seed + Takra –Palash seed has krimighna and grahi property. It mainly act on thereadworm and round worm by killing them. Takra being alma rasatmak help in rasapreenana and raktavardhaka and hrudya. It is having Lactobacillus. So combinely both the drugs will increases the absorption of iron and nutrients which help to prevent the garbhavyapada and garbhopadrasas like garbhini pandu (anemia in pregnancy).
2. Kanhuk (Palash Flower) – having Kapha pittaghna property it reduces reduces risk of abortion.
3. Palash patra pask – according to Acharya Sushruta it is kapha pitta prashamana, pramehanashaka, so useful to prevent the gestational diabetes as well as due to its grahi guna it works in plihodara so it also prevents the polyhydromnios condition in pregnancy.
4. Palash ghruta for 1st 12 days along with gold and silver boiled in

water – Gold and silver having properties of reducing vata-pitta, krimighna, rasayana, medhya, smrutiprada, balya, viharaha, ojovardhaka property.

According to Acharya Kaphyapa, in 1st 3 months the means (indriyas) have subtle manifestation and the mind has more manifestation. The fetus quivers, achieves consciousness and feels pain. So the above dietic regimen is very useful to mother and fetus become healthy.

Yashtimadhu

Due to its madhura rasa and vipaka, sheeta virya, brumhana, pittashamaka property it helps to prevent nausea and vomiting and nourishes the fetus. It contains gluceretic acid which is having anti-inflammatory activity and diacetrate having action to that of hydrocortisone.

Honey

It is madhur and kashya in rasa, kaphahara, yogavahi (catalyst in action – a drug which accelerates the action of other drug with which it recites without giving out its originality).

Sukshma marga anusaritan (A.S. Su. 6/92) Sukshma enables to penetrate into minute capillaries of the body, strotasas by increasing osmotic permeability. As it contains sugar which are rapidly absorbed by the digestive system and converted into energy, so it is an instant energizer.

It speeds up healing, growth of healing tissues, so useful in implanted bleeding and APH cases. It has anti-bacterial properties so prevent various infections like TORCH during 1st trimester which are responsible for abortion (constant use of honey strengthen WBC to fight bacteria, virus, etc.) Honey is a good antioxidant which restores the damaged skin and gives soft and young look. Antioxidants have the ability to inhibit oxidative damage which prevent inflammatory condition and also prevents neurodegenerative conditions.

ब्रणशोधनं संधानरोपणं वातलं मधु ।
रुक्षं कषायमधुरं तत्तुल्या मधुशर्करा ॥
नाद्रव्यात्मकत्वाच्च योगवाहि परं मधु ।
वृष्ययौगैरतो युक्तं वृषतामनुवर्तते ॥

Sarpi (Ghruta)

गव्ये क्षीर घृते श्रेष्ठे ॥

शस्तं धीस्मृतिमेधाग्नि बलायुः शुक्रचक्षुषाम् ॥
बालवृद्धप्रजाकान्ति सौकुमार्यस्वरार्थिनाम् ।
क्षतक्षीण परीसर्पशस्त्रान्नि पितात्मनाम् ॥
वातपित्त विषोन्माद शोषालक्ष्मी जरा पहम् ॥

अ.सं. सू. ६

Sarpi has unique quality to transform itself so as to imbibe the qualities of the substances to which it is added without losing its own qualities. This is known as samskara anuvartana. This property is not so prominent in other sneha dravya like – Taila, vasa, majja.

Madhuryat – sweet in taste.

Avidahitvat – does not cause burning sensation.

Janama dyeva cha shilana – it is used since birth.

Pharmacodynamics:

Rasa	-	Madhur
Guna	-	Snigdha, Mrudu, Guru, Manda
Virya	-	Shita
Vipaka	-	Madhur
Prabhav	-	Agnideepana
Karma	-	Pitta vatahara, Svara,- lavanya, teja-balakara, chakshushya, medhya, increases rasa, oja, dahashamaka, vrushya, vayasthapana.

Among the ghee form different sources, cow's ghee is found to be the best according to Ayurveda. Sarpi is effective in all three doshas. It alleviate vata dosha by virtue of its snigdha (unctuous) quality. It pacifies pitta dosha due to its madhur and shita quality attributes. It also treats kapha dosha by virtue of samskara anuvartana, when it is combined with kaphahara drugs. Moreover, sarpi has been proved as a good bio-enhancer of accompanying drug, as well as a good ojokara

(immunity enhance). That's why each and every Acharya prescribe the use ghruta throughout pregnancy period.

Ghee is a rich source of vitamin A, Vitamin E and carotenoids. It acts as a catalyst for absorption of various macro and micronutrients from placenta. Is also lowers the prostaglandin level in serum. It has hypocholesterolemic effect.

Prostaglandins decrease uterine blood flow and increase the level of oxytocin which results in abortion, premature labour as well as pre eclamptic condition and PIH.

अत्रं गव्यं तु जीवनीयं रसायनम् ।

क्षतक्षीणहितं मेध्यं बल्यं स्तन्यकरं सरम् ॥

A. र. सू. ५/२१

4th Month

चतुर्थे मासि स्थिरत्वमापद्यते गर्भः ।

च. शा. ४ / २०

चतुर्थे सर्वाङ्ग प्रत्यङ्ग विभागः प्रव्यक्तो भवति ।

गर्भं प्रत्यक्त्तिभावाच्चेतना धातुशाभिव्यक्तो भवति कस्मात् ॥

सु. शा. ३ / १४

Various body parts become more conspicuous and stability to the fetus comes in the 4th month. Manifestation of heart and consciousness associated with heart takes place. Due to stability in fetus the woman feels more heaviness in the body. So shalishashti, curd and navnet plays an important role as follows:

स्निग्धो ग्राही लघु स्वादुस्त्रिदोषघ्नः स्थिरो हिमः ।

षष्टिको व्रीहिषु श्रेष्ठो गौरश्वासितगौरतः ॥

अ. ह. सू. ७ / ७

Snigdha, grahi, laghu, sthira guna helps in stabilization of fetus and create laghuta in pregnant woman.

लाजास्तुट् छर्षतीसारमेहमेदः कफाच्छेदः ।

कासपित्तोपशमनां दीपना लघवो हिताः ॥

Due to the above property plays an important role in garbhini aruchi and chhardi.

नवनीत

शीतं स्वादु कषायाम्लं नवनीतं नवोद् घृतम्

कषायो रसः संशमनः, संग्राही, सन्धानकर, पीडनो, रोपणः, शोषणः, स्तम्भनः, श्लेष्मरक्तपित्तप्रशमनः, शरीररक्तेदस्योपयोक्ता रूक्षः शीतोत्लघुश्च ।

Due to above properties it helps to stabilize the foetus in uterus.

Curd

Curd contains lactic acid. Lactate is essential for brain development and it also prevents fetal acidosis.

Mamsarasa

It is a good nutritive, vatapittahara, Ruchikara, help in relieving tiredness and dhatukshaya. It is rich source of vitamins, organic iron, calcium and other minerals.

Due to manifestation of fetus heart in 4th month it possesses two hearts so the mother is called “dauhridini”. Hence the fetus indicates its desire in sense of objects. If these desires are ignored, the lady would delivers the fetus with various garbhavikruti (congenital anomalies) i.e. Kubja, Kuni (deformed hands), Khanja (deformed legs) Jada, (mentally retarded), Vamana, abnormality in eyes. So one can take the douhruda as an indicator of nutritional deficiency or psychological need of mother.

तस्मादिति सुख दुःख संबन्धात् सुखोत्पादनार्थं दुःखपरिहारार्थं च स्पन्दते चलति ॥

च. शा. ४ / १५ चक्रपाणी टीका

According to Acharya Kashyapa, after 4th month chances of abortion declines and basic organogenesis is also advanced to certain extent, minimizes the chances of congenital anomalies. Hence, whatever she desires should be provided to her afterward she delivers powerful and

long lived progeny.

5th Month

पञ्चमे मासि गर्भस्य मांसशोणितोपचयो भवत्यधिकमन्येभ्यो मासभ्यः ।
तस्माद् गर्भिणी काश्यमापद्यते विशेषेण ॥

च. शा. ४ / २१

पञ्चमे मनः प्रतिबुद्धतरं भवति ॥

सु. शा. ३ / १६

According to Ayurvedic philosophy the knowledge of perception is the result of interaction between mana and indriya. Since by 5th month auditory reflexes and peripheral sensory reflexes develops to certain extent.

The woman becomes emaciated due to lack of nourishment of maternal dhatus as the rasa is driven to nourish more and more the flesh and blood of the fetus.

That's why Acharya has prescribed ghruta, milk and meat of wild animals in this month. From 4th month onwards muscular tissues of fetus grow sufficiently required more proteins which are supplied by use of meat soup.

6th month

षष्ठे मासि गर्भस्य बलवर्णोपचयो भवत्याधिकमन्येभ्यो मासेभ्यः ॥
तस्माद् गर्भिणी बलवर्णं हानिमापद्यते विशेषेण ॥

च. शा. ४ / २२

षष्ठे बुद्धि ॥

सु. शा. ३ / १६

षष्ठे केशरोमनखास्थिस्नाखादीन्याभिव्यक्तानी बलवर्णोपचयश्च ॥
अ. सं. शा. २ / २८

बलवर्णो जसां वृद्धि षष्ठे ॥

का. सं. शा. असमानगोत्रीय

षष्ठे मातु श्रमोऽधिकम् ॥

का. सं. शा. असमानगोत्रीय

As by 24th to 25th weeks, sensory and motor organs attain some maturity and skin becomes pink so the description of buddhi and complexion is given. Deposition of calcium also starts in this month, so the classics have described formation of hairs and bone. As during this month the fetus derives relatively more strength and complexion hence the pregnant woman suffers loss of strength and complexion, she feels more tiredness. That's why use of godugdha and godhruta is indicated.

In this month kleda nirmiti takes place, so pedal edema is seen prominently in pregnant woman that is why ghruta medicated with gokshura is given to pregnant woman, as it has kledaghna, mutral, shothaghna property. According to modern science steroidal Saponin has good diuretic property and is proved to have the best nephroprotective activity as that of gentamycin. It also prevents the retention of water, reduces albuminuria. As it is having vasodilator property it preventing PIH, IUGR, pre mature labour, DM and infection. Gokshura is also having buddhi vardhaka, nrumbhana, pitta-kapha nashaka property. So it helps to increase the intellect.

7th month

सप्तमे मासि गर्भः सर्वे भवैश्याप्यते ॥

च. शा. ४ / २३

सप्तमे सर्वाङ्ग प्रत्यङ्ग विभागः प्रव्यक्ततरः ॥

सु. शा. ३ / १६

तस्मात्तदा गर्भिणी सर्वाकारैः क्लान्ततमा भवति ॥

च. शा. ४ / २३

All the features (muscle, blood, bone, etc.) get proper nourishment. All the major and minor body parts are more conspicuous (are fully developed). Whole body gets completely associated with vata, pitta,

and kapha. As the fetus attains overall maturity in this month, the pregnant woman feels excessively exhausted. That's why Acharya prescribes milk and ghruta with medicated with madhura aushadhi.

Navneet medicated with madhur aushadhi, Ghruta khanda (a sweet dish) is a specially prescribed by Acharya Harita. Madhura and amla rasa play an important role a prescribed earlier.

Ghruta medicated with pruthakpami and vidarigandhadi gana are prescribed by Acharya Sushruta. The drugs of vidarigandhadi gana are diuretic, anabolic, relative emaciation and suppress pitta-kapha and maintain the health of mother and fetus.

8th month

In this month, according to Acharya Charaka, rice gruel (yavagu) prepared with milk should be given to garbhini.

यवागू

यवागू त्रिविधा प्रोक्ता मण्डः पेया विलेपी ।

सिक्थकौ रहितो मण्डः पेया सिक्थ समाप्तिता ।

विलेपी बहु सिक्था स्याद् यवागू विरलद्रवा ॥

सु. सू. ४६ / ३४४

Yavagu – preparation of cereals like rice, wheat, barley. It is easily and completely absorbed by human body. It is easily and completely absorbed by the human body.

कृशरा

कृशरा शुकला बल्या गुरुः पित्तकफप्रदा ।

दुर्जरा बुद्धि विष्टम्भि मलमूत्रकरी स्मृता ॥

भा. प्र. कृतात्रे

Kaphapittakara, vatahara, balya, buddhiprada, malamutravardhaka.

In 8th month most of the time constipation takes place due to pressure of gravid uterus over the bowels and effect of progesterone. Use of Asthapana basti of badaradi dravyas and anuvasana basti of milk and madhur dravya siddha tail relieves the constipation and helps in anulomana of vata (apana) and vishodhana of puran mala. This may also affect the autonomous nervous system governing myometrium and help in regulating their function during labour. So it prevents the malpresentation and increases the chances of normal labour.

9th month

Anuvasana basti of Madhura aushadhi siddha tail should be given. Yonipichu of Til Tail medicated with madhur dravya should be kept in vagina for softening of the birth canal.

Qualities of Til Tail – Rassa – madhur, Anurasa – Tikta, Kashaya. Virya – Ushna.

Guna – Tikshna, Gurur, Snigdha, Vikasi, Sara Karma

मारुतघ्नं न च श्लेष्मवर्धनं बलवर्धनम् ।

त्वच्यमुष्णं स्थिरकरं तैलं योनि विशेषणम् ॥

च. सू. १३ / १५

- Til tail is good source of zinc and has powerful antioxidant property.
- Taila alleviates Vata dosha but does not aggravate kapha.
- Promotes Bala (strength) to apatyapatha (vagina).
- Controls the morbidity of female genital tract.
- Antibacterial and anti-fungal activity.

Oil tampon soften the birth canal, influence autonomic fibers governing myometrium and help in regulating their functions. As having anti-microbial (krimighna) property, it kills the microbes in birth canal and help to prevent sutika roga (puerperal sepsis).

CONCLUSION

Benefits of monthly regimen

परम इति निर्विकार माष्यस्यमानस्य गर्भस्य मासे मासे कर्मोपदेश्यामः ।

एवं कुर्वती हृद्गोणाऽऽग्य बल वर्ण स्वर संहनन संपदुपेतं ज्ञातीनाम् श्रेष्ठमपत्यं

जनयति ॥

यदिदं कर्म प्रथमं मासं समुपादायोपदिष्टमानवमान्मासात्तेन गर्भिण्या गर्भसमये गर्भधारिणीकुक्षिकटीपाश्र्वपृष्ठं मृदुभवति वातश्चागुलोमः संपद्यते मूत्रपुरीषे च प्रकृतिभूते सुखेन मार्गमनुपद्येते चर्मनखानि च मार्दवमुपयान्ति बलवर्णो चोपचीयेते पुत्रं चेष्टं संपदुयेतं सखिनं सुखेनैषा काले प्रजायत इति ॥

च. शा. ८ / ३२

After following the dietetic regimen from 1st to 9th month, the woman remains healthy and delivers the child possessing good health, energy or strength, voice, compactness, much superior to other progeny.

Women's kukshi (abdomen), sacral region, flanks and back become soft, apana vayu moves into its right path, feces, urine and placenta are excreted easily by their respective passage. Skin and nail become soft. Woman gains strength and complexion. She delivers easily at proper time. A desired, excellent, healthy child possessing all the qualities of long life.

Abbreviations

च. – Charaka Samhita

सु. – Sushrut Samhita

अ. ह. – Ashtang Hridaya

अ. सं. – Ashtang Sangraha

का. सं. – Kashyapa Samhita

भे. – Bhela Samhita

भा. प्र. – Bhavapraksha Samhita

सू. – Sutrasthana

शा. – Sharirsthana

A CRITICAL ANALYSIS OF SAMSAJANA KRAMA**Dr. Megha R. Survase***

Assistant Professor, Department of Panchakrama, CSMSS Ayurveda Mahavidyalaya, Aurangabad.

***Corresponding Author: Dr. Megha R. Survase**

Assistant Professor, Department of Panchakarma, CSMSS Ayurveda Mahavidyalaya, Aurangabad.

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ABSTRACT

Shodhana and Shamana are two treatment principles in Ayurveda. Panchakarma is Shodhana treatment which includes Vamana, Virechana, Vasti, Nasya, Raktamokshana. Every Panchakarma is done in three stages poorvakarma, pradhana krama, and paschat krama. All of these stages has been given its own importance and relevance. In paschat krama, there are some paschat karma done immediately after pradhana karma like kavala, gandush, dhoompana and some paschat karma done in sequential order to restore agni bala. This sequential order are been followed in samsarjana krama, tarpanadi krama, rasa avacharan krama as per given in classics. The different ways of giving samsarjana krama, tarpanadi krama and rasa avacharan krama, according to classics are critically analyzed in this paper Its modified way of giving is also been discussed in this paper. This paper also focuses on the practical problems faced by physician in case of vegetarians and highlights on the substitute which can be given instead.

KEYWORDS: Samsarjana krama, Tarpanadi krama, Ras avacharana krama, Paschat karma.**INTRODUCTION**

Ayurvedic management of diseases is generally, classified into "Shodhana" and "Shamana" treatments.^[1] Out of which the Shodhana therapy, has been given prime importance owing to its credential of providing a complete cure as there is no possibility of disease recurrence.^[2] Shodhana therapy is done by means of Panchakrama. In every Panchakrama there is poorva krama, pradhana krama and paschat krama and each of them has its own importance and relevance. Poorva krama includes deepana pachana snehana swedana.^[3] Pradhan krama includes vamana, virechana, Asthapanavasti, Anuvastana vasti Nasya krama, and raktamokshana,^[4] and paschat krama includes samsarjana krama, tarpanadi krama, parihar kala, kavala, dhoom etc.^[5]

Paschat krama means the regimen to be followed after Pradhana krama. In paschat krama some are immediate paschat krama done for shesha dosha pachana and some are gradual and sequential paschat krama for agni sandukshan. It means the kavala gandusha dhoomapana comes under immediate paschat krama as it is done immediately after shodhana like vamana, nasya. It is done for shesha dosha pachana, kantha shuddhi, utklishta dosha shanti.^[6] The paschat krama like samsarjana krama parihar kala tarpanadi krama are mentioned to be given gradually and in sequential order to retain the strength of agni Samsarjana krama is indicated after vamana and virechana and parihar kala is done after vasti.^[7] The

reason for samsarjana krama in case of vamana and virechana is explained in Chakrapani that there is prabhut elimination of doshas which causes kshobha in the body leading to agnimandya and for agni sandhukshan samsarjana krama is followed. And after vasti there is sthoka (less) agnimandya so, samsarjana krama is not required after vasti,^[8] only dwiparihar kala is necessary for agni sandhukshan It is understood that samsarjana krama is given only after attaining shuddhi in the patient. In case of not attaining shuddhi there is tarpanadi krama told in classics.^[9]

Samsarjana krama literally means graded administration of diet after shodhana. The main purpose of samsarjana krama is not only agni sandhukshan but also to make agni mahan, sthira, and capable of digesting all food preparations even of guru gunas.^[10] After shodhana all of sudden regular diet cannot be introduced to the patient as it may increase the agnimandya so liquid and laghu diet should be started gradually stepping up to solid or guru diet. According to different classics there are different types of food preparations mentioned for samsarjana krama viz Manda peya, yavagu, vilepi, odana akruta yusha kruta yusha akruta mamsa rasa and kruta mamsa rasa. This paper will focus on different aspects of samsarjana krama in classics, which is a part of paschat krama.

Samsarjana Krama

When to do Samsarjana krama

As far as the Panchakrama is concerned the samsarjana krama is done after vamanadi krama in the patients according to Charaka. Sushruta also mentions that samsarjana krama should be done after snehapana, vamana virechana, nirooha vasti and raktamokshana, as these kramas creates agnimandya in the body.^[11] But Chakrapani clears that in vamanadi though vamana, virechan, nirooha, shirovirechan has been included but in the context of samsarjana krama it is related with only vamana and virechna.^[12]

Why to do Samsarjana krama

After vamanadi krama, the shodhita purusha feels krusha, durbala, shunya deham, has alpa agni, krusha ashaya, so for recovery and for agni sandhukshan samsarjana krama is followed.^[13] The reason to follow samsarjana krama is agni sandhukshan, to make agni mahan sthira and capable of digesting every food preparations even of guru gunas.^[14]

In short samsarjana krama is followed after vamana and virechana because there is elimination of prabhut doshas from body, agni becomes weak, so to restore the prana the peyadi samsarjana krama should be followed. It depends upon the shuddhi attained by the patient.

Shuddhi and Samsarjana Krama

There are three types of shuddhi pradhan, madhyam, avar shuddhi. Depending upon this shuddhi annakala has been mentioned. In pradhan shuddhi 3-3 annakala, in madhyam shuddhi 2-2 annakala and in heena shuddhi 1-1 annakala of peya vilepi akruta yusha, kruta yusha, and mamsa rasa are been given.^[15]

Maniki Shuddhi and Samsarjana Krama

According to Sushruta Samsarjana krama also depend upon hrut doshasya pramana which means, quantity of doshas removed outside during shodhana process.^[16] For vamana virechana and raktamoksham 1 prastha is 13.5 palas.^[17] though normally it is 16 pala

Table 1: Maniki shuddhi and samsarjana krama.

Doshas removed outside	Annakala	Anna
1 prastha (540gms)	1	Yavagu
Half adhak (1080 gms)	2	Peya
1 adhak (2160 gms)	3	Peya

Table 3: Definition and proportion of various food items for samsarjana krama.

Food preparations	Definition	Sharangdhar	Madanpala nighantu	Bhavaprakash
Manda	Siktha Virahito Manda	1:14	1:14	1:14
Peya	Sikta Samanvwita Dravadhik Swalpa Siktha	1:14	1:14	1:14
Vilepi	Bahusikta Syad Ghanasiktha Syat	1:04	1:04	1:04
Yavagu	Veeral Drava	1:06	1:06	1:06
Odana	-	4:14	--	4:14
Yusha	-	1:14	1:18	1:18

When 1 prastha doshas are eliminated then 1 annakala of yavagu should be given. When half adhak doshas are eliminated then 2 annakala of peya should be administered and when 1 adhak doshas are eliminated then 3 annakala of peya should be administered.^[18]

Bala and Samsarjana Krama

Sushruta also focus that samsarjana krama depends on the bala of the patient. Dalhana mentions that bala can be judged by upachaya. Hence samsarjana krama is depended on agnibala.

Table 2: Bala and samsarjana krama.

Bala	Annakala
Pravar (Good)	1
Madhyam (medium)	2
Heena (less)	3

Patient having good bala 1 annakala of samsarjana krama should be given, for madhyam bala 2 annakala of samsarjana krama should be given and for those with heena bala 3 annakala should be given.^[19]

In short it can be understood that mainly samsarjana krama depends on shuddhi attained by patient. There are four types of shuddhi regarding vamana and virechana in classics. In Chakarapani vaigiki, maniki, antiki and laingiki, shuddhi has been mentioned.^[20] Dalhana mentions three criteria laingiki, vaigiki, maniki, amongst which he mentions laingiki to be best criteria for shodhana.^[21] For samsarjana krama shushruta has given importance to the quantity of doshas expelled in shodhana which is maniki criteria. Samsarjana krama mainly depends on agni bala of patient.

Descriptions Regarding the Food Preparations

The descriptions regarding the food preparations of samsarjana krama are mentioned in krutanna vargas in classics. The administration is done mainly depending upon agni bala.

Rice Preparations

Manda, Peya, Vilepi, Yavagu, Odana in Samsarjana krama are prepared by using rice. Raktashali is said to use as it balances tridoshas and is best among all rice. Manda is very thin gruel prepared by boiling rice in water, the watery portion is manda. Peya is liquid rice gruel prepared by boiling rice until it becomes very soft and thin, Vilepi is thick gruel with more of boiled rice in it. Yavagu is semi solid food with much rice and very little of fluid in it.^[22]

According to Sharangdhara four pala rice boiled in 14 times water, the watery portion is manda and the thick rice is madhura and laghu that is odana.^[23]

According to Shushrut, Odan is cooked rice prepared from washed rice, dirt free rice, pleasing to mind, pleasant odour, it should be well cooked, hot or warm, drained off fluid, vishada (non-slimy), easily digestible.^[24] That prepared from unwashed rice, not drained off its fluid, not well boiled, and which has become cold is hard for digestion. That prepared from bhrushta tandula are laghu sugandhi, migitates kapha.^[25] Odana when mixed with sneha, mamsa, fruits, tubers, pulses, sours and milk becomes hard for digestion, bruhamana balya.^[25]

Yusha

According to Sharangdhara, 1 pal dravya kalka ; sunthi and pippali half karsha and drava bhaga one prastha should be taken and boiled till it reduce to half the quantity of drava bhaga,^[27] that is yusha.

Yusha is prepared by Shimbi dhanya like mudga, masur, chana, kulattha etc. But preferably for Samsarjana krama mudga is used. There are two types of yusha akrut yusha krut yusha. According to Charak akrut yusha is laghu than krut yusha. According to Sushruta, akrut yusha is liquid diet which is not added with sneha lavana and katu rasa (asneha lavanam sarvam akrutam katukai veena) and krut yusha is liquid diet which is medicated with sneha lavana and katu rasa (sneha lavanamkatukai samskrutam krutam).

Mamsa rasa

Charak mentions about two types of mamsa rasa viz tanu means akrut mamsa rasa and krut mamsa rasa and the latter is heavier than, former. It is preenana, hrudya, good for emaciated person, vyadhimuktinam, for ksheena retas, sarvarog prashaman, swarya, it promotes bala, varna, vaya, buddhi, ayushya, those who are indulged in vyayama, stree, madya, takes mamsa rasa regularly, they neither succumb to disease nor they lose their strength.^[28]

According to Sushruta, mamsa rasa does preenan, cures swasa, kasa, jwara, migitates vata pitta, shramahara, hrudya, promotes smriti ojas, swara, good for the people who are weak because of jwara kshataksheena, good for alpa retas, it do apyayana, builds physic, does bala vardhan, and if added with dadima rasa it is vrushya and dosha shaman.^[29]

There are different gunas of various food preparations used in samsarjana krama. It is been tabulated as follows from different classics.

Table 4: Gunas of various food preparations for samsarjana krama.

Manda	Peya	Vilepi	Yusha	Mamsa rasa
Deepan	Deepan	Deepan	Deepan	Brimhana
Pachan	Pachan			Aapyayan
vata anulomana	vata varcha anulomana	pitta nashini	Vata shaman Tridosha shamana	Vata shaman Tridosha shamana
swedam janayati	sweda janani	-----	sweda janani	-----
Trushnaghna	Trushnaghna	Trushnaghna	Hrudya	Hrudya
	Kshudhaghna	Kshudhaghna		
		Hrudya		
Laghutam	Laghutara	Laghu	Laghu	Laghu
pranadharan	Grahini	Grahini,	grahini	Pranadharan
Glanihara	Glanihara	Snehapayinam hita	-----	Preenan
	shramhara			
	Dourbalyahara			
Dhatu pushtida	Dhatu pushtida	Bala wardhan	Balya	Balya
Doshashesha pachana	kukshiroga	Vrana akshi roga	krimigna,	Kshataksheeni,
	jwarapaha,		kushtagna,	jwaraghna
	vasti shodhana,		jwarahara	Vrushya
				chakshushya

Practical Approach of Giving Samsarjana Krama

In classics according to different commentaries there are different ways of giving samsarjana krama. The practical approach of giving samsarjana krama has been

mentioned in Charak^[30] and sarvanga sunder tika of Ashtanga Hridaya.

Table 5: Practical Approach of Giving Samsarjana Krama.

Annakala	Day time	Aanna	Description	Grains	Anupana
1,2,3	Same day evening or next day depending on agnibala	Manda or yavagu	Sukhoshna	Purandalohitashali Tandula	--
4,5,6	Accordingly next annakala	Vilepi	Asnehalavana or alpasnehalavana	Purandalohitashali Tandula	Ushnodaka
7,8,9	Accordingly next annakala	Yusha	2 prasruta shali and tanusnehalavana mudgayusha	Purandalohitashali tandula and mudga	Ushnodaka
10,11,12	Accordingly next annakala	Mamsa rasa	Prepared by using water and lavana	Lavak,pinjal	Ushnodaka

Table 6: Variations of giving samsarjana krama mentioned in classics.

Day	Annakala	E/M	Pradhan Shuddhi			Madhyam Shuddhi			Heena Shuddhi		
			PC & IT	SST	CT	PC & IT	SST	CT	PC & IT	SST	CT
1	1	E	P	P	P	P	P	P	P	P	P
2	2	M	P	P	P	P	P	P	V	V	V
	3	E	P	P	P	V	V	V	AY	AKY	AKY
3	4	M	V	V	V	V	V	V	KY	KM	KM
	5	E	V	V	V	AY	AY	AY	KM	PB	PB
4	6	M	V	V	V	AY	KY	KY	PB		
	7	E	AY	AY	AY	KY	KM	KM			
5	8	M	AY	KY	KY	KY	KM	KM			
	9	E	AY	KY	KY	KM	PB	PB			
6	10	M	KY	KM	AM	KM					
	11	E	KY	KM	KM	PB					
7	12	M	KY	KM	KM						
	13	E	KM	PB	PB						
8	14	M	KM								
	15	E	KM								
9	16	M	PB								

(P-Peya; V –Vilepi; AY- Akruta Yusha; KY-Kruta Yusha, AM-Akruta Mamsarasa; KM-Kruta Mamsarasa, PB-Prakrutibhojana; E- evening; M – morning; PC- Padartha Chandrika Tika, IT – Indu Tika, SST – Sarvanga sunder Tika, CT – Chakrapani Tika)

Tarpanadi krama

Regarding tarpanadi krama it is mentioned that it is given if pitta and shleshma are eliminated in little quantity, in patient taking madya, and patient with vata pittaj disorder.^[31]

In context of shodhana karma, when little quantity of doshas are eliminated outside, it is ayoga.^[32] Hence it is cleared that in case of ayoga tarpanadi krama should be

followed because if samsarjana krama is given in that condition i.e. ayoga it will increase the abhishyanda viz strotorodha.^[33]

Methods of giving Tarpanadi krama

Different commenters have different opinion regarding tarpanadi krama. Chakrapani mentions to give swaccha tarpan instead of peya and Ghana tarpan instead of vilepi^[34] and after its digestion yusha and mamsarasa can be given. Jejjat mentions to use mudga yusha and mamsarasa for tarpan due to similar properties. Arundatta and Parmeshwara the commenter's of Ashtang Hrudaya and even padartha chandrika of Ashtang Hrudaya mentions about annakala while commenting about tarpanadi krama.

Table 7: Tarpanadi krama according to different commentaries of A. H.^[35]

Commentors A. H.	1 st Annakala	2 nd Annakala	3 rd Annakala
Arundatta	Lajasaktu	Jeerna shali odana	Mamsarasa odana
Parmeshwara	Lajasaktu	Yusha and anna bhojana	Mamsarasa and anna bhojana

Rasa Avacharan krama (Rasa prayoga and samsarjana krama)

According to Chakrapani, in context of samsarjana krama, purvam peyadina bhishak and rasottaren kramen. words are used regarding ras samsarjana krama which has been explained as follows.

1. Initially peya vilepi, yusha and in uttar kala mamsa rasa should be used
2. After vama virechana peyadi krama as there is agnimandya; so for agni sandhukshan peyadi krama should be followed while in nirooha there is sthoka agnimandya so rasa prayoga can be done.
3. After completion of peyadi krama administration of rasadi krama should be done.^[36]

It means rasadi krama mentioned in classics, should be used in paschat krama as far as shodhana is concerned. Chakrapani clears that it can be done with peyadi krama or after peyadikrama for prakruti bhojanartha and bala apyayanartha.^[37]

Sushruta mentioned that during samsarjana krama or after samsarjana krama there are chances of getting dosha prakopa, so to pacify these doshakopa rasa samsarjana krama should be followed.^[38]

In rasa samsarjana krama different types of ras yugma administration should be done in shodhita purusha in vyatasat manner. Firstly Snigdha amla swadu hrudhyani rasa should be used then amla lavana, then madhura tikta rasa should be used and lastly kashaya katu rasa should be used.^[39]

First yugma amla madhura is predominantly guru and snigdha. Second yugma, amla lavana it is predominantly laghu, agni mahabhuta dominant can be called as rooksha yugma. Third yugma, madhura tikta is predominantly sheeta, guru, can be called as snigdha yugma. Fourth yugma is predominantly laghu, rooksha, can be called as rooksha yugma.

Four rasa yugma are used in vyatyasat manner. First snidgha guna rasa prayoga then rooksha guna rasa are used viz snigdha rooksha prayoga.

In this context amla swadu rasa are used for pakwasayagata vata shaman, amla lavana rasa are used for agni sandhukshan, madhura tikta rasa are used for pitta shamanartha, kashaya katu rasa are used for tat urdhwa sthita kapha shamanartha.^[40]

Table 8: Rasa Avacharan krama.

Rasa Avacharan krama			
Charak	Reason	Sushrut ⁴¹	Reason
amla swadu	for pakwasayagata vata shaman	Swadu tikta	To pacify vata pitta and agni samikarnartha
amla lavana	for agni sandhukshan	Snigdha, Amla lavana katu	To pacify vata kapha and agni sandhukshan
madhura tikta	for pitta shamanartha	madhura Amla lavana	To pacify the increased pitta vata due to previous rasa
kashaya katu	for tat urdhwa sthita kapha shamanartha	Swadu tikta	To pacify the increased pitta Kapha due to previous rasa

DISCUSSION

Samsarjana krama is administration of food in orderly manner based on the gunas of food preparations. Manda, peya, yavagu odana, yusha, mamsa rasa are mentioned to be given as the food preparations during samsarjana krama. Among the food preparations manda is the most laghu. The rice used should be rakta shali because it balances tridoshas and is best among all rice, madhura vipaka, pathya, laghu. When this rice is boiled with fourteen times water, the watery portion is manda which is the most laghu and can be given with initiation of peyadi krama as it is pachak, agni pradeepak and sweda pravartak. Here the sweda pravartak guna of manda should be focused, as it is understood that the strotorodha are getting cleared. Giving of manda initially has been quoted as manda purva yavagu in charak. The practical approach of giving peyadi krama has been focused in this sutra. Here it is cleared that, amongst the food preparations, rice preparations should be started and that too with the rice water first. Then depending upon agni, peya can be advised to take which is prepared by same way as manda but here, it should be boiled till the rice

becomes very soft and mixes with water; and that soft thin gruel is peya It does mala anulomana, pathya, dourbalyahara, kshut trut glani hara. After shodhana there is little dourbalya glani and agni mandya so, to cope up with these symptoms it is wise to use peya which is again laghu and Deepak, pachak. It is also having malanutoman property, which means making the malas moves through the body in proper direction. It is helpful in clearing the strotos. This thin gruel is advised to take according to shuddhi. In pradhan shuddhi three times, in madhyam shuddhi two times and in heena shuddhi one time. It is three annakala, two annakala, and one annakala. Annakala is that times when patient feels hunger. In classics there is only morning and evening times mentioned to take as annakala. But considering present situations it can be given according to the hunger, whenever patient feels hungry. That means it can be given in morning, noon, and evening time also, with respect to agni.

When the raktashali cooked with six times water it is yavagu. It is laghu but it is slightly heavier than manda

and peya. It is grahi, balya tarpini, vatanashini according to sharangdhara. Though according to sharangdhara, in annaprakriya shadhan vidhi mudga masha, tila are mentioned to use for preparations of yavagu but in context of samsarjana krama only raktashali tandula are mentioned to use for preparation of yavagu. In classics other than samsarjana krama, 28 different types of yavagu are mentioned in charak with respect to different diseases.

When this raktashali is cooked in 4 times of water, the thick gruel formed is vilepi. It is madhura, pitta shamak, pathya, laghu hrudya, deepani, trushna shamak, kshudha shamak does bala wardhan, good for shodhita purusha, dourbalyahara. Mand, peya, vilepi yavagu are laghu, but manda is laghutam peya is laghutar and yavagu vilepi are laghu. All are dourbalya hara but bala wardhan is done mainly by yavagu and vilepi the word bala wardhan are not told regarding manda peya it is mentioned regarding vilepi, yavagu. Dhatu pushtida word is mentioned regarding peya. So it can be understood that after shodhana initially manda peya are used for glani hara, for dhatu poshana, and after dhatuposhana yavagu and vilepi are used for increasing bala which has been reduced after shodhana.

In case of manda peya vilepi and yavagu rice should be used but in case of yusha shimbi dhanya like mudga masha, masoora, godhuma, kulattha etc should be used for preparation. In bhavprakasha 18 times water is mentioned for preparing yusha it is again of two types akruta yusha and kruta yusha. Akruta yusha is that yusha which is not added with sneha lavana katuka. It is laghu than kruta yusha. So in samsarjan krama it should be given first and then kruta yusha should be given Kruta yusha is that yusha which is added with sneha lavana katuka. It is kaphaghna deepana, hrudya. Usually mudga yusha is preferred for samsarjana krama as mudga are pathya laghu, kashaya, madhura, katu paki and sheeta. Yusha is tridosha shamak, balya, sweda janani. It means it clears the strotas and increases the bala in classics other than samsarjana krama yusha has been used in many different diseased condition Even sushruta has mentioned different types of yusha in krutanna vargas.

Last food preparation is mamsa rasa which is again kruta and akruta mamsarasa which is, preenana, hrudya, good for emaciated person, sarvarog prashaman, swarya, it promotes bala, varna, vaya, buddhi, ayushya. Mamsarasa is good for increasing strength of agni and also physic. In classics it is not mentioned as to what should be used instead of mamsarasa in case of vegetarian people. It should be given based on yukti. The vegetarian diet which will enhance agni bala, which will do brumhana prana vardhana should be given. So sarvadhanya krut yusha with goghritam is one choice or godhum yusha with goghrita can also serve the purpose.

There is also tarpanadi krama mentioned in classics which should be given when proper shuddhi has not

attained. It can be inferred from the definition of tarpanadi krama that it is to be given in ayoga of shodhana. When alpa doshas are eliminated from body, it leads to kapha pitta prakopa and in this condition if peya is given it will lead to strotorodha, agnimandya, abhishyanda in body, so tarpanadi krama has been mentioned to be used in paschat krama.

Also a different concept of rasa avacharan krama has been mentioned in classics. It is indicated when there is dosha kopa in body, occurred while giving peyadi samsarjan krama or there is dosha kopa in body after completion of samsarjana krama. Thus it is understood that it is used as a therapeutic measure for dosha shaman which has occurred while giving or after giving peyadi samsarjana krama. When acharyas clearly mentions that it is given with samsarjana krama or after samsarjana krama it means that ras avacharana krama is given after attaining shuddhi in patient it is not given in ashuddhi condition. If dosha kopa occurs while giving samsarjana krama the ras avacharan krama can be given with food materials like peya vilepi etc. If dosha kopa has occurred after completion of samsarjana krama then it can be given with laghu aahar which can be called as medicated aahara or can be given independently For eg if patient gets bitter taste vomiting after completion of samsarjana krama then either dadima rasa can be given independently which will increase bala of patient by doing pitta shaman or mudga yusha cooked with dadima rasa can be given according to agni bala. The particular krama of giving rasa yugma has been mentioned in classics It has started with amla madhura rasa, then amla lavana rasa, then madhura tikta rasa and lastly kashaya katu rasa, which has been mentioned to use in vyatyasat manner. The reason regarding giving this rasa is tridosha shaman and agni sandhukshan The amla madhura rasa is given for vata shaman, then amla lavana is given for agni sandhukshan. If while giving amla lavana rasa pitta increases then madhura tikta rasa should be given for pitta shaman and kashaya katu rasa can be used for kapha shamana. In rasa avacharan krama this particular order of giving rasa yugma has been given importance. But practically after assessing the dosha avastha the particular rasa yugma can be used for dosha shaman. Say if vata increased in patient, madhura amla rasa can be used or if pitta is increased in patient madhura tikta rasa can be used or if patient is having less agni amla lavana rasa can be used for agni sandhukshan etc. In short while giving rasa avacharan krama one should not stuck on the krama which is mentioned in sutra as against after assessing the dosha avastha that particular rasa yugma can be used wisely.

CONCLUSION

- Samsarjana krama should be given according to the shuddhi of patient.
- Tarpanadi krama should be given when Ayoga has occurred in patient.
- Rasa avacharan krama should be given after the shuddhi of patient.

- Rasa avacharan krama can be done with samsarjana krama to mitigate the dosha prakopa.
- Rasa avacharan krama can be done after the samsarjana krama to mitigate the dosha prakopa.
- Ras avacharan krama can be given after assessing the dosha avastha in patient, instead of sticking on the particular sequential order mentioned in sutra.
- In samsarjana krama instead of mamsa rasa godhuma or sarvadhanya kruta yusha can be used with goghrita in case of vegetarian patient.

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Aamvata- A Single Case Study

Dr. Yashashri A Vitonde

Assistant Professor

Department of Kayachikitsa

CsmssAyurvedMahavidyalayaKanchanwadi, Aurangabad

Dr. A.K.Burley

Professor

Department of Kayachikitsa

CsmssAyurvedMahavidyalayaKanchanwadi, Aurangabad

Abstract:

Aamvata is acute joint disorder which is comparable to Rheumatic arthritis .The disease hampers patients routine work by severe fleeting type joint pain, swelling at joints, fever with involvement of heart. Aamvataaggravates due to Ama & Vatadosha which circulates in the body through blood vessels & goes into shdeshmasthanalike Joints, Stomach, Heart, Head etc. The aim of our treatment is to detoxify Ama by giving Langhan, dry fomentation, basti & vatashamakaushadhi. In this study a patient 44 years female diagnosed as aamvata given above said treatment & successfully get relief without remission.

Keywords: -Aamvata ,guggul,Aamvat,shool ,shoth.

Introduction:

Aamvatais acute disease in which both Ama&Vata are aggravated& affects various kaphadosha sites like joints & heart¹

This disease iscomparable to Rheumatic arthritis.Indulgence in incompatible foods and habits, or does physical exercise after taking fatty foods & those who have poor digestive fire , even normally also, produces Ama in the body .

At the some time if the same person takes Vataprovoing diet & activities ,then such Ama gets associated with vitatedAma& starts circulating in the body .

This Ama spread from the heart & blood vessels & then goes at various site of kaphadosha, like Joints ,Head& stomach .This causes fever, heart disorders & joint problems .This diseases starts in the stomach manifests in the joints and the heart .There is acute pain at big joints ,heaviness in the body,high fever, indigestion & edema on the body.²

The pain is fleeting type as if bitten by scorpion.³

The painfully swelling can be found in the joints of hands, feet ,cervical region ,pelvic and shoulder joint ,knees & thighs. Associated symptoms like loss of energy ,bad taste in mouth ,polyuria ,burning sensation, low functioning of digestive system, anorexia ,reversalof sleep pattern , constipation, joint stiffness etc.⁴

when the heart gets involved usually the mitral value is affected & there is either stenosis or regurgitation type deformity .when there is predomtnance of Pitta,there is redness and heat , whereas with the predominance of Vata .

the pain is severe. If kapha is aggravated more then there is feeling of being covered with wet clothes , heaviness and itching sensation.When one or two dosha are involved then diseases is curable but it gets incurable when all the three dosha s are involved.⁵

Hence the main treatment is to destroy Ama. For this fasting,fomentation , use of bitter& pungent herbs for detoxification of Ama. Purgation, interval oleation& giving decoction enemes should be carried out⁶.

Castor oil is very useful because of its power of removing Ama.⁷

Herbs of choice are Eranda,Bhallataka ,Rasnaguggul,Vatsanabha, Dhattura,Sahachar,Dhashmula.

Case study: - A 44 yrs female patient, working in farm (previously before 6-7 yrs) came to hospital having complaints of severe joint pain & swelling over carpal ,metacarpal joint . With history of fever & anorexia since 6 yrs in on &off pattern .Now since 1 month above symptoms gets aggravatedso harsh that she can not able to perform routine work even.

So patient was examined & diagnosed by Ayurvedic approach.

Asthavidhpariksha had been done

Patient Name : ABC 44 Yrs /Female

Hindu by religion

occupation –farmer

OPD NO - 1423

IPD NO – 1423/18

Date of admission - 3/2/2018

Chief complaints :Duration

1 Sarvangsandhishool 6 yrs

2 Parvasandhishool&shoth1 month

3 Jwar 1month

4 Sakashtachankramana 1 month

5 Tivrasancharivedana1 month

On examination:-

GC – Poor , Febrile.

Temp. – 101⁰ F

PR – 90/min

BP- 130/90mm Hg

CVS -S1 S2 - Normal

RS- chest clear AEBE

PA - soft non tender

CNS- conscious, well orientated

Mala -Malavashtambha

Mutra-Bahumutrata

Jivha-Saam

Netra-shwetaabh, Pallor Present

Weight - 50 kg

M/H - Irregular menses

Diagnosis- aamvata (Diagnosis made clinically.)

Treatment protocol:

Treatment was conducted in following way for 1 month;

1. Aampachakvati 250mg BD with lukewarm water
2. Tribhuvankirtiras 250 mg BD with lukewarm water
3. Mahayograjguggul 250mg BDwith lukewarm water
4. Maharasnadikwath 20 ml BD with lukewarm water
5. GandharvaHaritakichurna 5 gm at night with lukewarm water
6. Punarnavamandoor 250 mg BD with lukewarm water

Above treatment was given for 1st 7 days. Patient was adviced to take warm water to drink and langhanor laghuaahar to take that is mug dal + puranshalishashtik (rice) &to avoid fan& to take guru pravarana.

After 7 days i.e. afterkshudhavardhan patient had taken waluka-pottali sweda⁹over inflamed joints with kalabasti of Anuvasan (Tiltel) & Niruha(Dashmulakawath) for 16 days along with above medicine. Patient got relief in 10 days .patient is alsoadviced to avoid oily & spicy food & only to take kulatthayusha,Bajara Roti with 1 tea spoon of Eranda tail with garlic chutney.¹¹

Again for 7 days only medicine was given as follows

1. Sihnaadguggul 250 mg BD with lukewarm water
1. Tribhuvankirti 20 ml BD with lukewarm water
2. Maharasnadikwath 20 ml BD with lukewarm water
3. Dadimavaleha 10ml BD
4. Punarnavamandoor 250 mg BD with lukewarm water

Follow up was taken by 1 month & observations carried out .No new complaint raised during the follow up period related to study.

Observation:-

In the treatment period the patient had not taken anything except these medicines. Assessment criteria were based on the cardinal symptoms which are sarvangsandhishool, shoth, Parvasandhishool, shoth, tivrasancharivedana, jwar.

Sr.No	Observations	Before treatment	After treatment
A	Chief complaints	1st day	30th day
1	Sarvangsandhishool	Severe	Mild
2	Sarvangsandhishool	Severe	Absent
3	Parvasandhishoolshoth	Severe	Miled
4	Tivrasancharivedana	Severe	Absent
5	Jwar	Severe	Absent 98 ⁰ F
B	Pathological	1st day	30th day
	ESR	50mm	22mm
	HB	8gm%	10 gm%

Discussion:

According to Ayurveda, Aamvata is a disorder involving aam&vata, kaphadosha, ras, rakta, asthidhatu The given treatment works to reduce aam in the body & improve the jatharagni as Well as Dhatwagni.The given treatment Were having vedanashamaka&shothagna properties.

The present research work was mainly based on the clinical assessment of the above sing & symptoms. Effect of therapy was assessed on the basis of scoring chief complaints blood routine examination (mainly Hb%, ESR) Joint examination before & after treatment.

Conclusion:

In this case complaints of patient are very much diminished. All the complaints like sarvangsandhishool, shoth, parvasandhishool-shoth, tivrasancharivedana&jwar are markedly diminished in the 1 month of study. In conclusion, aamvata can be controlled up to higher extent by using Ayurveda treatment regimen for long period of time & by following proper pathyaie patient should drink warm water, old rice,

kulatthayush, errand tel in aahar as well as fasting, Basti, dry fomentation are advised regularly. In this context, it is suggested that the treatment should be continued for longer duration.

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**A clinical study to evaluate the efficacy of Vrushya Madhuka Yoga in the
Ksheena Shukra w.s.r. to oligospermia.****Aakash R. Chaudhari¹, S. M. Yennawar², J. S. Deshmukh³**

1. PG Student Final Year,
2. Asso. Prof. Guide,
3. Prof. HOD.

Dept. of Prasutitantra-Streerog, C.S.M.S.S. Ayurved Mahavidyalaya,
Kanchanwadi, Aurangabad.

*Corresponding Author- aakashchaudhari05@gmail.com; Mob.no. 9665434555

ABSTRACT

Ksheenashukra is a condition in which there is a qualitative and quantitative decrease of shukradhatu. It may be altered and may lead to shukradushti when vata and pitta dosha are vitiated in a body. By definition and symptoms Ksheenashukra it can be correlated with Oligospermia. A study was made to assess the efficacy of VrushyaMadhuka Yoga on seminal parameters without any shodhana procedures at OPD level. As a drug under trail has based on hypothesis that is ingredients Yashtimadhu, Ghrita(Goghrita) and Kshaudra(Madhu)having Vrushya property and it is useful for combatingKsheenashukra. Hence the trial of the drug VrushyaMadhuka Yoga was done on diagnosed male patient of oligospermia from the OPD of CSMSS Ayurved Rugnalaya, Aurangabad with detailed semen analysis. Duration of clinical trial was 90 daysand the patient were followed up after 30 days to evaluate the effect of trail drug. Single case study has been performed and significant result were seen.

KEYWORDS – *Ksheenashukra, Oligospermia, VrushyaMadhuka Yoga*⁸.

INTRODUCTION

Ayurveda is a science of life. In Ayurveda 7 Dhatus has been described and Sara of all dhatu is considered as Shukradhatu. Now a days sedentary life style, where people prefer to take out side food more often and busy work schedule have made humans more vulnerable to many disease. Its effects on formation of Shukradhatu.

Sushrutacharya stated that Ksheenashukra is caused by vitiation of Pitta and Vata.¹ It is condition characterized by Medhra and Vrushanvedana, Ashatki, Apresaka, Raktadarshan.²According to CharakacharyaKsheenashukra is a condition in which there is a qualitative and quantitative decrease of Shukra characterized by Daurbalya, Mukhashosha, Pandutva, Sadanam, Shrama, Klaibya, Shukravisrga.³Ksheenashukra is one of the Shukra dosh which is the common etiology for Male infertility.⁴Infertility is defined as a failure to conceive within

one or more years of unprotected coitus.⁵ By definition and symptoms Ksheenashukra it can be correlated with Oligospermia. Oligospermia is condition where the sperm concentration is less than 20million/ml. whereas normal sperm count of healthy person is about 120million/ml. and normal ejaculated volume at each coitus is 3.5ml.⁶ Therefore, Oligospermia is one of the prime factors in male infertility. In allopathic treatment of Oligospermia may give positive results, but their prolonged use may cause side effect and may cause impotency.⁷ In modern medical science we have seen very advance technologies like IVF, GIFT, ZEFT, ICSI etc. But it is not accepted widely in India, where poverty is rampant. So it is unable to provide these services to all class of people in society and it may be hardly successful many times. To out come through above mentioned problem, for better results in Ksheenashukra, choose an Ayurvedic drug "VrushyaMadhuka Yoga"⁸ It is having Vrushya property and it is use for combating Ksheenashukra. It is easily available and much cheaper than other drug and minimum or no side effect.

AIM & OBJECTIVES –

AIM -

TO STUDY THE EFFICACY OF VRUSHYA MADHUKA YOGA IN KSHEENA SHUKRAW.S.R. TO OLIGOSPERMIA.

OBJECTIVES–

- ❖ To evaluate the efficacy of VrushyaMadhuka Yoga in the management of Ksheenashukra.

- ❖ To carry out the comprehensive literary work Ayurveda classic, contemporary system of Medicine on Ksheenashukra (Oligospermia).
- ❖ To study detailed pathophysiology of Ksheenashukra. (Oligospermia).

CASE REPORT –

A male patient, aged 30 years presenting with complaints of Maithun-ashakti (libido), Shukra-avisarga (ejaculation of semen), Shrama (fatigue), Daurbalya (weakness), Sadanam (Exhaustion) during sexual intercourse since 7-8 months came in OPD of CSMSS Ayurved Rugnalaya, Aurangabad. Patient had taken initial treatment at private hospital but had no relief and the semen analysis report brought by the patient it is understood that he is suffering from Oligospermia.

Chief complaints –

- Sadanam (Exhaustion)
- Shukra-avisarga (ejaculation of semen)
- Daurbalya (weakness)
- Shrama (fatigue)

Personal history –

- Surgical – Nothing significant
- Allergic - Nothing significant
- Addictions - Nothing significant
- Family history - Nothing significant

Physical examination –

- BP – 120/80 mm of Hg

- PR – 80 / Min.
- RR – 20 / Min.
- Temp. – 98.6⁰ F
- Testicles – Normal (Size & Shape)

Systemic examination –

- CVS – S₁ S₂ normal
- CNS – NAD
- RS – AEBE clear
- GIT – NAD

Lab investigations –

- **Semen analysis**–
Abstinence – 6 days

Physical examination –

Quantity – 1.5 ml
Transparency – Translucent.
Self Liquification – Complete
within 25 minutes
Colour – Milky white
Viscosity – Moderate

Chemical examination –

Fructose – Present.
pH – 7.1

Microscopic examination –**Sperm Count –**

The number of spermatozoa per ml – 1.3 Millions
The number of sperms per ejaculate – 1.9 Millions
Viability – 0 % spermatozoa alive at the end of ½ hr.

Motility Of Spermatozoa

Total Forward Progressive– 5 %

Rapid linear progressive – 0 %

Sluggish linear progressive – 5 %

Non-Progressive - 10 %

Non-Motile – 85 %

Final Diagnosis – Ksheenashukra (Oligospermia).

Treatment given –“VrushyaMadhuka Yoga”.Which contains Madhuka (Yashtimadhu), Ghrita(Goghrita) and Kshaudra(Madhu).

Drug Review –**1. Yashtimadhu**

Botanical name –
Glycerrhizaglabra.
Useful part – Mula (Root)
Rasa – Madhura
Virya – Shita
Vipak – Madhura
Guna – Guru, Snigdha
Karma – Shukravardhak, Medhya, Pittahara.

2. Madhu (Honey)

Ras – Madhura, Kashaya.
Guna – Ruksha, Shita, Laghu.
Karma – Deepana, Varnya, Svarya, Lekhana, Hridya, Vajikarana, Sandhankar, Shodhana, Ropana and Prasadana.

3. Ghrita

Here, ghrita means Goghrita. Goghrit is best among all types of ghrita.

Ghrita is considered food as well as medicine. It is rich in antioxidants and helps in absorption of vitamins and minerals from food.

International Journal of Research in Indian Medicine

Rasa – Madhura (Charak, Sushrut, Bh.P.)
 Virya – Shita (Sushrut, Bh.P.)
 Vipaka - Madhura (Charak, Sushrut, Bh.P.)
 Guna – Guru, Snigdha, Manda, Mrudu, Sheeta

Sevankal – Pratahakali

Anupana – 200 ml of Koshnadugdha.

Duration – 90 Days.

Follow up – Follow up was taken on every 30 days.

Dose – 25gms

Assessment Criteria (Subjective) -

Score → Symptoms ↓	Grade 0	Grade 1	Grade 2	Grade 3
Sadanam (exhaustion)	No exhaustion at all	Slight exhaustion occasionally	Exhaustion during sexual encounter	Exhaustion without sexual encounter
Shukra-avisarga (ejaculation of semen)	Normal ejaculation (self and partner satisfaction)	Early ejaculation after penetration	Prolonged ejaculation after penetration	No ejaculation at all
Daurbalya (weakness)	No weakness at all	Slight weakness occasionally	Weakness during sexual encounter	Weakness without any activity
Shrama (fatigue)	No fatigue	Fatigue not affecting his sexual activity	Fatigue affecting his sexual activity	Fatigue without any activity

Objective criteria –

Value → Semen Analysis ↓	Grade 0	Grade 1	Grade 2	Grade 3

International Journal of Research in Indian Medicine

Total Sperm Count	>40million/ml.	30-40million/ml.	20-30million/ml.	<20million/ml.
Sperm Motility	>50% progressive forward motility	40-50%	30-40%	Non Motile<25%
Sperm Volume	2.0ml or More(1.5ml)	1-1.5ml	0.5-1ml	<0.5ml.

❖ Observation & result(Subjective criteria)

No.	Observation	Before T/t 0 day	30 th day	60 th day	90 th day
0;1	Sadanam (exhaustion)	3	3	2	1
2	Shukra-avisarga (ejaculation of semen)	3	3	2	1
3	Daurbalya (weakness)	0	0	0	0
4	Shrama (fatigue)	1	1	1	1

(Objective Criteria)

No.	Observation	Before T/t 0 day	90 th day
1	Total sperm count	1.3 ml	4.5ml
2	Sperm Volume	1.8 ml	2.0ml
3	Sperm Motility		
	Total Forward Progressive	5%	5%
	Rapid linear progressive	0%	5%
	Sluggish linear progressive	5%	10%
	Non-Progressive	10%	20%
	Non-Motile	80%	60%

Conclusion ;-

The effect of treatment for the subjective criteria such as Sadanam, Shukra-avisarga, Daurbalya, Shrama of ksheenshukra “VrushyaMadhuka Yoga” is significant.

.The effect of treatment for the objective criteria such as Sperm count, Motility and Volume of VrushyaMadhuka Yoga is improved.

The single case study shows that the “VrushyaMadhuka Yoga” has potential action on ksheenaShukra (Oligospermia). It is Easily available and No side effect.

Further study is needed to evaluate it's efficacy in more patients so that it can prove beneficial to mankind.

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Aakash R. Chaudhari, S. M. Yennawar, J. S. Deshmukh

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**Efficacy of Virechana And Raktamokshana in The Management
of Vicharchika (Eczema) – A Case Study**

Dr.Ajaykumar .D .Santre

(PG scholar, Kayachikitsa,CSMSS
Ayurved College, Kanchanwadi,
A'bad.)

Dr.Naresh .R. Nimbalkar

(Asso.professor, Kayachikitsa,CSMSS
Ayurved College, Kanchanwadi,
A'bad.)

Dr.Ajay .S. Thote

(Assistant Professor.
Kayachikitsa,CSMSS Ayurved
College, Kanchanwadi, A'bad.)

Abstract

Dermatitis, also known as eczema, is a group of diseases that results in inflammation of the skin. This disease is characterized by itchiness, red skin, and rash. The exact cause of dermatitis is often unclear. Cases are believed to often involve a combination of irritation, allergy, and poor venous return. Dermatitis was estimated to affect 245 million people globally in 2015¹. It is clinically characterised by itching, erythematous, oozing and scaling. Lakshana of Vicharchika are similar to that of eczema like kandu (itching), srava (oozing) and pidaka with kandu. In this case report a 60 years female patient diagnosed as vicharchika and successfully treated with ayurveda treatment like shodhan and shaman without remission .

Keywords: Vicharchika, Eczema, Shodhan, Shaman.

Introduction

Vicharchika is explained in Charaka Samhita under Kustha Chiktisa Adhyaya. Vicharchika is a disease of Raktavahastro Dusthi in which Rakta as well as Dusthi of saptakodravya is explained. For Raktadusthijanya Vyadhi the line of treatment have explain as Virechana and Raktamokshana. Vicharchika can be correlated with eczema (Dermatitis) which comes under non-infectious inflammatory dermatoses, it is clinically characterised by itching, erythema, oozing and scaling². Lakshana of Vicharchika are similar to that of eczema like kandu (itching), srava (oozing) and pidaka with kandu.

In modern medicine topical application of drugs as well as systemic drugs are used for the treatment of dermatological diseases. Most of the drugs respond to topical therapy, but some requires a combination of local and systemic therapy². In Ayurveda line of treatment have explained as Abhyantar(Shaman and Sodhana) Chiktisa. Virechana, Raktamokshana and various lepas also have been explained. If bahudosha-awastha of vicharchika then, the Sodhana Karma is to be given, like Vamana, Virechana, and Raktamokshana. When doshaj awastha is not eligible for vrুদ্ধa dosha, then and only then Shaman as well as lepas Chiktisa will be given³.

AIM – To study the Kshudra Kustha vyadhi w.s.r. to Vicharchika

OBJECTIVES –

- 1) To study the Vicharchika Vyadhi.
- 2) To study the Eczema as per Modern Science.
- 3) To study the etiopathogenesis of vicharchika as per Ayurveda.
- 4) To study the Chiktisa of Vicharchika as per Ayurveda concept.

CASE REPORT

Name of patient –XYZ

Gender – Female

Age – 60 yrs

Occupation – Housewife

Desh – Sadharan
Religion – Hindu
Marital status – Married

Chief complaints –

1. Kandu(+++++) all over body (more on abdomen ;lateral regions)
2. Black-reddish discoloration of skin(at the site if itching)
3. Oozing after itching

The above complaints are present since one month. But the disease persist since last 10years.

Present illness – patient was well before 10yrs. gradually the symptoms like itching all over the body, skin discolouration and oozing started. (Symptoms appear to be more severe in Sharad Rutu) She was taking treatment from general practitioner i.e. local steroids for external application and antifungal, antihistaminic as oral medicine. After taking these medicines patient got relief from above symptoms, but after discontinuation of these treatment again symptoms appears. So for further ayurveda treatment patient approached to CSMSS Ayurved Rugnayala, Kanchanwadi Aurangabad.

Note - (Patient have experienced relief in symptoms when she take a bath in the first rain fall in mruga naskhatra. –patient experience)

Past history of illness – No H/O DM, HTN, Asthama or any other disease .

Family history – No significant family history was found.

Ahara – Vegetarian (more consumption of lavana rasa)

Vyasan – Tea (4 to 5 times in a day)

Nidra – Disturbed sleep due to itching

Prakruti – Vata- pradhan pitta- anubandhi

Nadi – 74/min regular **BP** -130/80 mmHg

Bala –Madhyam

Jiva – Sama (white colour)

Agni – agnimandya

Mala pravrutti – Once / Twice a day (Swarup- Grathit)

Mutra pravrutti – 4 to 5 time in day, 2 to 3 times in night.

Akruti – Madhyam

Shabda – Prakrut (Spashta)

Sparsha – Anushnaseeta, Ruksha

Druk – Araktata+ , Netra kandu.

Skin examination –

1. Kandu – Present (more at night)
2. Strava – After itching (reddish white discharge)
3. Pidaka – Present
4. Twak Rukshata – Present
5. Raji – Present

Routine blood investigation(CBC, ESR, BSL, KFT, LFT, Urine routine and microscopic) was done before treatment and found normal. After taking proper history Virechana was planned followed by Raktamokshana.

Material And Method

• Shaman Chiktisa

1. Nidana Parivarjana.
1. Ahara – Laghu, Ruksha, Anabhishtyandi.
2. Ampachak vati 2BD (250mg each) at Samana Kala with Ushnodaka for 3day –for Pachana .

• Sodhana Chiktisa

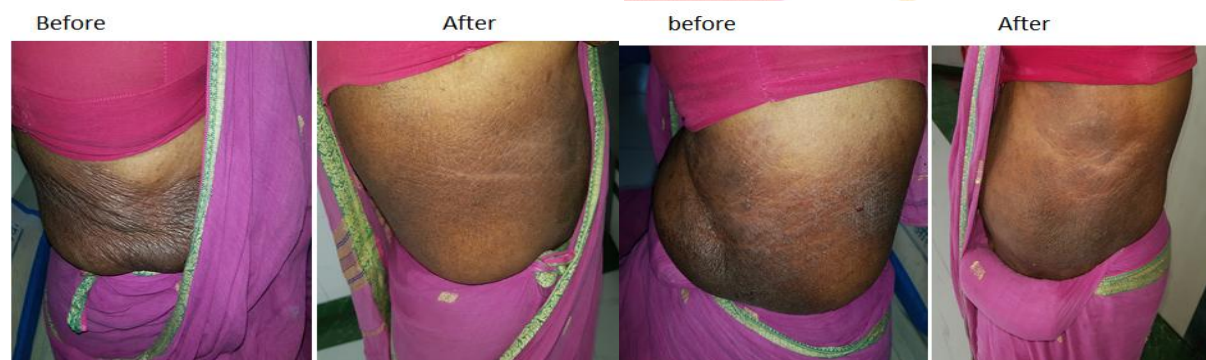
3. Snehapana was done with Panchatikta Ghrita .

Days	Quantity of Sneha
1 st day	30ml
2 nd day	60ml
3 rd day	90ml
4 th day	120ml

Samyak Snigdha lakshana appears on 4th day.

4. Then external Snehana with Sahachar tail and Swedana (Nadi Sweda) was done for 3days.
5. After external Snehana and Swedana , Virechana was given with Avipattikar churna 4tsf at bed time with luke warm water.
6. Patient had 7 vegas of Virechana.
 - a) First Vega – Purisha alpa drava yukta
 - b) Second Vega – Drava mala pravrutti
 - c) Third Vega –Drava mala pravrutti
 - d) Fourth Vega - Drava mala pravrutti
 - e) Fifth Vega – Drava mala pravrutti
 - f) Sixth Vega - Drava mala pravrutti
 - g) Seventh Vega - Drava mala pravrutti
7. After Virechana Samsarjan karam was followed for 3days.

After completion of Samsarjan Karma Siravedha was done under all aseptic precaution from cuboidal fossa of both the hands. Scalp set (needle) no 20 was used, around 30ml of blood was removed from each cuboidal fossa.



Discussion

Vicharchika is Kshudra Kustha it is included under Rakta Pradoshaj Vikara⁴. Vicharchika is having both acute and chronic condition. Lakshana according to Acharya Charaka can be co-related with acute condition like Pidaka and Srava⁵ while lakshana according to Acharya Sushruta can be co-related with chronic condition like Rukshata, Raji, and Kandu⁶. While explaining the treatment of Kustha Acharya Charaka told

that if lakshana are severe then Sodhana should be done and if lakshana are not severe then Raktamokshana should be done in such patients⁷. In this case study the lakshana of patient was severe and chronic like Itching, Oozing, skin (black reddish) discolouration, Rukshata. So keeping in mind about severity of lakshana and Bala of patient first Sodhana was done with Virechana and then Siravedha.

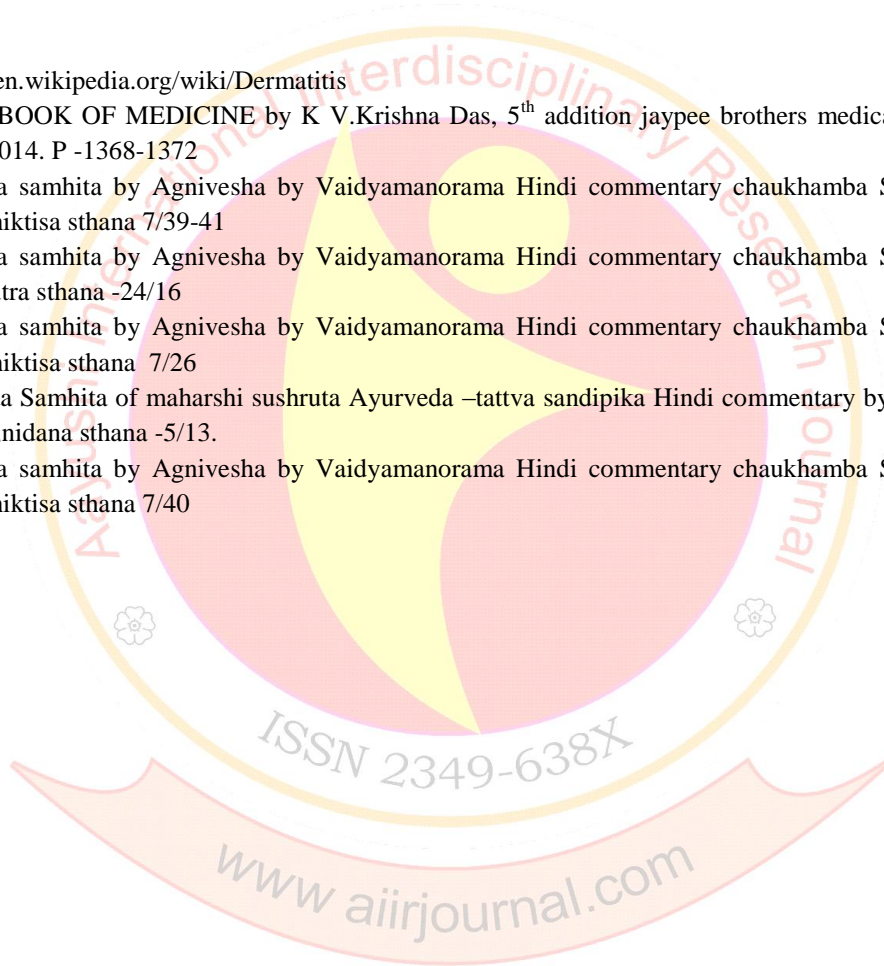
After Virechana the discolouration of skin, Rukshata, Pidaka, Raji, Oozing was reduced 70% to 80% and itching was still persist but severity was reduced. After the Siravedha the itching was totally reduced. As it was a chronic case there will be Sanga of Dosha therefore by doing Siravedha and Sodhana the Sanga have been removed. Because of Siravedha the vitiated blood was removed. The rakta is also responsible for varna, after siravedha the skin appears normal.

Conclusion

It can be concluded that chronic case of Vicharchika can be successfully manage with Ayurveda treatment such as Virechana and Siravedha.

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**A CLINICAL TRIAL OF PATHA TRIKANTAKA VRUKSHAKA
KWATHA IN THE MANAGEMENT OF GRANTHIBHUTA
ARTAVADUSHTI**

Dr. Guddi Jaynath Yadav*¹, Dr. Sandhya Yennawar² and Dr. J. S. Deshmukh³

¹C.S.M.S.S Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad.

²Asso. Professor, B.A.M.S., D.G.O B.A.M.S.D.G.O.Ph.D, Prasuti Tantra & Prasuti Tantra & Streerog.

³Professor & HOD, B.A.M.S., D.G.O B.A.M.S.D.G.O.Ph.D, Prasuti Tantra & Prasuti Tantra & Streerog.

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***Corresponding Author**

Dr. Guddi Jaynath Yadav

C.S.M.S.S Ayurved

Mahavidyalaya,

Kanchanwadi, Aurangabad.

ABSTRACT

God has gifted women with rare & unique phenomenon of giving rise of offspring. To fulfil the above aim effectively, nature has conferred special anatomical and physical characteristics in the women which are collectively referred to as "*Streekarabhav*". One among them is the concept of *Rajapravruti* i.e *Artava*. As human life is constantly influenced by the rhythmic phenomenon operative in this universe, the female menstrual cycle which involve dramatic hormonal changes affecting a women's emotional and physical state. The menstrual cycle which involves the shedding of endometrium, which was prepared in anticipation of providing a bed for fertilized gamete, when fails result

into the manifestation of - मासानुमासिक रजः प्रवृत्ती means आर्तव प्रवृत्ती | As per *Brihatrayee* and *Laghutrayee* there are eight types of *Artavadushti* and among them is *Granthibhuta Artavadushti*.

Lakshan of Grathibhuta Artavadushti

“ग्रन्थिभुतश्लेष्मवाताभ्याम्।”¹ सु.शा.२/४

Vataja Artavadushti :- “तेषु वातवर्णवेदनम्वातेन।”¹ सु.शा.२/४

Kaphaja Artavadushti :- “श्लेष्मवर्णवेदनश्श्लेष्मणा।”¹ सु.शा.२/४

Need for Study: Due to addiction of junk food, night shift, physical and mental stress from home and office leads to many diseases. Among these various problems, *Granthibhuta Artavadushti* is remarkable problem to women health having pain and altered colour of menstrual blood. In *Sushrut Sharir Sthana*,

“आर्तवमपि त्रिभिः दोषैः शोणीतचतुर्थैः प्रुथग्दन्द्वाैः समस्तेश्च उपसृष्टम् अबीजम् भवति ॥”^[1]

सु.शा.२/५

The abnormalities of *Artavadushti* is incapable of producing progeny, so to overcome this problem *Shudha Artava* is needed. Keeping this view in mind and to study the effect of drug, Selected this topic for study. **Prevalence:** Prevalence of menstrual disorders has been recorded as high as 87% in India in 2012.^[2]

INTRODUCTION

God has gifted women with rare and unique phenomenon of giving rise of offspring. To fulfil the above aim effectively, nature has conferred special anatomical and physical characteristics in the women which are collectively referred to as “streekarabhav” one among them is the concept of Rajapravrutti i.e. Artava. This phenomenon taking place in cyclic manner and any physical, physiological or mental alteration can disturbs her life as well as her whole family and menstrual disorder is one of them.

The menstrual cycle which involves the shedding of endometrium, which was prepared in anticipation of providing a bed for fertilized gamete, when fails result into the manifestation of “मासानुमासिक रजः प्रवृत्ती means आर्तव प्रवृत्ती |” and menstruation is most important physiological function of women in her reproductive life. According to National Journal of Integrated Research in Medicine (year 2011), volume 2, issue 1, page 38-40, Prevalence of menstrual disorders has been recorded as high as 87% in India.^[1,3]

Normal menstruation (आर्तव प्रवृत्ती) is important for healthy and normal functioning of reproductive system. due to changed in life style of women in terms of Ahara, Vihara, physical and emotional stress increased and this may result in Artava vyapadas. there are 8 types of Artava vyapadas explained in Brihatrayee and Laghutrayee, and among them is “Granthibhuta Artavadushti”.

“आर्तवमपि त्रिभिर्दोषैः शोणितचतुर्थैः पृथग्द्वन्दैः समस्तैश्चोपसृष्टमबिजं भवति,

तदपि दोषवर्णवेदनादिभिविजेयम् I

तेषु कुणपग्रंथि पूतिपूयक्षीणमूत्रपुरीषप्रकाशमसाध्यं साध्यमन्यच्चेति” II^[2]

सु.शा.२/५

Lakshan of Granthibhuta Artavadushti

“ग्रन्थिभुतमश्लेष्मवाताभ्याम्।”^[2] सु.शा. २/४

Vataja Artavadushti :- “तेषु वातवर्णवेदनम्वानेन।”^[2] सु.शा. २/४

Kaphaja Artavadushti :- “श्लेष्मवर्णवेदनमश्लेष्मणा।”^[2] सु.शा.२/४

NEED OF STUDY

Modern science of medicine said that due to increased in addiction of junk food, night shift, physical and mental stress from home and office leads to many diseases. it may causes menstrual disturbance, due to imbalance of hypothalamo-pituitary ovarian-uterine axis which lead to many gynaecological problems. And among these various problems Granthibhuta Artavadushti^[1] is remarkable problem to women health having pain and altered colour of menstrual blood.

In Ayurveda Acharya Sushruta explains in Sharir sthana as,

“आर्तवमपि त्रिभिर्दोषैः शोणितचतुर्थैः पृथग्द्वन्दैः समस्तैश्चोपसृष्टमबिजं भवति ॥”^[2] सु.शा.२/५

The abnormalities of *Artavadushti* is incapable of producing progeny, so to overcome this problem *Shudha Artava* is needed. Keeping this view in mind and to study the effect of drug, Selected this topic for study.

Granthibhuta Artavadushti is due to Artava dushti, vata dushti and kapha dushti. So to correct it विरुद्ध Guna yukta Aushadhi chikitsa is used.

Many Aushadhi formulation explained for treatment of Granthibhuta Artavadushti according to Ashtanga Shangraha Sharir Sthana- patha, trikantaka, vrukshaka kwatha is effective in Granthibhutha Artavadushti.

“तथा ग्रंथ्यार्तवे पाठा त्रिकंटकवृक्षकक्वाथम् II”^[4] अ.स.शा १/३८

so Patha, Trikantaka, Vrukshaka kwatha will be effective in treatment of Granthibhutha Artavadushti. keeping this in mind patha, trikantaka, vrukshaka kwatha is selected for study as they subside infertility problems. so, subject entitled “**A Clinical Trial of Patha Trikantaka Vrukshaka Kwatha in the Management of Granthibhutha Artavadushti**” has been selected.

AIM AND OBJECTIVES

Aim

“To evaluate the efficacy of *Patha Trikantaka Vrukshaka kwatha* in the management of *Granthibhutha Artavadushti*.”

Objectives

1. To study details of *Granthibhutha Artavadushti*.
2. To explore the efficiency of *Patha Trikantaka Vrukshaka Kwatha* in the management of *Granthibhutha Artavadushti*.
3. To observe the signs and symptoms of *Granthibhutha Artavadushti* before and after the treatment.
4. To study the side effects of *Patha Trikantaka Vrukshaka Kwatha*.

DISEASE REVIEW OF GRANTHIBHUTA ARTAVADUSHTI

Ayurvedic Disease Review.

Granthibhutha Artavadushti

In Ayurvedika classics most of the menstrual disorders have been described under the heading of Ashta Artavadushti, Asrgdhara, Artava Kshaya.

Defination

Granthibhutha artavadushti is one among the eight types of artavadushti characterized by clotted appearance of menstrual bleeding and anovulation with poly cystic ovaries due to Vata-Kapha dushti. And it leads to infertility in female.^[2]

Samanya nidana of Artavadushti

According to Kashyapa Samhita – atyushna annapana sevana leads to the dooshana of veerya, artava and beeja, ksheenata of jataragni and rasa along with the sanchaya of kapha and pitta doshas^[1] (ka.ka.7/32).

Lakshanas of Granthibhootha Artavadushti

This Granthibhootha Artavadushti is caused by the vitiation of vata and shleshma both together and has features of both the doshas^[2,4] (Su.Sha.2/4) (A.S.Sha.1/14).

Features of vata include

“तेषु वातवर्णवेदनम्वातेन”^[2] | सु.शा. २/४

The menstrual blood vitiated by vata is tanu – thin, rooksha – dry, phenila – frothy, aruna – red in colour, alpa – less in quantity, sarujayukta – associated with pain and chiraat nishicchayate – excreted slowly^[4] (A.S.Sha. 1/24).

Due to vata dushti the artava possess either red or black colour along with different types of vatavedana like toda and bheda i.e. perforating or piercing type of pain^[2] (Su.Sha.2/4).

Features of kapha include

“श्लेष्मवर्णवेदनमश्लेष्मणा”^[2] | सु.शा. २/४

The menstrual blood vitiated by kapha is majjopasamsrushta – mixed with bone-marrow, vibaddha – thick, ambhasi – whitish in colour, unctuous and settles at the bottom when put in water^[4] (A.S.Sha. 1/24).

Due to kapha dushti the artava possess shukla varna – whitish in colour, kandu – itching and visra gandha – pungent smell^[2] (Su.Sha.2/4).

Sadhyasadyata

According to Sushrutha^[2] – Asadhya.

According to vagbhata^[4,5] – Krucchra sadhya.

Chikitsa of Granthibhutha Artavadushti

- Kwatha prepared out of Patha, Tryushana and Vrukshaka (kutaja)^[2] (Su.Sha.2/24).
- Kwatha prepared out of Patha, Trikantaka and Vrukshaka^[4] (A.S.Sha.1/37).

- Kwatha prepared out of Patha, Triphala and Vrukshaka^[5] (A.H.Sha.1/16).

SROTODUSHTI

In Artavadushti there is involvement of Rasa, Rakta, Artavaha.

Samanya Srotodushti Nidana

आहारश्च विहारश्च यः स्यात् दोष गुणैः समः I

धातुभिः विगुणश्चापि स्रोतसां स प्रदुषकः^[9] II

च.वि.५/२३

The ahara and vihara which are doshagunaihi samah – similar to the doshas and dhatubhirvigunah – dissimilar to the dhatus in properties cause morbidity in the srotases.

Rasavaha srotodushti Hetu

Those who indulge in food drinks which are guru, sheetha, astisnigdha, atimatra ahara and atichintana suffer from morbidity of rasavaha srotas^[9] (Ch.Vi.5/23).

Raktavaha Srotodushti Hetu

Those who indulge in food and drinks which are vidahi, snigdha, ushna and liquid and also exposure to Atapa and Anila suffer from morbidity of raktavaha srotas.^[9] (ch.Vi.5/14).

Artavaha Srotodushti Hetu

Those Those who indulge in food and drinks which are vidahi, snigdha, ushna and liquid and also exposure to Atapa and Anila suffer from morbidity of Artavaha srotas.^[1] (kashyapa samhita).

Samprapti

The deranged and aggravated doshas while circulating through the srotas in the whole body, gets obstructed due to an occlusion i.e. Sanga or defects in the srotas i.e. Khavaigunya cause disease manifestation.^[10] (Su.Su. 24/19).

Attinushna annapanna, ruksha, tikshna dravyas sevan



Agnimandhya



Garbhashaya sanchit kapha and
vata dosha prakopa



Granthibhuta artavastrava, yonikandu,
yonivedana, Vikruta varna artavastrava.



Granthibhuta artavadushti

Flow chart No. 3.

Samprapti Ghatakas

Dosha: Kapha, Vata.

Dushya: Rasa, Rakta, Artava

Srotas: Rasavaha, Raktavaha, Artavavaha.

Rogamarga: Abhyantara.

Adhishtana: Garbhashaya, Phalakosha.

Agni: Jataragni and Dhatwagni.

Apana vata

Apana vata help in the evacuation of mala, muthra, shukra, garbha and artava through adhomarga and when it vitiates produces the diseases of basti and guda^[11] (Su.Ni. 1/19).

Vyana vata

Vyana vayu resides all over body and performs functions like rakta samvahana, helps in sweda and asruksravana and performs 5 fold functions like gati, utkshepana, apakshepana, nimesha and unmesha and when it vitiates produces diseases all over the body^[11] (Su.Ni.1/18).

Samanya Srotodushti Lakshana

The 4 types of srotodushti explained are^[9]: (Ch.Vi. 5/24).

- Atipravrutti – enhanced flow.
- Sanga – obstruction.
- Granthi – formation of clots and
- Vimargagamana – flow of contents in wrong direction.

Pratyeka Srotodushti Lakshanas^[12,10]: - (Ch.Su. 28/8-15, Su.Su. 24/9-12)

- Rasavaha

स्त्रोतसां रोधः - Obstruction in srotasa.

सादः - Malaise, depression.

- Raktavaha

असृग्धरः - Menorrhagia.

नीलिका - Discolouration, hyper pigmentation.

पिडका - Acne, pustular eruptions.

- Artavaha^[2]: Su.Sa.Sha.9/14

अल्पार्तव – oligomenorrhea.

कष्टार्तव – Dysmenorrhea.

वन्ध्यता – Infertility.

मैथुनासहिष्णुत्वमः – Dyspareunia.

आर्तवनाश – Absence of Artava.

Chikitsa^[12] (Ch.Su. 28/25)**Importance of vata in chikitsa**

Without the vitiation of vata dosha there will not be manifestation of any type of yoni vyapat.

Hence, it should be treated first followed by the other 2 doshas^[13] (Ch.Chi.30/115).

Chikitsa Siddhantha

Ayurvedic management can be planned based on the pathological factors involved.

For Kapha dosha

According to Bhaishajya ratnavali,^[14] in balaasadushta yoni vikaras or kaphaja yoni vikaras, rooksha and ushna guna dravyas should be used for treatment.

According to Ashtanga Hrudaya,^[5] shleshmanaha, katu, rooksha, kashayadi guna yukta dravyas should be used for treatment.

For vata dosha

According to Charaka Samhitha, for the treatment of apana vayu vikruthi the treatment modalities incorporated should possess Deepana, Grahi, vatanulomana and pakvashayavishodhana properties^[13] (Ch.Chi.28/243).

Rasa pradoshaja vikaras should be treated by all types of langhana and aushadi.

Rakta pradoshaja vikaras should be treated by virechana, upavasa and raktamokshana.

Artava pradoshaja vikaras should be treated by all types of basti, deepan, pachan aushadi.^[2]

DRUG REVIEW

Selection of drugs

Drug introduction

Sr. No	Name of Drugs	English name	Latin	Rasa	Vipak	Virya	Guna & karma	Parts Used
1.	Patha	Cissampelospariera		Tikta	Katu	Ushna	Laghu, tikshna, Grahi, vatakaphahara, Balya	roots
2.	Trikantaka	Tribulus terrestris		Madhura	Madhura	Shita	Guru, Snigdha, Vatapittahara, Mutrala, Rasayana	fruits
3.	Vrukshaka	Holarrhena antidycentrica		Tikta, Kashya	Katu	Shita	Laghu, Ruksha, Kaphapittahara, Grahi, Dipana	twak

DRUG PREPARATION

Procedure of Drug Preparation

Preparation of research drug **PATHA TRIKANTHAKA VRUKSHAK KWATHA** is prepared according to reference of Sharangdhar Samhita,^[3] time to time as per needed to patient.

“तथा ग्रन्थयार्तवम् पाठा त्रिकन्टकवृक्षक क्वाथम्^[11] II” अ.स.शा १/३८

All the raw material will be purchased from local market.

Drugs used in preparation of Patha Trikantaka Vrukshak Kwatha



Patha



Trikantaka



Vrukshak

PREPARATION



Churna of Patha, Trikantaka, Vrukshak



Water



Mixed Churna and Water



Boiling of Mixture



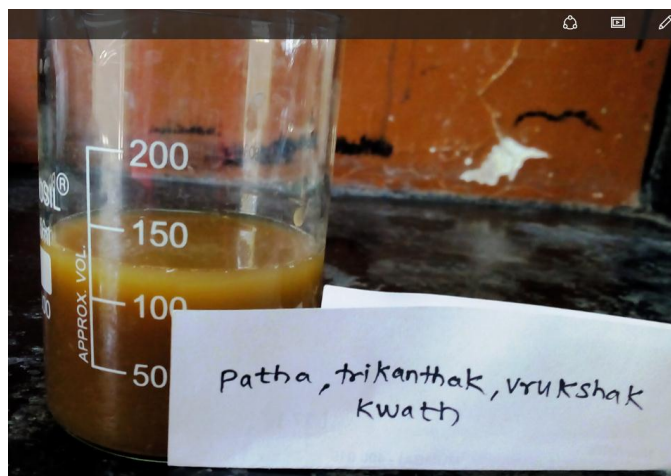
1/8th Part of Mixture Remain



Filtration of Kwatha



Kwatha



CLINICAL STUDY**MATERIALS AND METHODS****Materials**

1. Trial group – diagnose patient of Granthibhuta artavadushti
2. Patha Trikanthak Vrukshak Kwatha
3. Koshna jal.

METHODOLOGY**Selection criteria****Inclusion criteria**

- a) Patients were willing for study of GRANTHIBHUTA ARTAVADUSHTI.
- b) Patients age between 12-50 years.
- c) Both unmarried and married women.
- d) Menses bleeding with clots.
- e) Patients presenting with the pratyatma lakshana of GRANTHIBHUTA ARTAVADUSHTI.
 - Granthibhuta Artava strava (menses bleeding with clots)
 - Yonikandu (itching over external genital region)
 - Yonivedana (Dysmenorrhoea) painful menses
 - Varna of Artava strava (colour of menses bleeding)

Exclusion Criteria

Patients unwillingly participating and associated with other complications such as,

1. Age before 12 yrs and after 50 yrs.
2. Diagnosed cases of Malignancy, fibroids, suspected cases of Ca cervix, polyps, cyst.
3. Diagnosed cases of Haemorrhagic disorders.
4. Diagnosed cases of Pelvic inflammatory disease, venereal disease, diabetes.
5. Patients taking hormonal drugs.
6. Patients with IUCD.

Withdrawal Criteria

1. Patients willing to discontinue the trial.
2. Patients absent for followup after cycle.

3. Patient develops any allergic condition/ if there is unbearable aggravation of symptoms itself.

Baseline screening

1. Clinical examination
2. Lab investigation
 - a. CBC.
 - b. Urine routine and microscopic.
 - c. BT, CT.

Informed consent

The subject undergoing this study was informed about the nature and purpose of study and written consent from each patient in both groups was done.

Criteria for Diagnosis

1. Diagnosed patients having symptoms which are commonly seen in Granthibhuta artavadushti were selected by **random sampling method** as per inclusion and exclusion criteria and subjected to a careful clinical examination. Then data acquired from selected diagnosed patients were recorded in research proforma along with informed valid consent.
2. Age, Education, Occupation, Habitat, Socioeconomic status etc. particulars were noted. Then patients were inquired about the main complaints with duration.
3. The detail history of past illness, family history, personal history including bowel, sleep, diet, sexual life, agni, koshta, prakruti, hormonal or other drug administration, past menstrual history, obstetric history, etc. were recorded.
4. After general examinations including Astavidha, Dashavidha, and Strotas pariksha was also carried out as systemic examinations. Udar Parikshana was done.
5. Routine investigations of Blood for CBC, BT, CT, urine routine and microscopic were done in laboratory.
6. All the patients were examined monthly once and the changes observed in the symptoms were assessed and recorded.

Management of patients

After the proper diagnosis of patients, patients were randomly selected irrespective of their age, socio-economic, status, religion etc. following line of treatment was given to the trial

group. All the patients fulfilling inclusion criteria were selected for the study with fully informed consent:

- Study: Open randomized trial
- Number of patients: Total 50 patients were selected Randomly for the clinical trial.

Table No. 13: Drug Regimen.

Sr. No.	Topic	Group
1.	Form	<i>Patha Trikantaka Vrukshaka kwatha</i>
2.	Dose (<i>matra</i>) ^[3]	40 ml BD
3.	<i>Kala</i> ^[3]	before meal [<i>Abhakta</i>]
4.	Duration of therapy	3 months
5.	Follow up	After next menstrual cycle
6.	Route of administration	Orally
7.	<i>Anupan</i>	<i>Koshna jal</i>

PROCEDURE OF PATHA TRIKANTHAKA VRUKSHAK KWATHA

Patha Trikanthaka Vrukshaka Kwatha was prepared according to Sharangdhar samhita in Rasa shastra and Bhaishajya Kalpana Dept. procedure of kwatha was thought to patient and then advice them to make fresh kwatha daily and take for 3 months (follow up after every 1 month).

Instruction

1. Spicy and fermented food should be avoided.
2. Avoid anger, fear, sorrows.
3. General advice of proper hygiene and habits were given.
4. Avoid upvasa, adhyshana, ratrijagrana, divaswapna.

ASSESSMENT CRITERIA

- Finally the result of treatment was assessed on the basis of following criteria and its improvement was noted in research proforma.
- Results of the treatment were rule out on the basis of relief in the symptoms of Granthibhuta artavadushti.
- Qualitative assessment of the criteria was carried out by adopting a general scoring pattern. According to severity of each symptom, suitable score was given. The details of general and special scoring pattern are given below.

General scoring pattern

- No complaint – 0
- Mild complaint -1
- Moderate complaint – 2
- Severe complaint – 3

ASSESSMENT CRITERIA

1. Grade of pain (*yoni vedana*).
2. Itching vulva (*yoni kandu*).
3. Granthibhuta Artavastrava (clots in menses).
4. Varna (colour of menses).

A. *Yoni vedana* [Pain]^[1]**Table No. 14.**

Grade	Symptoms	Score
I	No Pain	0
II	Mild (occasional) no interference with daily routine	1
III	Unable to do normal activities.	2
IV	Disturbed sleep due to pain.	3

B. *Yoni kandu* [Itching Vulva]^[1]**Table No. 15.**

Grade	Symptoms	Score
I	Absent.	0
II	Mild [Occasional].	1
III	Unable to do normal activities	2
IV	Disturbed sleep due to itching	3

C. *Granthibhuta Artavastrava* [Clots]^[2]**Table No. 16.**

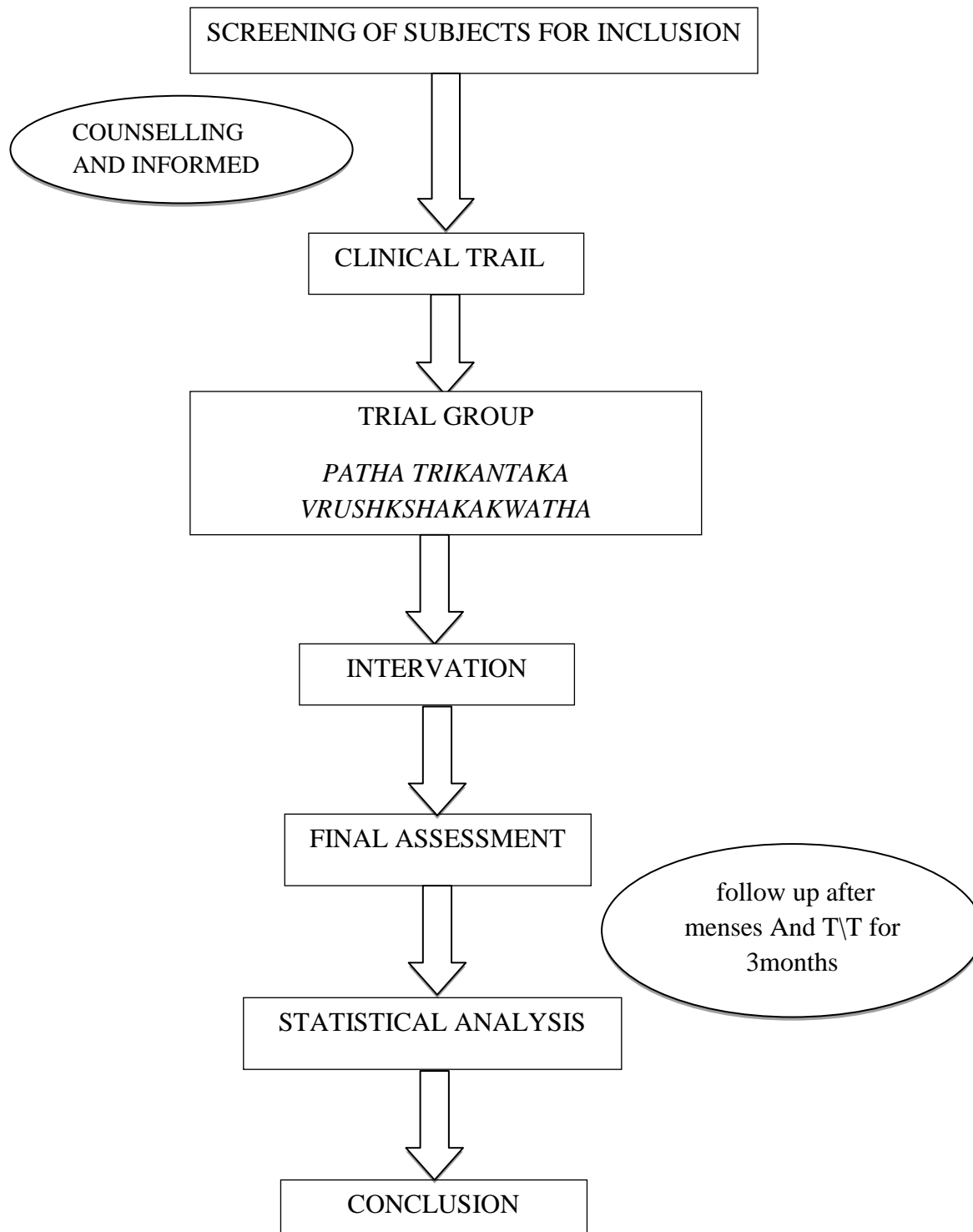
Grade	Symptoms	Score
I	No clots.	0
II	Bleeding with occasional clots. (+)	1
III	Bleeding with more clots. (++)	2
IV	Only clots. (+++)	3

D.Colour [Varna of menses]^[2]

Table No. 17.

Grade	Symptoms	Score
I	Red.	0
II	Brownish red.	1
III	Blackish red.	2
IV	More Blackish red (Tar appearance)	3

FLOW CHART NO.4 STUDY PLAN



ASSESSMENT CRITERIA

1. Yoni vedana
 - Before treatment
 - After treatment
2. Yoni kandu
 - Before treatment
 - After treatment
3. Granthibhuta artavastrava
 - Before treatment
 - After treatment
4. Colour of bleeding
 - Before treatment
 - After treatment

Criteria for the assessment of overall effect of therapy

The data obtained from the above parameters before and after the therapy was utilized for the purpose of overall effect of therapy, and Result of the drug was determined as-

Percentage of relief in symptoms and signs with respect to each of the patient was as follows and classified as per the definition of Cured, Highly Improved, Improved and Unchanged.

Table No. 18.

Efficacy of the treatment	Total assessment
Excellent	>75 – 100% relief in sign and symptoms
Moderate	51- 75% relief in sign and symptoms
Mild	25 – 50% relief in sign and symptoms
Ineffective	0 – <25% relief in sign and symptoms

Presentation of Data

The data collected and compiled from the clinical work is presented in two sections-

1. Observations

It is related to various observations obtained from the research proforma.

2. Result

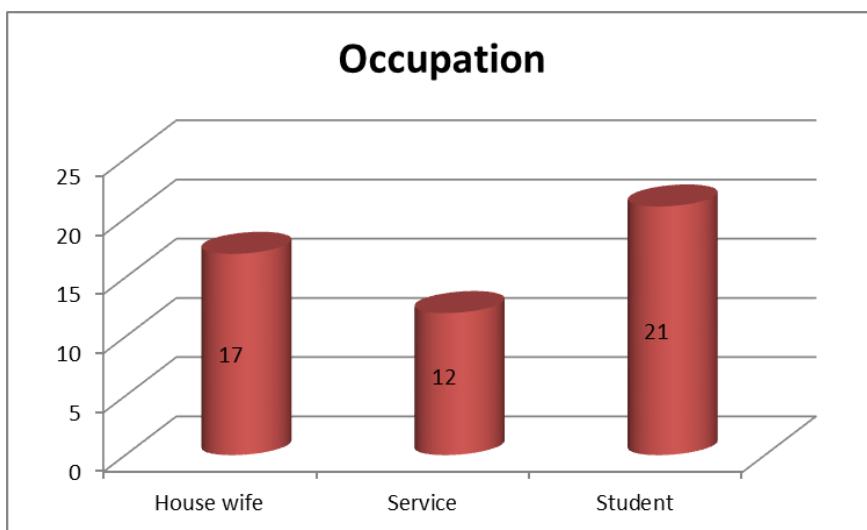
In this section, the effect of therapy evaluated on the basis of improvement in the assessment criteria and the total effect of therapy.

OBSERVATIONS

Registered Patients – In present trial 55 patients were registered, out of which 5 patients dropped out from trial before its completion. So the present study was carried on 50 patients. All the selected patients were thoroughly examined and diagnosed and selected, based on exclusive and inclusive criteria. The assignment revealed the following statistics.

Demographic finding**Table No. 19: Show occupation wise distribution of patient.**

Occupation	No. Of Patients	Percentage
House wife	17	34%
Service	12	24%
Student	21	42%
Total	50	100%

**Figure No. 28.**

Above table reveals that majority of patient i.e 21 (42%) were reported in student, followed by 17 (34%) patients observed in housewife, 12 (24%) patient observed in service doing women.

Table No. 20: Show Religion wise distribution of patient.

Religion	No. of Patients	Percentage
Hindu	45	90%
Muslim	5	10%
Total	50	100%

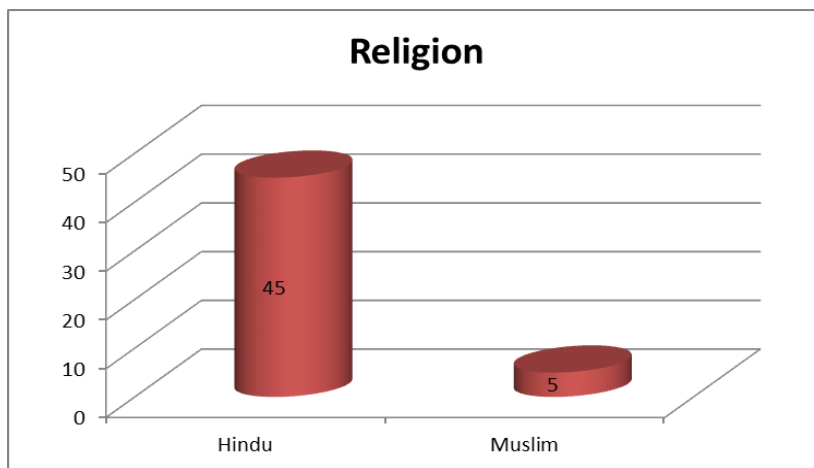


Figure No. 29.

Above table reveals that majority of the patients i.e 45 (90%) were reported in Hindu religion, followed by 5 (10%) Patients observed in Muslim women.

Table No. 21: Show diet wise distribution of patient.

Diet	No. of Patients	Percentage
mixed	31	62%
Veg	19	38%
Total	50	100%

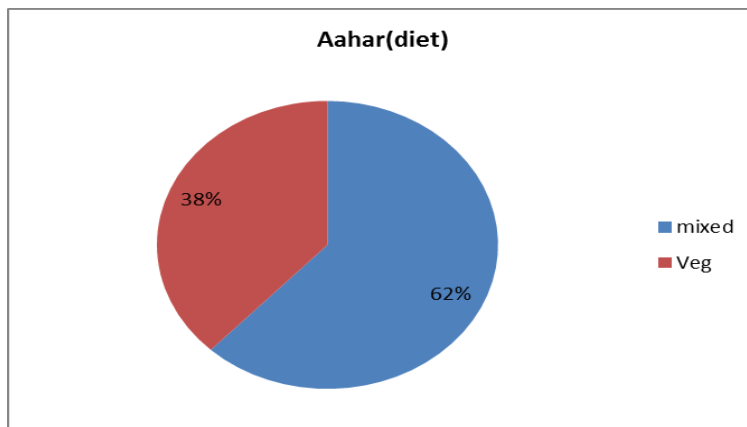


Figure No. 30.

Above table reveals that majority of the patient i.e 31 (62%) were reported in mixed, followed by 19 (38%) patient observed in vegaterian women.

Table No. 22: Show Socio Economic distribution of patient.

Socio Economic	No. Of Patients	Percentage
L.C	4	8%
M.C	35	70%
U.C	11	22%
Total	50	100%

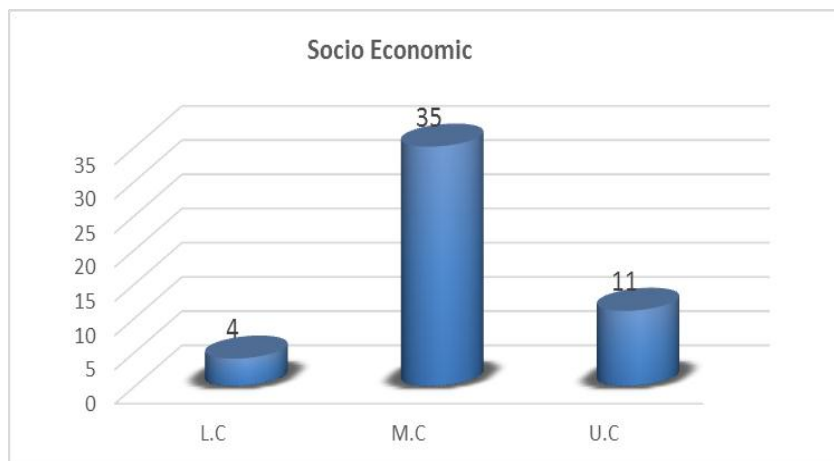


Figure No. 31.

Above table reveals that majority of the patients i.e 35 (70%) were reported in middle class, followed by 11 (22%) patients observed in the upper class, and 4 (8%) patient observed in lower class.

Table No. 23: Show Age wise distribution of patient.

Age	No. of Cases	Percentage
<21 yrs	3	6%
21-25 yrs	19	38%
26-30 yrs	21	42%
>30 yrs	7	14%
Total	50	100%

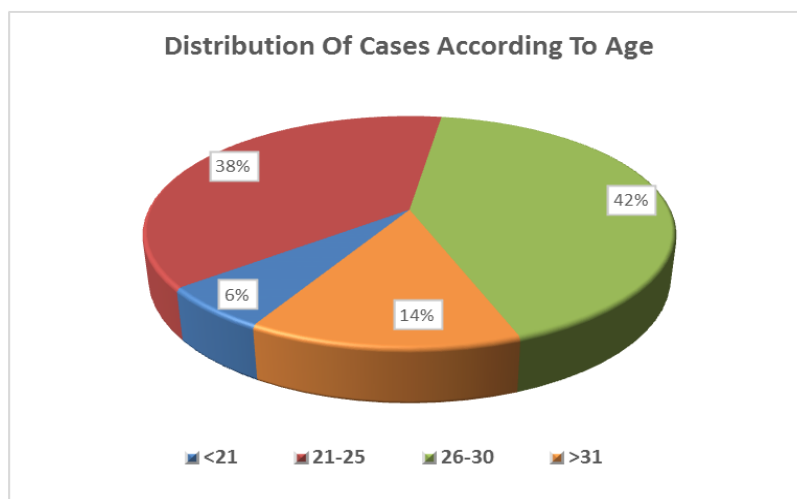


Figure No. 32.

Above table revealed that maximum patients i.e.21 (42%) were from age group 26-30 which is followed by 19 (38%) from age group 21- 25 years, 7 (14%) from age group >30 Years & 3 (6%) from age group < 21 Years.

Table No. 24: Show Marital Status distribution of patient.

Marital Status	No. of Cases	Percentage
Married	28	56.33%
Unmarried	22	43.67%
Total	50	100.00%

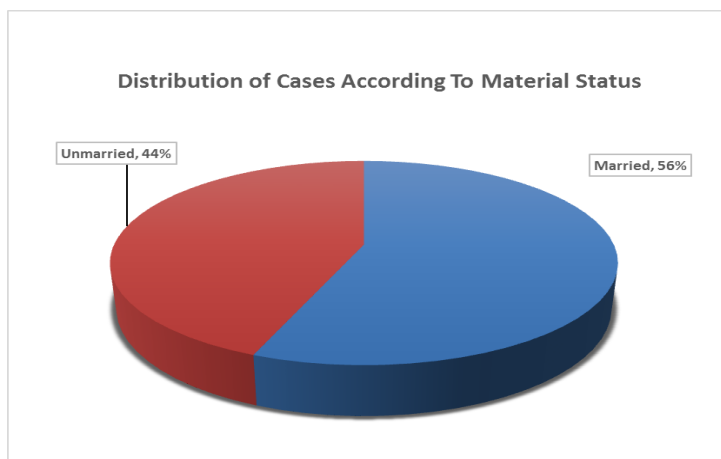


Figure No. 33.

Above table reveals that out of 50 Patients 28 patients i.e. 56.33% were married while 22 patients i.e. 43.67 patients found unmarried.

Table No. 25: Show Prakruti wise distribution of patient.

Prakruti	No. of Cases	Percentage
K-V	1	2%
P-K	13	26%
P-V	1	2%
V-K	18	36%
V-P	17	34%
Total	50	100%

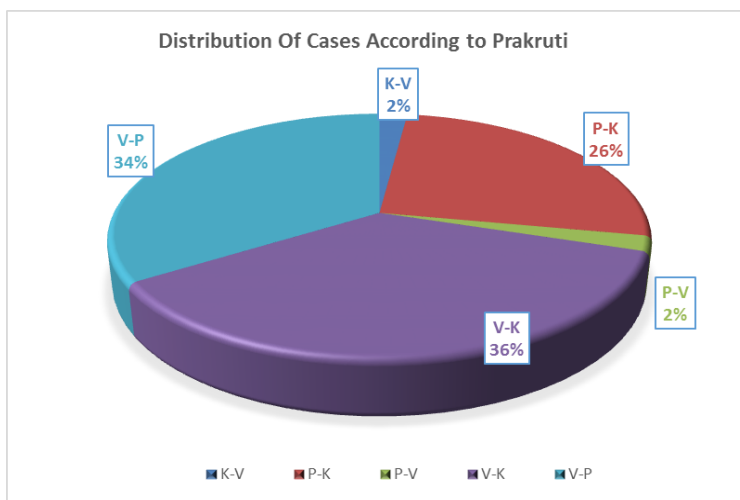


Figure No. 34.

Above table reveals that majority of patient i.e 18 (36%) were reported in vata kapha prakruti, followed by 17 (34%) patients observed in vata pitta prakruti, 13 (26%) patients observed in pitta kapha prakruti, 1 (2%) patients observed in kapha vata prakruti and 1 (2%) patient observed in pitta vata prakruti.

Table No. 26: Show Agni wise distribution of patients.

Agni	No of Patients	Percentage
Tikshna	9	18%
Sama	14	28%
Manda	15	30%
Visham	12	24%
Total	50	100%

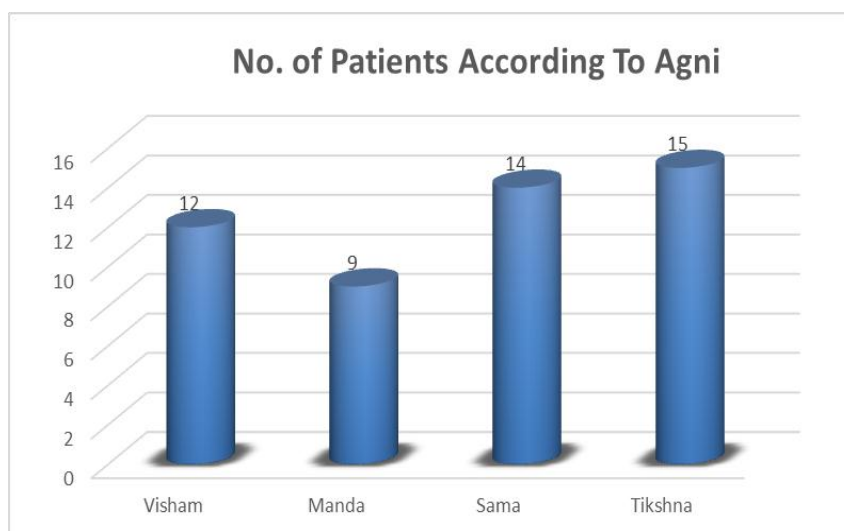


Figure No. 35.

Above table reveals that majority of patients i.e 15 (30%) were reported of Manda agni, followed by 14 (28%) patients observed of Sama agni, 12 (24%) patients were observed of visham agni, and 9 (18%) patients observed of tikshna agni.

Table No. 27 Show duration of Granthibhuta Artavadushti wise distribution of patient.

Duration	No. of Patients	Percentage
1	4	8%
2	27	54%
3	16	32%
4	3	6%
Total	50	100%

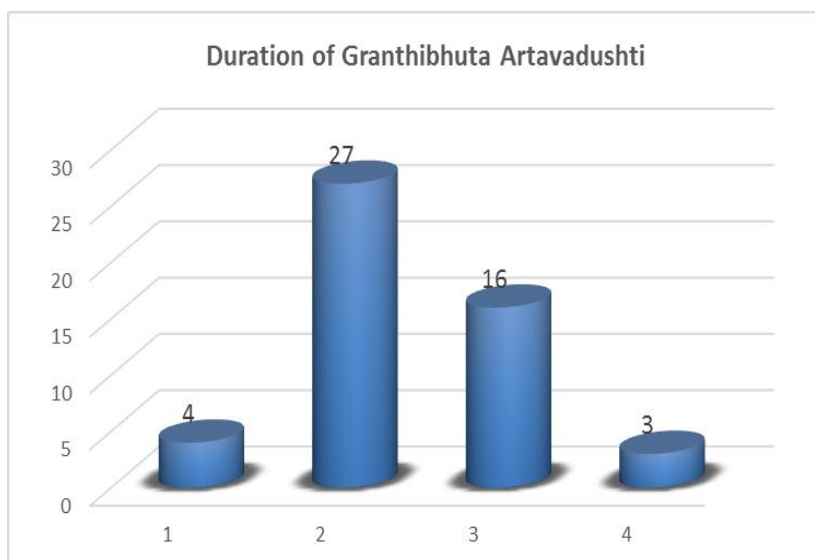


Figure No. 36.

Above table reveals that majority of the patient i.e 27 (54%) were reported with 2 months duration of symptoms, followed by 16 (32%) patients observed with 3 months duration of symptoms, 4 (8%) patients observed with 1 month duration of symptoms and 3 (6%) patients observed with 4 months duration of symptoms.

EFFECT OF THERAPY

Effect of Patha Trikantaka Vrukshaka Kwatha in Granthibhuta Artavadushti

50 patients who completed the full course of treatment and so the effect of Patha Trikantaka Vrukshaka Kwatha therapy in Granthibhuta Artavadushti is quoted from here onwards.

Statistical Analysis

- **Null hypothesis, H_0**

The effect of treatment on all symptoms in Patha Trikantaka Vrukshaka Kwatha in Granthibhuta Artavadushti is not significant.

- **Alternative hypothesis, H_a**

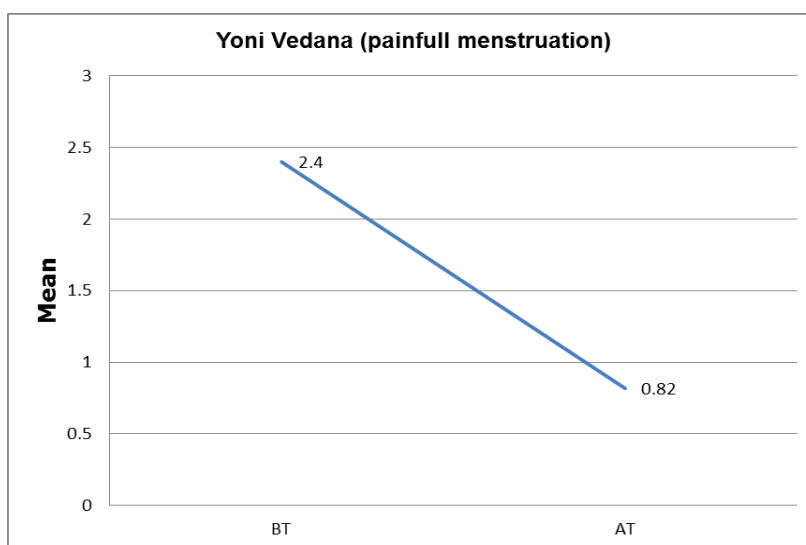
The effect of treatment on all symptoms in Patha Trikantaka Vrukshaka Kwatha in Granthibhuta Artavadushti is significant.

All the values in following tables are calculated by using Wilcoxon Sign Rank Test for subjective criteria. Statistical analysis of every symptom is described separately in the following tables.

Note: - Sample size of research study was 50 but n is less than 50 in following tables because while applying Wilcoxon Sign Rank test we have to exclude the gradation values which are same before treatment and after treatment. We have to consider patients who were having different before and after treatment gradation value.

Table no. 1.

Symptom	Yonivedana (painfull menstruation)
N	50
Mean Score, B.T.	2.4
Mean Score, A.T.	0.82
S.D. (\pm), B.T.	0.606
S.D. (\pm), A.T.	0.56
S.E. (\pm), B.T.	0.085
S.E. (\pm), A.T.	0.079
W	1275
Z	-5.97
P	P<0.05
Result	Significant



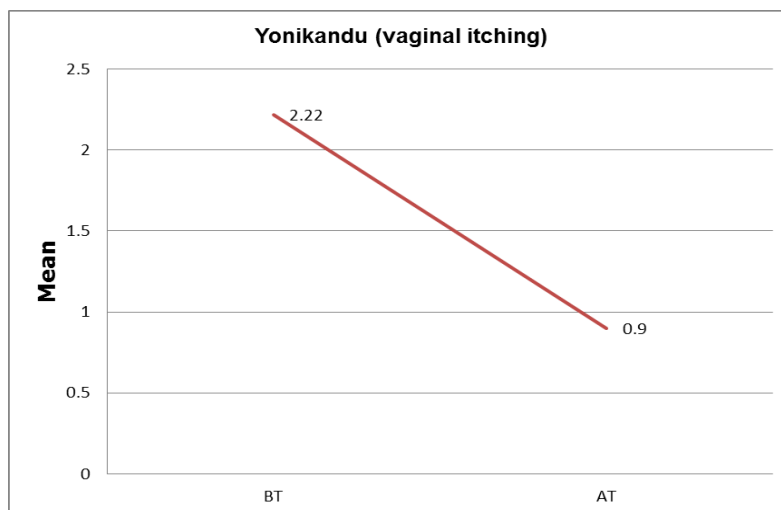
Graph No. 1.

As the p value is lower than the significance level $\alpha = 0.05$, we should reject the null hypothesis H_0 and accept the alternative hypothesis H_a for Yoni Vedana (Painfull menstruation).

Table No. 2.

Symptom	Yonikandu (vaginal itching)
N	50
Mean Score, B.T.	2.22
Mean Score, A.T.	0.9
S.D. (+), B.T.	0.678
S.D. (+), A.T.	0.677
S.E. (+), B.T.	0.096
S.E. (+), A.T.	0.095
W	1275
Z	-5.775
P	P<0.05
Result	Significant

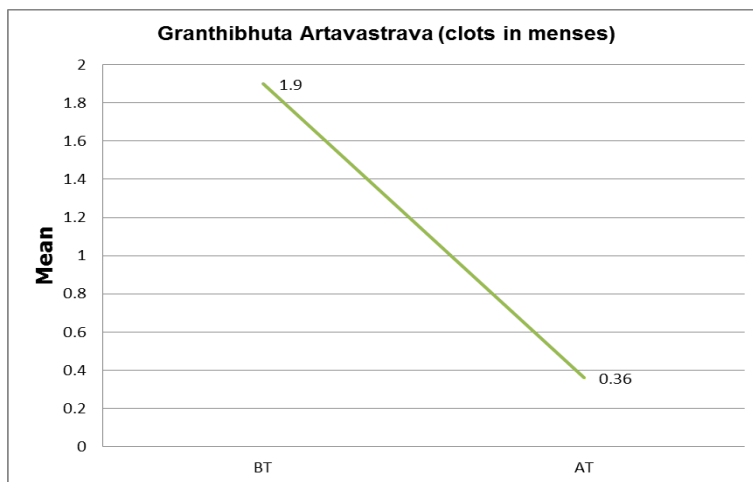
As the p value is lower than the significance level $\alpha = 0.05$, we should reject the null hypothesis H_0 and accept the alternative hypothesis H_a for Yonikandu (vaginal itching).



Graph No. 2.

Table No. 3.

Symptom	Granthibhuta Artavastrava (clots in menses)
N	50
Mean Score, B.T.	1.9
Mean Score, A.T.	0.36
S.D. (+), B.T.	0.762
S.D. (+), A.T.	0.484
S.E. (+), B.T.	0.107
S.E. (+), A.T.	0.068
W	1275
Z	-6.154
P	P<0.05
Result	Significant

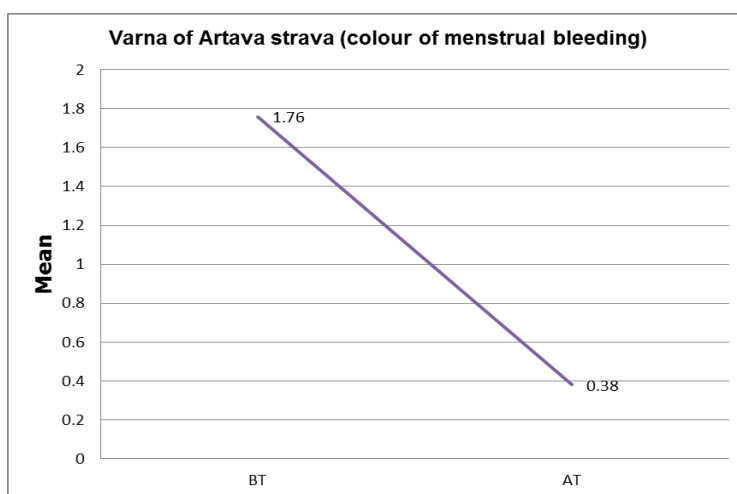


Graph no. 3.

As the p value is lower than the significance level $\alpha = 0.05$, we should reject the null hypothesis H_0 and accept the alternative hypothesis H_a for Granthibhuta Artavastrava (clots in menses).

Table No. 4.

Symptom	Varna of Artava strava (colour of menstrual bleeding)
N	50
Mean Score, B.T.	1.76
Mean Score, A.T.	0.38
S.D. (\pm), B.T.	0.77
S.D. (\pm), A.T.	0.49
S.E. (\pm), B.T.	0.109
S.E. (\pm), A.T.	0.069
W	1275
Z	-6.013
P	$P < 0.05$
Result	Significant



Graph no. 4

As the p value is lower than the significance level $\alpha = 0.05$, we should reject the null hypothesis H_0 and accept the alternative hypothesis H_a for Varna of Artava strava (colour of menstrual bleeding).

ABOVE GIVEN POINTS SHOULD BE WRITTEN IN DISCUSSION

Symptom	Percentage Relief
Yoni Vedana (painfull menstruation)	65.83 %
Yonikandu (vaginal itching)	59.45 %
Granthibhuta Artavastrava (clots in menses)	81.05 %
Varna of Artava strava (colour of menstrual bleeding)	78.4 %

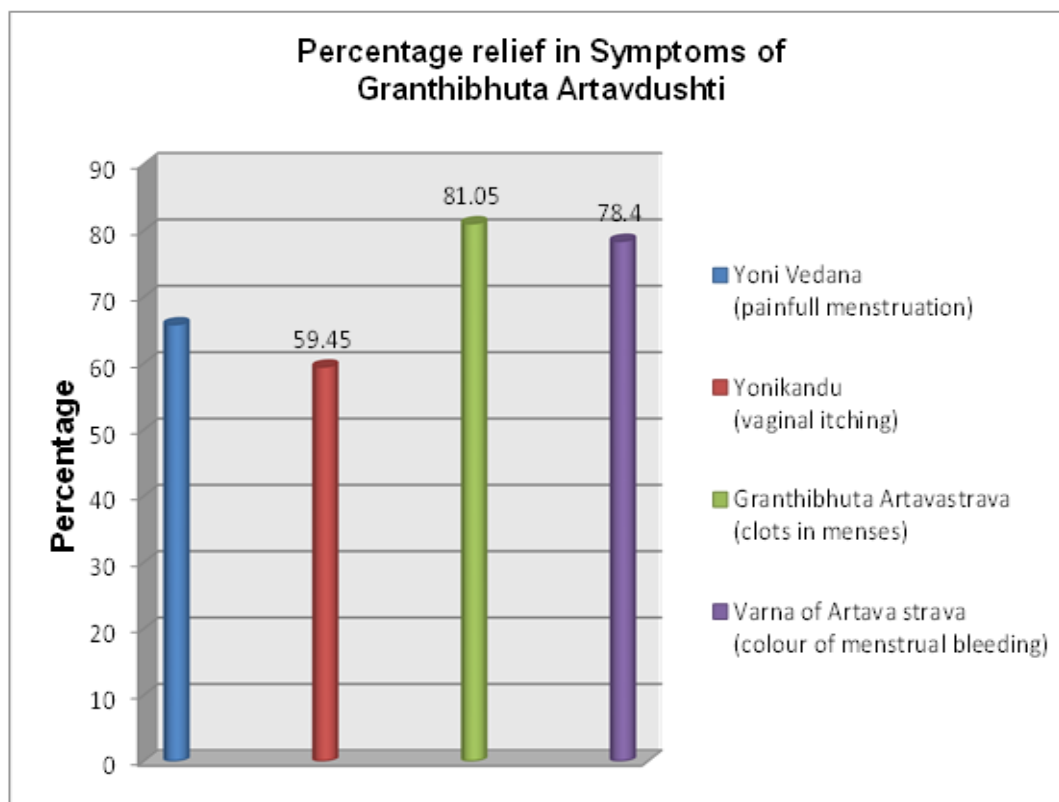
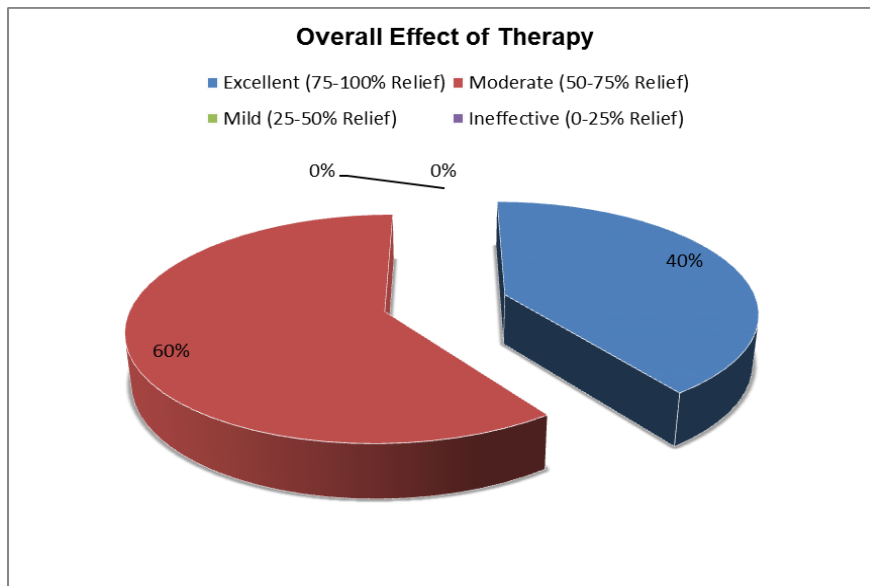
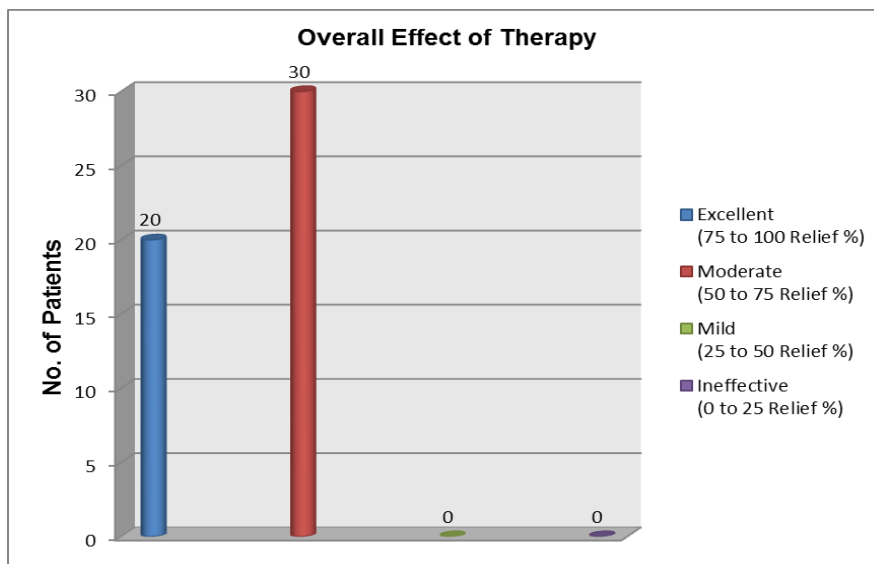


Table No. 5: Overall effect of therapy on 50 patients of Granthibhuta Artavadushti.

Result	Group of Patha Trikantaka Vrukshaka Kwatha	
	Number of patients	%
Excellent (75 – 100 % Relief)	20	40.00 %
Moderate (50 – 75 % Relief)	30	60.00 %
Mild (25 – 50 % Relief)	0	00 %
Ineffective (0 – 25 % Relief)	0	00 %



Graph No. 5.

In Group of Patha Trikantaka Vrukshaka Kwatha out of 50 patients, Moderate relief (50 to 75% relief) was noted in 30 patients i.e. 60%, 20 (40%) patients were reported in Excellent relief (75 to 100% relief), and no one was reported in Mild (25 to 50% relief) and Ineffective (0 to 25% relief) in this study.

RESULT

Effect of the Patha Trikantaka Vrukshaka Kwatha on symptoms observed in Granthibhuta Artavadushti is statistically proved to be significant.

Yoni Vedana (painfull menstruation), Yonikandu (vaginal itching), Granthibhuta Artavastrava (clots in menses), and Varna of Artava strava (colour of menstrual bleeding) are proved statistically significant where $p < 0.05$ i.e. at 95% level of significance.

DISCUSSION

Ayurveda is a science by the use of which, one can throw the light on such a hidden fact. Discussion is one of the important part of research work. It comprises the discussion of result obtained from applied study. Discussion is logical meaning of Observation. If all the points are discussed with proper reasons, then they help to draw proper conclusions. Discussion is the bridge which connect the findings with conclusion. Therefore, discussion is important part of research work.

In Ayurvedic classics mostly the menstrual disorders have been described under the heading of Ashta Artavadushti, Asrgdhara, Artava Kshaya. Granthibhuta artavadushti is one among the eight types of Artavadushti characterized by clotted appearance of menstrual bleeding due to Vata Kapha dushti and it leads to infertility in female. Also the modern treatment itself has various complications and recurrence is common. Owing to the complexities in the management of modern science, it is basic need of time to develop a dependable and easily available therapeutic intervention which should be effective, safe and without complications or side effects. With this background, this research project is carried, entitled-

“A clinical trial of patha trikantaka vrukshaka kwatha in the management of granthibhuta artavadushti.”

In order to achieve this, aim the study has been devided into 3 catagories

- ❖ Discussion on conceptual study.
- ❖ Discussion on mode of action of drug.
- ❖ Discussion on the clinical study.

CONCEPTUAL DISCUSSION

In Ayurvedica classics most of the menstrual disorders have been described under the heading of Ashta Artavadushti. Granthibhuta Artavadushti is one among the eight types of

Artavadushti characterized by clotted appearance in menstrual bleeding due to kapha vata dushti and it leads to infertility in female according to Acharya Sushrut. According to Kashyapa Samhita atyushna annapana sevana leads to the doshana of veerya, artava and beeja ksheenata of jataragni and rasa along with the sanchaya of kapha and vata doshas and this vitiation of vata and kapha in Granthibhuta artavadushti leads to Yonivedana, Yonikandu, Granthibhuta artava strava, vikruti in varna of artava strava.

According to modern science hormonal imbalance affects reproductive system of female and group of symptoms observed such as dysmenorrhea, clots in menses, vaginitis, abnormal colours of menstrual flow. And if its persist then leads to infertility. In modern science hormonal therapy are used for the treatment of menstrual disorders. Due to long time use of hormonal therapy causes many side effects such as irregular menses, weight gain, mental disturbance. So present study is attempt to provide on effective Ayurvedic remedy.

Before studying detail description of Granthibhuta artavadushti, we have to focus on Artava utpatti, karma, guna. Artava is upadhatu of Rasa dhatu. So any default in Rasa dhatu hamper on artava utpatti. Rasa dhatu affected due to jataragni mandhyatava and with vitiated doshas hamper the formation of Ahara rasa by producing Ama. So proper artava utpatti can be achieved by maintaining normalcy of the agni.

Mula sthana of artava srothas is Garbhasaya and artavavahini dhamani and expulsion of artava is done by Apana vata so, any deformity occur to artava srothas and apana vata its lead to Artavadushti. Artavavaha srothas obstructed by the vikruti of Apana vata and kapha result in Granthibhuta artavadushti.

In Ayurvedic treatment of Granthibhuta artavadushti, both Shodhana and Shamana chikitsa has been explained i.e maintain normalcy of agni and vata removing the kapha is the basic line of treatment. Main cause of Artava dushti is Agni mandhya and this lead to formation of Ama, so in treatment of Artavadushti dravyas having virudha guna is used i.e. pitta vardhak dravyas. Pitta vardhak dravyas stimulate agni which help in digestion of Ama, lead to formation of Ahara rasa which later on forms the Rasa dhatu from which Artava is formed. These pitta vardhak dravyas help in increasing the quantity of Artava, as the Artava is also pitta pradhana. As the basic concept of “Samanyam vrudhikaranam” intake of samana guna causes the increase of same guna. Hence the pitta vardhak dravyas are given prime

importance in producing Artava. Keep this in mind Tikta, Madhura, Kashya rasa, Katu, Madhura vipak, ushna, Sheeta virya use in Artavadushti.

Discussion of drug review

Patha Trikanthaka Vrukshaka Kwatha is use in the treatment of Granthibhuta Artavadushti is described in classical ayurvedic text of Ashtang Hrudhya Samhita. Detail study of drugs as follow.

1. Patha

Sr. no	Properties	Action
Rasa	Tikta	Pitta kapha samaka, vata vardhaka, Kanduhara, dhatu soshana.
Vipak	Katu	Ruksha, Laghu, enhances vata, subsides Kapha.
Virya	Ushna	Vatahara, Kaphahara and pitta vardhaka, deepana, pachana, daha janana.
Guna and Karma	Laghu, Tikshna, Grahi, Vatakaphahara, Balya	<ul style="list-style-type: none"> • Laghu - Kaphahara, vata vardhaka, it reduces the tissue weights and malas and clears the channels of the body i.e. sroto sodhana, improves the digestion. On the psyche (manas) it has positive effects by improving activeness and providing inspiration. • Tikshna – pitta vardhaka, kapha-vata hara, reduce tissue weight, enhances the excretion of malas. • Grahi – digest Ama, and absorbs fluid. • Vata-kaphahara • Balya

2. Trikanthaka

Sr. no.	Properties	Action
Rasa	Madhura	Vata-pitta samaka, kapha vardhaka, dhatu vardhana, ojo vardhana, indriya prasadana, balya.
Vipak	Madhura	Kapha vardhaka, vata-pittahara, improve Sukrala dhatu.
Virya	Sheeta	Pittahara, vatakapha vardhaka, rakta prasadana, balya.
Guna and karma	Guru, Snigdha, Vatapittahara, Mutrala, Rasayana.	<ul style="list-style-type: none"> • Guru – Vatahara, kapha vardhaka, nourishes all the dhatus, on the psyche (manas) it impose inhibitory effects on receptive capacity. • Snigdha – Subside vata and aggravates Kapha, provides tonicity to tissues, regularize the movement of malas, act as vajikarana, balya. More effective in vata vyadhis. • Rasayana - Rasayana prevent ageing, increase longevity & immunity, improve mental function, vigor and vitality of the body. • Mutrala • Vata-pittahara

3. Vrukshaka

Sr. No	Properties	Action
Rasa	Tikta, Kashya	Tikta – pitta-kapha samaka, vata vardhaka, kandu hara, lekhana, dhatu soshana. Kashaya – pitta-kaphahara, vata vardhaka, sthambhana, rakta prasamana, lekhana.
Vipak	Katu	Ruksha and laghu, enhance kapha, vata-pitta hara.
Virya	Sheeta	Pittahara, vata-kapha vardhaka, rakta prasadana, balya.
Guna and Karma	Laghu, Ruksha, Kapha-pittahara, Grahi, Deepana	<ul style="list-style-type: none"> • Laghu - Kaphahara, vata vardhaka, it reduces the tissue weights and malas and clears the channels of the body i.e. sroto sodhana, improves the digestion. On the psyche (manas) it has positive effects by improving activeness and providing inspiration. • Ruksha – Subside kapha and aggravates vata, reduces the quantity of excreta, Sthambhana, soshana, rukshana. • Grahi – digest Ama and absorbs fluids. • Deepana – stimulate agni and pachana of Ama. • Kapha-pitta hara.

Effect of drug on Granthibhuta artavastrava

1) Yoni vedana is mainly due to the involvement of vata prakopaka and srotoavarod.

a. Patha

- Vatahara and srotosodhana is line of treatment for vata dominant dosha avastha and srotoavarod. Patha has vatahara karma, which help in reduction of vitiated vata dosha in entire body (sarvadehik) ultimate result in subsidence of yoni vedana.
- Ushna virya of patha lead to vatahara
- Laghu guna, ushna virya has the property of srotosodhana and improve digestion and thus use for the treatment of srotoavarod and agnimandhya.

b. Trikanthaka

Madhura Rasa and sheet, snigdha, guru Guna is vata shamak, bruhaniya, Dhatu vrudhikar. Due to Madhura vipak it act as vata shamak, Dhatu vardhan, Balya and sheet veerya it act as vataghna, Pittaghna. Thus help in samprapti bhanga.

c. Vrukshaka

Laghu guna and shita virya is vata shamak and srotosodhana, thus help in subsidence of yoni vedana.

2) Yoni kandu is mainly due to the involvement of ruksha guna of vata and shleshma guna of kapha prakopa.

a. Patha

Ushna virya and vatakapahara, snigdha, guru Guna is vata shamak, bruhaniya, Dhatu vrudhikar. Due to ushna virya it act as kapha shamak, Dhatu vardhan. Thus help to subside yoni kandu.

b. Trikanthaka

Madhura Rasa and shita virya, snigdha, guru Guna is vata shamak, bruhaniya, Dhatu vrudhikar. Due to Madhura vipak it act as vata shamak Dhatu vardhan, Balya and sheet veerya it act as vataghna. Due to vata shamak, ruksha guna of vata subside – act on yoni vedana.

c. Vrukshaka

Shita and laghu guna is vata shamak, effect on ruksha guna of vata and therefore it act on yoni kandu.

3) Granthibhuta artavastrava is mainly due to the involvement of vata and kapha dosha.

a. Patha

- Ushna virya and vatakapahara karnma is vata shamak, bruhaniya, Dhatu vrudhikar. Katu vipak has property of bhedana karma, thus act on granthibhuta artava and bhanga samprati.
- Patha use for the treatment of artavabhedhana as per samhita, so use in granthibhuta artavadushti.
- Grahi guna and ushna virya improve digestive system and therefore jataragni improve agnimandhya and produce suddha rasa, rakta. As artava is uppadhatu of rasa and rakta. Suddha artava is produce.

b. Trikanthaka

- It has lithotryptic activity so use as bhedana karma in granthibhuta artavastrava.

c. Vrukshaka

Deepana and grahi guna has the property of ama pachana and stimulate agni which result In shuddha rasa and rakta dhatu utpatti and as artava is uppadhatu of rasa and rakta, shuddha artava is form.

4) Vikrut varna of artavastrava

a. Patha

Tikta rasa, katu vipak, ushna virya, grahi guna has a property of pachana of ama and therefore act on agnimandhya and produce suddha rasa, rakta. As artava is upadhatu.

b. Trikanthaka

Madhura rasa and vipak, guru guna has property of dhatu vardhana, so help in nirmiti of shuddha artava.

c. Vrukshaka

Deepana and grahi guna has the property of ama pachana and stimulate agni which result in shuddha rasa and rakta dhatu and as artava is upadhatu of rasa and rakta, shuddha artava is form.

Karya on Dosha

Due to Tikta – Rasa, Madhur – Vipaka, Ushna sheeta & Virya, this preparation performs the following functions. It pacifies the following property of Dosha.

Kapha - Guru, Snigdha, Manda, Slakshna, Sthira.

vata- ruksha, laghu, etc.

This preparation is Kapha-vatanashaka and works mainly on shleshmaka Kapha, appana vayu.

Samprapti Vighatana

Kapha-vata are the chief Dosha involved in this disease. We must use the drug which is having Ruksha Guna, ushna virya and Madhura, Tikta, katu Rasa. Tikta-katu Rasas are present in this preparation, this drug reduces the shleshmaka kapha and prakrut appna vayu nirmiti and decrease ruksha guna of vayu.

Thus this drug act on granthibhuta artavadushti by carrying following functions.

Agni-Vardhana

Samakapha and vata Pachana srotoshodhana

Rasa rakta Prasadana

As rasayana property act on Dhatu –rasa, rakta etc.

This proves the whole mode of action of kwatha in Granthibhuta artavadushti. As per observation collected in this thesis this yoga has property of total Samprapti Vighatana of Granthibhuta artavadushti. These drugs are very cheap, easily available and effective in Granthibhuta artavadushti. The symptoms of Granthibhuta artavadushti are due to disturbance in shleshmaka kapha, ruksha guna of vata and vikruti in appana vayu. It means this drug acts mainly on ruksha, strotoavarodha and sleshmaka kapha. Kwatha has Deepana - pachana, Tridosahara (especially kapha vata Doshahara) properties. It also responsible for breakdown the samprapti of the disease.

Discussion on material and method

Discussion on inclusion criteria

Female patients suffering from Granthibhuta Artavadushti within reproductive age group of 12 to 50 years were selected because due to present life style menstrual disorder is more prevalent in reproductive age.

Discussion on exclusion criteria

Female patients with any other systemic disorders were excluded to avoid the interference in the action of the drug and also to avoid complication.

Discussion on Diagnostic criteria

Female patient having complaints of Yonivedana, Yonikandu, Granthibhuta Artava strava and abnormal menstrual colour.

Discussion on investigation

Basics Investigation done in menstrual disorder are

1. Haemogram – Hb done to rule out patient suffering from anaemia. Because in anaemic patient menstrual flow is heavy and due to it anticoagulants have no enough time to work and so enables to form clots.
2. BT and CT – It's to rule out normal level of bleeding time and clotting time.
3. Urine – to rule out any urinary infection.

Discussion on Drug and Dose

- Aushadha kalpana selected for the study is Kashaya Kalpana.
- Dose was decided as per the reference in classical texts.
- Aushadha sevana kala was decided as twice daily before meal

- Duration of treatment was decided as 90 days, which is the standard for any gynaecological treatment related to menstrual disorders as per modern science.

Discussion on Statistical methods

As the data is distributed in before and after treatment and sample is small Wilcoxon signed ranked test is applied for non parametric data.

Clinical discussion

Discussion on patients

This study was conducted on 50 female patients. A drug or a clinical study can be considered effective only when it provides symptomatic relief and tacksels the disease at the samprapti level itself. With this view the drug selected in the study showed improvement at different stages of disease as well as symptoms.

Plan of selection of drug

Drugs were selected on the basis of their properties keeping in mind their probable probable mode of action. To evaluate the action of Patha Trikanthaka Vrukshaka Kwath on Granthibhuta Artavadushti and its different manifestations Patha Trikanthaka Vrukshaka Kwath 40ml BD was administered orally for a period of three months i.e.90 days.

Observation seen in patients

Age

Menstrual disorders mainly occur in reproductive age group. In the present study 21 (42%) belonged to the age group of 26-30years, 19 (38%) from the age group of 21-25years, 7 (14%) from the age group more than 30years and 3 (6%) from the age group of less than 21years. As women in this age group are more conscious for pregnancy also family burdens, children and personal problems are there which might affect the personal life of a woman due to which menstrual cycle is disturbed and leading to Granthibhuta Artavadushti.

Occupation

Maximum 21(42%) patients were students, 17(34%) patients were house wife, and 12(24%) patients were under going service.

Majority of the patients were students. They are more prone to stress and hormonal imbalance. So this psychological and physiological state may affect artava utpatti.

Religion

Out of 50 patients maximum 45 (90 %) patients were from Hindu community, 5(10%) were from Muslim community. Due to strong panchan agni in muslim patient, they are least affected.

Ahara

Out of 50 patients 31 (62%) of patients were mixed type of diet, while 19 (38%) patients were taking vegetarian diet. So it can be said that patients were taking mixed type of diet are more prone to Granthibhuta Artavadushti.

Socio-economic status

The majority of the patients i.e 35 (70%) were reported in middle class, 11 (22%) patients observed in the upper class, and 4 (8%) patients were in lower class. It may be presumed that people of lower class and middle class are not having proper diet and unhygienic environment. So the chances of malnourishment are higher in lower and middle class the ladies of other classes. Middle and lower class people undergo lot of stress in many phases of day to day life. We know that stress itself is a cause for many disorders.

Marital status

Out of 50 patients 28 (56.33%) patients were married while 22 (43.67%) patients were unmarried. It can be said that the change in Desha, Ahara, Vihara after marriage, disturbs menstrual cycle which in turn lead to Granthibhuta Artavadushti and in some married women psychological and economical stress and disturbances in marriage may lead to Granthibhuta Artavadushti.

Prakruti

Maximum distribution of patient i.e 18 (36%) of them were seen from the vata kapha prakruti, 17 (34%) patients from vata pitta prakruti, 13 (26%) patients from pitta kapha prakruti, 1 (2%) patients were kapha vata prakruti and 1 (2%) patient were pitta vata prakruti. Increasing number of vata kapha prakruti is seen in the study may be because of the close proximity of these doshas with the disease entity.

Agni

Out of 50 patients 15 (30%) patients were found having Mandagni. As mandagni is primary cause of all vyadhi it is also may cause Granthibhuta Artavadushti. So it can be said that women having mandagni are more prone to Granthibhuta Artavadushti.

Duration of Granthibhuta Artavadushti

Out of 50 patients 27 (54%) with 2 months duration of symptoms, 16 (32%) patients with 3 months duration of symptoms, 4 (8%) patients with 1 month duration of symptoms and 3 (6%) patients with 4 months duration of symptoms.

Discussion on Effect of therapy on subjective criteria**Yonivedana**

The pain during menses subsided with 65.83 % and P value being < 0.05. Show highly significance.

Yoni kandu

Yonikandu i.e vaginal itching subsided with 59.45% and P value being < 0.05. Shown highly significane.

Granthibhuta Artava Strava

Granthibhuta Artava Strava i.e. clotted appearance in menses subsided with 81.05% and P value < 0.05. show very highly significance.

Varna of Artava Strava

Varna of artava Strava i.e abnormal menstrual colour subsided with 78.4% and P value < 0.05. show very highly significance.

Discussion on overall effect of therapy

Out of 50 patients, Moderate relief (50 to 75% relief) was noted in 30 patients i.e. 60%, 20 (40%) patients were reported in Excellent relief (75 to 100% relief), and no one was reported in Mild (25 to 50% relief) and Ineffective (0 to 25% relief) after treatment.

Yoni Vedana (painfull menstruation), Yonikandu (vaginal itching), Granthibhuta Artavastrava (clots in menses), and Varna of Artava strava (colour of menstrual bleeding) are proved statistically significant where $p < 0.05$ i.e. at 95 % level of significance.

Other Observations

It was observed that there were no adverse effects of the treatment in any of the patients. All the patients tolerated the treatment very well.

This drug was also try on the patient having malignancy of reproductive organ. As per study chemical constituent of saponin In drug prevent the spread of malignancy.

Additional benefits are as a result of the action of the drugs on Agni there by preventing the agnimandhya. Also the nidana parivarjana may be one of the reasons for the betterment of the treatment.

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• Tq. Latur, Dis. Latur 413512 (MS.)
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Cheiloscopy: En Effective Tool for Sex Determination and Person Identification from Aurangabad Region

Vd. Manisha More (Shinde),

Department of Agad Tantra Avum Vidhi Vaidyak,
CSMSS Ayurved College, Aurangabad

Vd. RajeshKumar S. Upadhyay

(Guide and HOD)
Department of Agad Tantra Avum Vidhi Vaidyak,
CSMSS Ayurved College, Aurangabad

Abstract

Introduction: Cheiloscopy, the study of lip prints, is an upcoming tool for the identification of persons. The lip print of every person is unique and can be used to determine the personal identity and sex of the individual.

Aim: The main objective of the present study was to ascertain whether the lip prints behold the potential for determination of identity and sex of the person from Aurangabad region.

Materials and methods: This study was conducted on 80 subjects, which includes 40 males and 40 females from Aurangabad region. The lip prints were recorded by applying lipstick evenly on lips; print obtained on thin bond paper and on plain glass. Lip prints obtained on plain glass were retrieved and matched with the first one by two examiner to determine the sex and identity of the person.

Result: We found that 36 of the actual 40 lip prints of the females and 32 of 40 males were correctly diagnosed as females and males respectively. Lip prints of 68 of 80 individual were correctly matched, thus identification of the person.

Conclusion: The study revealed that the lip prints of all the experimental subjects did not match with each other. The study is able to convey that lip prints behold the potential of determination of the sex and identity of the person for Aurangabad region.

Key words: Cheiloscopy; Lip prints; Sex determination; Personal identification

Introduction

In forensic identification, lip print patterns can lead us to important information and helps in person's identification. The grooves present on human lips (Sulci labiorum) are unique to each person and can be used to determine identity¹. Lip prints are normal lines and fissures in the forms of wrinkles and grooves present in the zone of transition of human lip, between the inner labial mucosa and outer skin, examination of which is known as cheiloscopy. This is unique for individuals, as finger prints². Fingerprints, post-mortem reports, and of late, DNA fingerprinting, have been successful in person identification in the field of forensic science. Just as in these methods, lip prints can be instrumental in identifying a person positively and can be used to verify the presence or absence of a person at the scene of crime³. Lip print is an anatomical character of the human lips⁴. Cheiloscopic techniques have an equal value in relation to other types of forensic evidences for personal identification⁵ and sex determination. One of the challenges faced by man in earlier days was to establish the identity of an individual. The concept of "identity" is a set of physical characteristics, functional or psychic, normal or pathological- that define an individual. Identification of humans is a prerequisite for personal social and legal reasons⁶. In a crime scene investigation, lip prints can link a subject to a specific location if found on cloths or other subjects, such as glasses, cups or even cigarette butts⁷. Analysis of the lip prints left at the scene of crime, and their comparison with those of suspected person may be useful for identification⁸. Dental identification remains one of the most reliable and frequently applied methods of identification, predominantly by the comparison of ante-mortem and post-mortem records⁹. Dentistry's fundamental and clinical disciplines have, from time to time, shed light on questions of civil and criminal law¹⁰. Article 6 of the Universal Declaration of

Human Rights states that; everyone has a right to identify as a person, before the law¹¹. Any process that possesses the possibility of assisting the forensic field in identifying a suspect should be pursued and, if discovered pertinent, utilizes in the act of criminal investigations and legal proceedings. The use of lip prints fall into this category and because they have been proved reliable and trustworthy to link a suspect to a crime, more emphasis should be given to this field¹².

Aim and Objective

To ascertain whether the lip prints behold the potential for determination of identity and sex of the person from Aurangabad region.

Materials and method

A) Materials

1. A dark colored frosted lipstick
2. Thin bond paper
3. Cellophane tape
4. Magnifying lens (10X)
5. Plain glass
6. Pen / pencil for labeling the individuals details
7. Starch powder modified by adding *Bukka* (a black colored powder prepared from tale (a metal)).

B) Method

This study was carried out in Department of Agad Tantra Avum Vidhi Vaidyak, CSMSS Ayurved College, Aurangabad after approval of Institutional Ethical Committee. All the participants were briefed about the purpose of the study and written informed consent was obtained from each of the participants. This study was conducted on 80 subjects, which includes 40 males and 40 females, in age group of 18-30 years from Aurangabad region. Care was taken to select individuals having no lesion, whether active or passive on the lips. Individuals with known hypersensitivity to lip stick were not included in the study. The lipstick was applied by the research personnel with a single stroke, evenly on the vermilion border. The subject was asked to rub both the lips to spread the applied lip stick. After two minutes, a first lip impression was made on the strip of cellophane tape which was then sticks to white thin bond paper which served as the permanent record. Second lip impression was taken directly on folded bond paper to record the vermilion border of the lip and third lip impression was taken on the plain glass; modified starch powder was then dusted on the respective lip print; excess powder was blown by using chip syringe and lip prints from glass were retrieved and transferred on another bond paper (Figure 1).

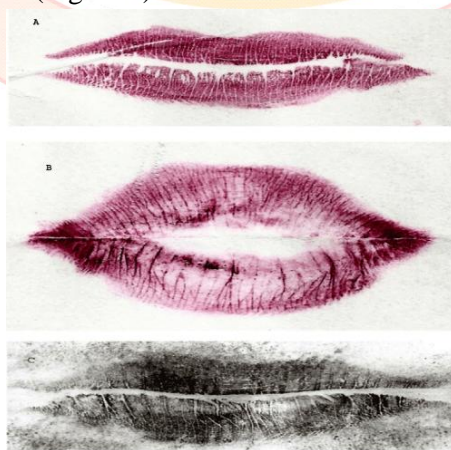


Figure 1. A) First lip print, B) Second lip print, C) Retrieved lip print

C) For sex determination

In this study, we followed the classification of patterns of lines on lips (Figure 2) given by Suzuki and Tsuchihashi¹³.

1. Type I: clear cut vertical grooves that run across the entire lips.
2. Type I': similar to type i but that do not run across the entire lip.
3. Type II: branched groove (branched y pattern).
4. Type III: intersected grooves.
5. Type IV: reticular grooves.
6. Type V: undetermined.

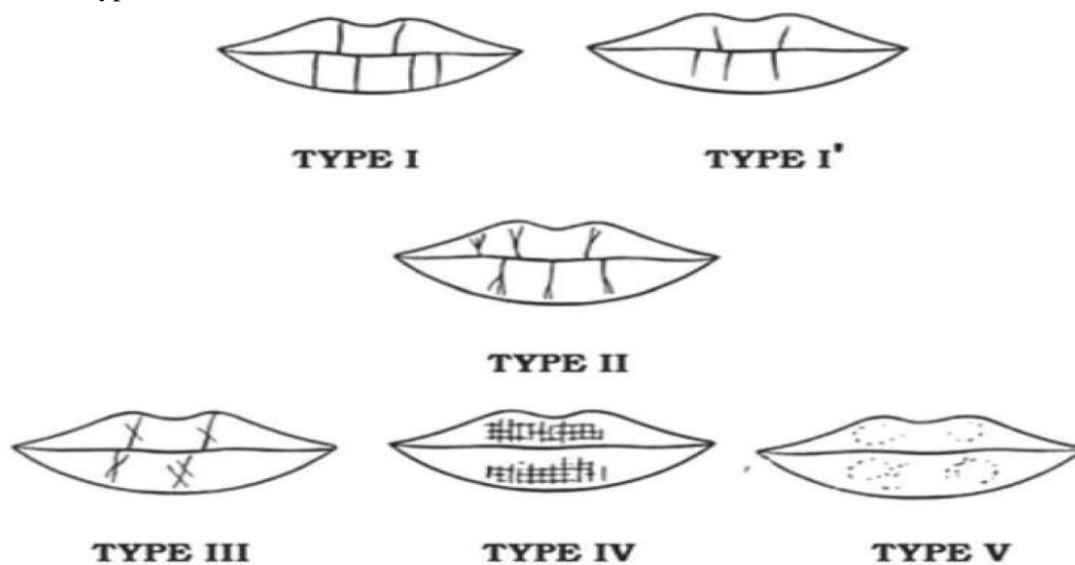


Figure 2. Suzuki and Tsuchihashi's classification

Because of numerically superiority of properties of the lines in the middle part of lower lip (10 mm wide), this fragment was selected for the study area. The sex of the individual was determined by Vahanwala et al.^{14,15}.

1. Type i and i' pattern dominant: female
2. Type i and ii pattern dominant: female
3. Type iii pattern dominant : male
4. Type iv pattern: male
5. Type v patterns: male

Varied patterns in all quadrants: male

Similar patterns in all quadrants: female

All the lip prints were subjected to both the examiners by hiding the identity of 80 subjects for determination of the sex.

D) For personal identification

The each lip print was measured for its length and divided into six equal parts as Upper Right (UR), Upper Middle (UM), Upper Left (UL), Lower Left (LL), Lower Middle (LM) and Lower Right (LR). Total numbers of horizontal lines, vertical lines, partial vertical lines, Y shaped pattern, intersected pattern, number of boxes and undetermined pattern were counted by using 10X magnifying glass in each part of every print of all 80 subjects and data tabulated for every subject. The same method was applied on retrieved lip prints. To avoid bias, all the lip prints were compiled, analyzed and interpreted by two examiners to determine the sex and identity of the individual.

Results : Our study revealed following observation.

1. Every lip print is different and unique.
2. No two lip prints were matched with each other.
3. Type I and I' were most common in females; type IV and V were seen most commonly in males.
(Figure 3) The above data was statistically analyzed to see the difference in types in the two sexes that showed $\chi^2=22.19$; $df=5$; $p=0.00048$; Highly significant.

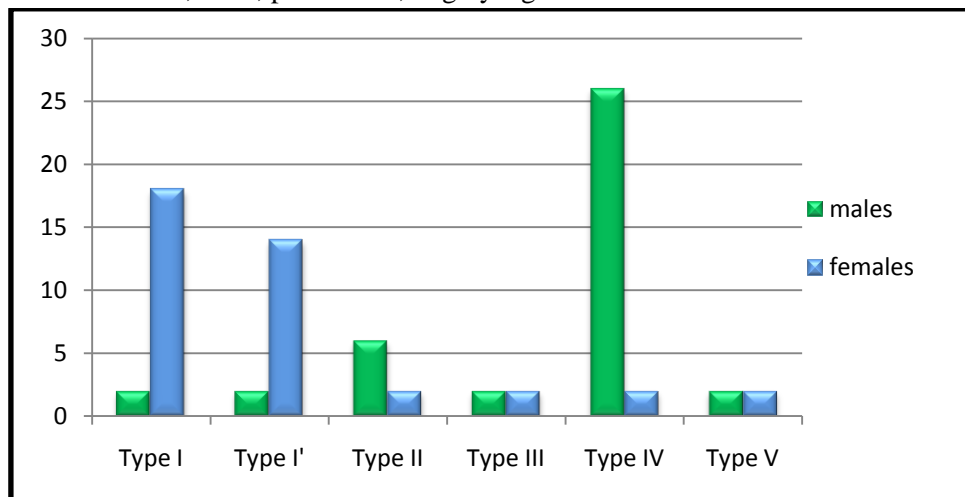


Figure 3. Gender distribution according to types

4. Total number of 36 females and 32 males were correctly recognized on the basis of their lip prints (Figure 4) $r=1$ (r denotes Pearson's correlation coefficient). There is perfect correlation between the sex determination for male and female.

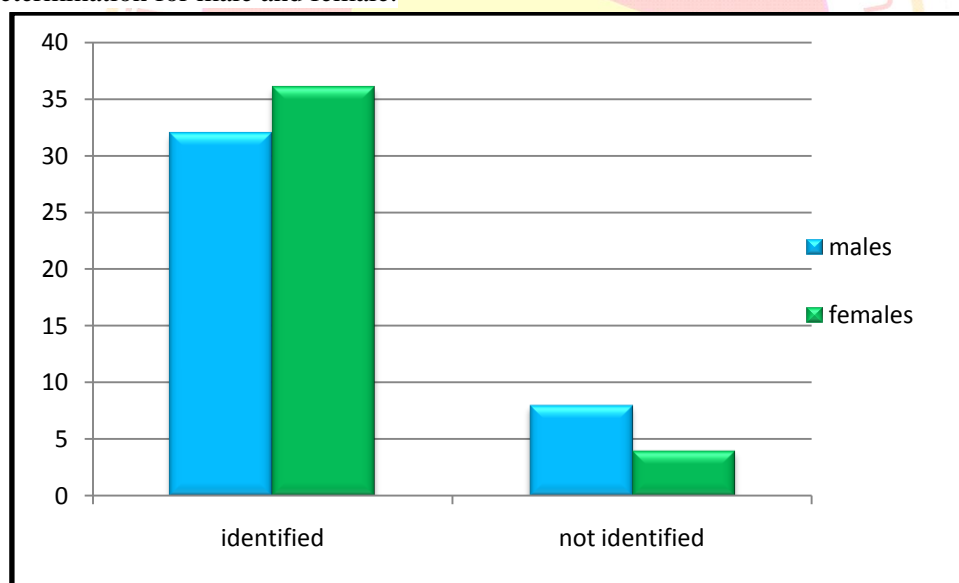


Figure 4. Diagram showing results of sex determination

5. Out of 80 subjects 68 subjects were correctly identified which include 32 males and 36 females (Figure 5) $r=1$ (r denotes Pearson's Correlation coefficient). It indicates there is perfect correlation between person's identification among males and females.

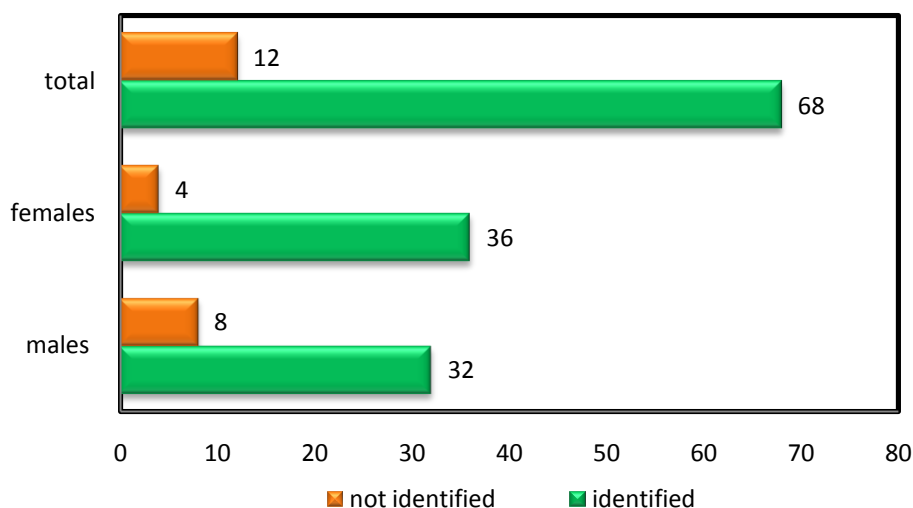


Figure 5. Result showing results of person identification

Discussion

Personal identification is necessary for unknown deceased person in homicide, suicide, accident, mass disaster, etc., and for living individual who are missing or culprits hiding their identity. If a definite description of the different parts of the upper lip and the lower lip are established for an individual by detailed study, this anti-mortem record can be used for matching the details of lip prints in post-mortem records for personal identification². The lip print pattern is identifiable as early as the sixth week of intrauterine life. Lip pattern is unique for each of the examined individuals, even in twins and family relatives. This finding is hoped to be useful in the identification process, both in civil and criminal issues. It is suggested to establish a database for all individuals in a certain locality so as to be a reference in the criminal investigations⁸. In 1902, Fischer described the system of furrows on the red part of human lips³. The use of lip prints were first recommended as early as in 1932 by Edmond Locard, one of France's greatest criminologists. It is thought that hereditary factors may have some influence on the lip print patterns. Japanese doctor Suzuki is supposed to have done the greatest work on lip prints. In 1970, he recalled the attention of everyone on the fact that the possible use of lip prints in personal identification had been suggested in LeMoyne Snyder's above-mentioned book. In the same year he examined 107 Japanese females aged 20-36 and simplified the classification of lip prints. Perhaps the first person to systematically classify lip prints was Santos in 1967. He stated that the wrinkles and grooves on the lips could be divided into simple and compound types and subdivided them into eight groups. Suzuki in 1970 after conducting the study on 107 Japanese women as mentioned above simplified the classification into five main types^{3,16} (Figure 1). On May 12, 1999, an Illinois Appellate Court accepted, in *People v. Davis*, No. 2-97-0725, the uncontroverted testimony of two state police experts (a fingerprint examiner and a questioned document examiner) that:-

1. Lip print identification is generally acceptable within the forensic science community as a means of positive identification because it appears in the field literature.
2. Lip print identification methodology, although seldom used, is very similar to fingerprint comparison and is a known and accepted form of scientific comparison.
3. There is no dissent in the forensic science community with regard to either the methodology used or the fact that lip prints provide a positive identification.
4. The F.B.I. and the Illinois State Police consider that lip prints are unique like fingerprints and are a positive means of identification^{3,17}.

In the present study, we aimed to find out the variations in lip patterns of 80 individuals. We tried to ascertain whether the lip prints hold the potential for determination of sex and identity of the individual. Even though the lines and furrows are present, both in upper and lower lip from one corner of mouth to other corner, only the middle portion of the lip is taken into account, since this portion is always visible in any trace. We labeled a particular pattern on the basis of the numerical superiority of types of lines present that is vertical, intersected, branched or reticular. If more than one pattern predominates it is typed as undetermined. In the past some researchers have worked on lip prints to prove that the gender difference does exist in lip print. According to Vahanwala et al.¹⁴ Type I and Type I' patterns were found to be dominant in females while type III, IV and V were dominant in males. In another study by Vahanwala and Parekh, it was shown that all four quadrants with the same type of lip prints were predominantly seen in female subjects and male subjects showed the presence of different pattern in a single individual¹⁸. Similar kind of results found to Sharma and Saxena¹⁸, Malik and Goyal¹, Satyanarayan, Prabhu^{3,18}. We also found type I and type I' patterns to be dominant in females while type IV and type V patterns were dominant in males. In addition, we observed that no lip prints matched with each other and that lip pattern was unique to every individual thus aid in personal identification. Singh⁷ signify that vermilion and indigo being natural, non-toxic and cost effective can replicate the already existing chemical reagents like sudan black, sudan III, oil red O, Nile red, as the ability of these natural dyes to develop recent lip prints are comparable to sudan black.

Practical Application

Suzuki and Tsuchihashi¹⁹ reported two cases where lip prints have proven useful in identification of the criminal. In first case while the lip prints were identified on an envelope and with those of the suspects, the second case lip prints were noted on the undergarments and were studied with the help of color test and ultraviolet rays. In 1987, FBI had successfully identified a male bank robber who used female disguises including lipstick. The FBI submitted the photographs and lifts of the lip prints that robber had left on the glass door while robbing a bank, which were identified to match with that of suspected robber². LeMoyné Snyder in his book Homicide Investigation written as early as 1950 mentions the possible use of lip prints in the identification of individuals. He describes a very good case in which a woman was struck by an automobile striking her face on the left front fender of a car. The owner of the car denied that he had hit that woman. A lip print was lifted from the left front fender of the car. The print was matched with that of the woman and it was proved beyond any doubt that it was indeed the lip print of the woman who was hit. Thus it was proved that the car in question had indeed hit the woman! Really a remarkable case in which lip prints helped the crime scientists in an unusual way¹⁶. These cases suggest that lip print study can definitely be used for criminal identification.

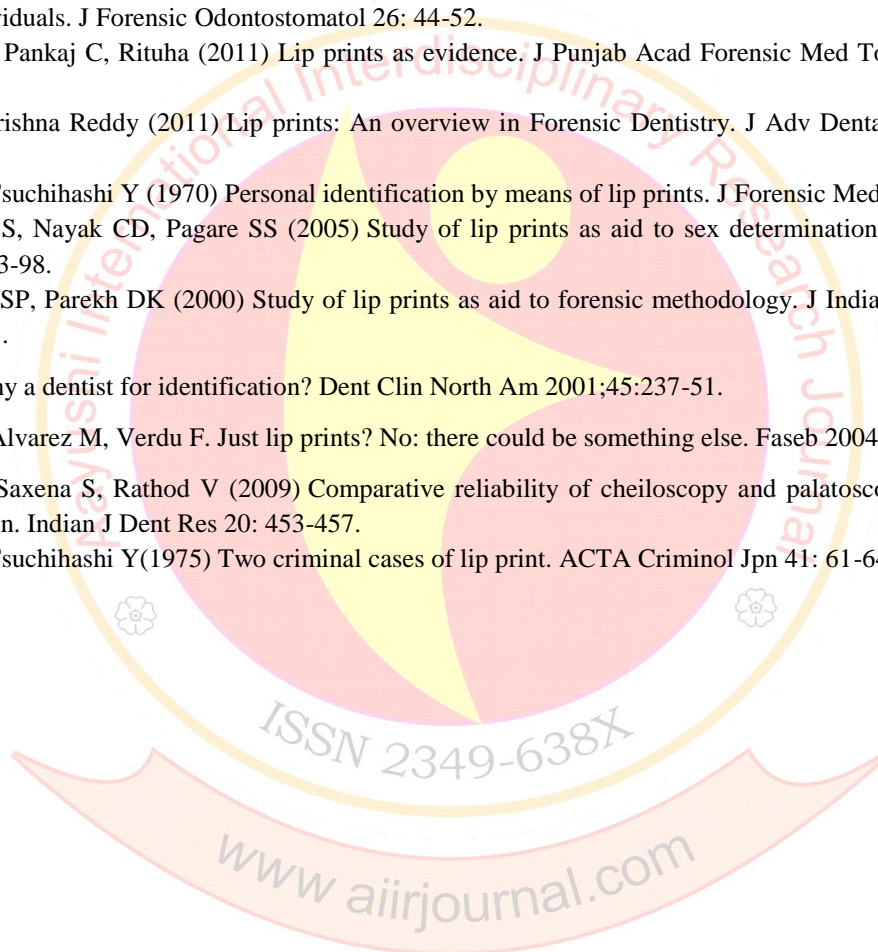
Conclusion

Our study, in Aurangabad region, has proved that cheiloscopy hold the potential to identify the sex and identity of the individual, as they remain stable over time and unique to individual, even in twins and family relatives. Further studies concerning standardization of the pressure applied to lip print during recording the prints is recommended and development for biometric system to allow fast and accurate assessment of lip print patterns.

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• aiirjpramod@gmail.com
• aayushijournal@gmail.com

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CHIEF EDITOR – PRAMOD PRAKASHRAO TANDALE

Conceptual Study on Examination of Poison**Dr. Rajesh Kumar S. Upadhyay**Professor & Hod Agad Tantra Avum Vidhi Vaidyak,
CSMSS Ayurved Mahavidyalaya Kanchanwadi,
Aurangabad Maharashtra, India**Dr. Ujwala M. Divekar**Asso. Professor, Samhita Siddhant Dept.
CSMSS Ayurved Mahavidyalaya Kanchanwadi
Aurangabad Maharashtra, India**Corresponding Author** : Email I.D. rajesh1968u@gmail.com**Abstract**

Vish Parikshan is one of the important part of the detection of poison According to Ayurveda whole world has taken place from the panchamahabhutas .All matter is constituted of five mahsbhutas. All the gross and fine elements in the universe, differ in their ratio of panchamahabhautic compositions and are named after the pre dominant bhuta. Similarly vish dravyas are also made up of panchmahabhutas. The specific composition and pre dominance of each bhuta for vish dravyas was not described Samhitas.Their bhautic composition is guesseed and assessed basing on the symptoms.They produce in the body.Panchbhautic Pareeksha Dalhana in his commentary on Sushruta Samhita has explained the teristic features of vish basing on the bhautic charecters in the context of vishaanna pareeksha (EXAMINATION OF POISONOUS FOOD) ,similarly analytical procedure is also important for detection of poison and clinical symptoms of poisoning also indicates features of poison and help to differential diagnosis.

Shabdha Pareeksha:- When the poisoned food is placed on fire it burns with cracking sound .

Roop pareeksha ; when the poisonous food is placed on fire it emanates as flames in the colours of peacock neck

Ras Pareeksha :- the flies die after flying over the poisonous food

Gandha pareeksha ; when poisonous food is placed on fire it emits irritating , pungent and strong fumes which cannot be extinguished easily.

Sparsha pareeksha ; poisonous food comes in contact with skin and causes burning sensation , severe itching.

Aim and Objectives

To detail study on examination of poison according contemporary and Ayurvedic methods

- 1)To detail study about Vish according Ayurveda. .*
- 2) To details study about poison according Modern Science .*
- 3) To detail study about examination of poison according Ayurveda*
- 4)To detail study about examination of poison according Modern Science*
- 5)To detail study about methods of examination of poison*
- 6)To study about different instruments and equipments used in the examination of poison .*
- 7)To create awareness about examination of poison and different methods of examination of poison .*

Key words: Visha,Poison, Examination,Parikshan,Ayurved,Methods,

Introduction:-

According to modern science, it is a substance (solid, liquid, gases)which if introduced in the living body or brought in to the contact which any part there of will be produce ill health or death by its constitutional or local effects or both ,thus almost anything is a poison. Poison may be suicidal, homicidal or accidental and a definite history of ingestion or contact with a known poisonous substance may are or may not be available, therefore the possibility of poisoning should always be considered in a puzzling situation, when differential diagnosis presents a difficult problem. According it is essential that one should be familiar without standing symptoms and sign of poisoning in the living persons together with its effect as found in examination of dead.

Visha pareeksha according to source: Utpati-based on the sources of origin examination was classified as sthavara and jangama visha. They can be detected and diagnosed based on the following features.

Sthavara visha :- Moves upwards in GIT. vomiting, hiccough, tingling sensation in teeth, anorexia.

Jangama visha:- Moves downwards in GIT. diarrhea, oedema, drowsiness, somnolence.

Visha parikshan based on properties(guna):- Classification of visha basing on their properties was not described in Ayurveda, they have also not described the examination or diagnosis of poison based on their qualities, visha by virtue of its ten qualities on entering the body vitiable different doshas and destroying ojas. There by resulting number of complication and some time even death, but the action of vish and its nature assessed based on the symptoms its produces and also the dosha it vitiates.

Animal Experimentation For Detection Of Visha:- In sushrut samhita kalpasthana has described the means detection of vish with the help of animals and birds. It was mentioned that the presence of poison in the food can be suspected and guessed with the help of abnormal behavioral attitude of animal or birds on sight of poisonous food.

According To Ashtang Sangrah-Vish Pareeksha Method Of Detection:- On some occasions certain weak minded people who are guilty of some other crime also suffer from the stated behavior because of constant fear of police etc. Therefore the food suspected to have been poisoned should be subjected to test by agni (fire) and other methods when poisoned food is thrown over the burning fire it burns with single point flame not in the form of spreading flame interrupted and slow emits flame of different colours like rainbow and gives out cracking sound. The smoke that comes out is like that of dead body causes fainting, watering of eyes, nose and mouth, excitement, headache, running nose and vision disturbance. Physician should observe the animal and birds behavior for diagnosis of poison.

Materials And Methods:- For the present review detailed literary study is performed. The details content of and references are analyzed from available principal text offered are Charak, Sushrut, Ashtang sangraha and some books also relevant references are taken from modern text book of toxicology and forensic medicine and other research articles available from internet.

Methods: Descriptive and conceptual.

Literary Review :-

According to modern science –Poison is a substance which, when administered, inhaled or ingested is capable of acting deleteriously on the human body. Thus almost anything is a poison. There is really no boundary between medicine and a poison, for a medicine in a toxic dose is a poison and a poison in a small dose may be medicine. In law the real difference between a medicine and a poison is the intent with which is given. It is substance is poison given with the intention to save life, it is a medicine but it is given with the intention to cause bodily harm, it is poison.

To diagnose poisoning it is essential that one should be familiar with the outstanding symptoms and signs of poisoning in the living person together with its effects as found in the examination of the dead.

Poisoning in the Living- The evidence of poisoning depends upon whether the poisoning is acute or chronic.

Poisoning in the dead :-

Postmortem examination, chemical analysis, experiment on suitable animal and moral and circumstantial evidence. Poison retard the action of putrefactive organisms to some extent. In a number of cases therefore the bodies are comparatively well preserved.

Chemical analysis:- The most important proof of poisoning is the analytical detection of poison in

parenchyma of the organs of the body . The finding of poison in food, medicine, fluid, alleged to have been taken is corroborative.

Experiment on suitable animals:- The suspected food ,medicine or fluid or the poison extracted from viscera can be fed to domestic animals such as dog and cat, these animal affected by poison in the same way as human beings, such procedure is not acceptable in some countries. In India prevention of cruelty to animals act enunciates the guidelines and punishment.

Moral and circumstantial evidence:-Clues regarding the recent purchase of poison by the victim or accused his behavior the contact of those looking after the victim suicide note and history of quarrel or financial problems may also provide valuable information.

Analytical Toxicology:- Scientific methods of analysis for poisons have only recently been developed. Until 19th century doctors and scientists harboured faulty notions about the effect of poisons on the human body .It was believed that if a dead body was black, blue or spotted in places or smelled bad ,the cause of death was poison. Other fallacious ideas were that heart of poisoned person could not be destroyed by fire. The body of a person dying from Arsenic poisoning would not decay. The attending Physician must be judicious in calling for necessary investigations and exercise discretion in the choice of test to be done.

The potential indication for seeking the assistance of Toxicology laboratory are as follows:-

- 1)Prognosis-To assess the outcome of a case of poison.
- 2)Research –In Toxic kinetics and mechanisms of Toxicity.
- 3) Order-From court or law enforcement officer.
- 4) Monitoring-Treatment measures and their efficacy.
- 5)Identification-Nature of the poison.
- 6)Severity-to assess the seriousness of given case.

7)Exclusion-confirmation of toxic exposure Mahoney and associates have categorized treatment of a poison case into four groups with respect to evaluation.

Toxicity correlates very well with serum levels and specific drug therapy can be instituted, for example digoxin ,ethylene, glycol, lithium, methanol, paracetamol, salicylates, theophylline.

The Analytic Procedure:-For Toxicological analysis poison can be divided into five groups.

Analysis- Toxicological analysis of biological tissues involves.

Separation of the drugs -From the biological tissue for this the contents of stomach are diluted in water and the solid viscera are cut into small pieces and macerated in water. Then a solvent is used to extract the poison.

Purification of the drug-This is done by additional extraction procedures using alkaline and acid solutions.

Analytical detection and quantitation- This is done by thin layer chromatography(TLC) gas chromatography mass spectrometry and rarely UV spectrometry. Except for gas chromatography mass spectrometry ,none of the methods is totally specific . If the method analysis other than GC.MS is used for initial identification ,then often it is easier to make positive identification and even quantitation .

Group I Gases are separated from blood or lungs by simple aeration procedures and specific test applied. Air samples collected at scene of exposure give better results.

Group II Steam volatile poisons-They include both organic and inorganic substance which are separated from biological materials by steam distillation from an acidic or basic medium e.g. ethyl and methyl alcohol ,phenol ,chlorinated hydrocarbons benzene amphetamines, nicotine, yellow phosphorus etc. Steam distillation of a sample of finely minced tissue containing tartaric acid

separates volatile acid and neutral substance. The residue is made alkaline and redistilled which separates volatile basic substance. Individual qualitative tests are carried out on suitable portions of the distillate. If some volatile compound is identified in distillate a fresh weighed sample of tissue is used for quantitative analysis.

Group III-1) Metallic poison –In dry Ashing procedure the weigh and minced tissue is dried in an oven and then placed in muffled ring /furnace at 4500C until all the organic matter is destroyed. The remaining ash is leached with mineral acid and resulting solutions subjected to qualitative and quantitative analysis for individual metals. Arsenic, Antimony, and Mercury are volatile at 4500c and would be lost in such procedure.

2)The wet Ashing procedure- It employs a mixture of nitric, sulfuric acid and per chloric acid to oxidize the organic matter. The remaining solution is the ash which is used for analysis of various metals.

Group IV-Non volatile organic poison-This group includes all compound that are alcohol and water soluble.

1)Compounds which may be extracted from an acidic aqueous medium by chloroform or other include organic acid and organic neutral compounds such as barbiturates acetanilid, phenacetin etc.

2)Compounds which may be extracted from a basic aqueous medium by chloroform or ether include organic bases such as cocaine, quinine, strychnine, phenothiazines, Imipramine, nicotine, Demerol etc.

3) Compounds which may be extracted from aqueous solution which is faintly alkaline which ammonia or sodium bicarbonate by chloroform with 10% ethanol include morphine, dionin, dilaudid etc.

Group V- miscellaneous –This includes all substances which are not classified in any of the above four group such as non metallic inorganic substances and water and alcohol insoluble organic compounds for identification special individual procedures for each substance must be employed.

Conclusion:- After studying all the aspect we came to conclusion that –

- 1)For detection of poison on physical properties are panchbhautik.
- 2)It is clear that visha pariksha on the basis of Ayurveda panchbhautik parikshan is essential like shabda, sparsh, gandha, roop examination.
- 3)Based on the sources origin the examination of poison.
- 4)Visha parikshan is possible on the basic of guna.
- 5)Animal experimentation is also necessary for detection of visha.
- 6)Analytical procedure is also important for detection of poison.
- 7) Clinical symptoms of poisoning also indicate feature of poison and help to differential diagnosis.

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• Tq. Latur, Dis. Latur 413512 (MS.)
• (+91) 9922455749, (+91) 8999250451

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Information of Cold Chain equipment in Government Immunization Programme (India)

Dr. Lalita Nivrutti Patole

Assist. Prof. Dept- Kaumarbhritya
C.S.M.S.S. Ayu. College, Kanchanwadi- Aurangabad.

Abstract-

India is a big country with large population. To run Immunization Programme successfully up to the interior of the country is the big challenge. One of the important elements for improving the immunization is Cold Chain which is backbone of the Immunization Programme.

In this review article- I am focusing on information about Cold Chain.

- *Cold Chain Equipment--- Electrical, Nonelectrical, Solar Cold Chain Equipment, Equipment & Vehicles used for transportation, Associated equipment for Cold Chain.*

Key Words: Vaccination, Immunization, Cold Chain.

Introduction

Vaccination is the act of administering a vaccine to the intended beneficiary.

Immunization is the process of inducing immunity in the intended beneficiary through the act of vaccination.

Most of India's population poor. They can't afford vaccines for their children in private hospitals. Our government have arranged free vaccination through **UIP** (Universal Immunization Programme). Immunization is one of the most effective methods of preventing childhood diseases. With the implementation of UIP, significant achievements have been made in preventing & controlling the Vaccine Preventable Diseases (VPDs). Immunization has to be sustained as a high priority to further reduce the incidence of all VPDs, eliminate Measles, control Rubella & sustain the eradication of Poliomyelitis caused by a wild Polio virus & the gains achieved in maternal & neonatal tetanus.

India has one of the largest UIP in the world in terms of quantities of Vaccines used, number of beneficiaries (approximately 27 million infants & 30 million pregnant women) covered, geographical spread (36 states & Union Territories) & manpower involved. India spends approximately 20,000 million INR every year in Immunization Programme (including Pulse Polio Immunization Programme) to immunize children against VPDs. For success of this programme maintenance of Cold Chain is very important. Cold Chain is back bone of Immunization Programme.

Aim & Objective

- To gain the information of Cold Chain equipment in Government Immunization Programme of India..

About Cold Chain

Definition- Cold chain is a system of storing and transporting the vaccines at recommended temperature from the point of manufacture to the point of use.

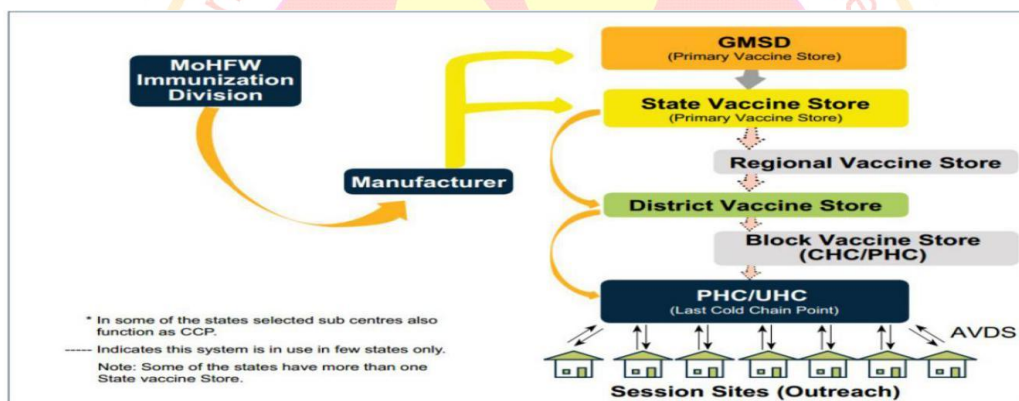
Network of cold chain is consisting of GMSD (Government Medical Stores Depots), State, Regional, District, Sub district Vaccine storage.

Cold chain consists of a series of storage and transport links, all of which are designed to keep the vaccines at the recommended temperature from the point of manufacture up to the vaccination point. Network consist of Vaccine stores along with requisites walk-in-coolers (WIC), walk-in Deep Freezers (DF), Ice lined Refrigerators (ILR), Refrigerated vans, Insulated Vaccine Vans, Cold boxes, Vaccine carriers and ice-packs from national level to states up to the outreach sessions.

There is wide network of cold chain stores, consisting of GMSD (Government Medical Stores Depots), State, Regional, District, Sub district Vaccine stores.

Number of Vaccine stores in India

Store Level	Numbers
GMSD	04
State Vaccine Stores	53
Regional Vaccine Stores	110
District Vaccine Stores	666
CHC/PHC/UHC/Other Hospitals/Last Cold Chain Point	25,555
Total	26,388



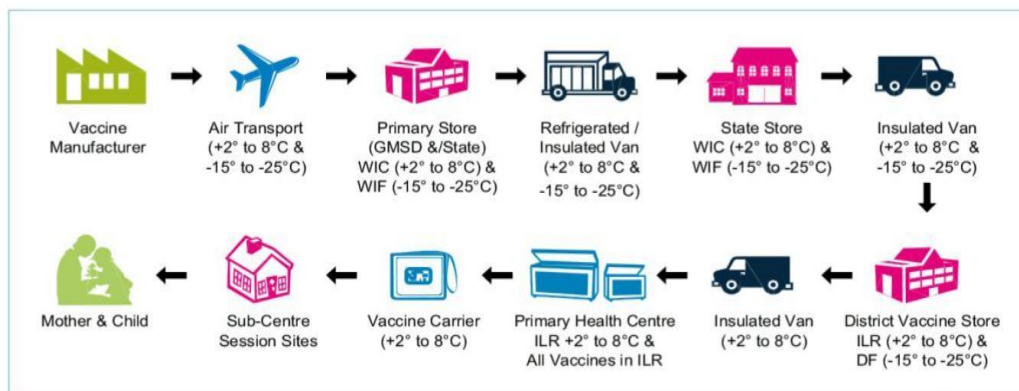
Above pictures show how vaccines come up to beneficiaries by transport. Vaccines are sensitive to heat, cold & light. Light- sensitive vaccines should be stored in cool & dark conditions. If vaccines are not stored safely (within recommended temp.), it may lead to adverse Event Following Immunization (AEFI). So maintaining cold chain properly is very important.

MoHFW has established two dedicated national centre of excellence in partnership with UNICEF, to strengthen the various components of immunization supply chain. The purpose is to support MoHFW to plan, implement, supervise, monitor, innovate, generate evidence through research, assessment, studies & provide platform for capacity building on vaccine & cold chain system across the country.

- 1. National Cold Chain & Vaccine Management Resource Centre (NCCVMRC) – New Delhi.**
- 2. National Cold Chain Resource Centre (NCCRC) –Pune.**

Cold Chain System- In this there are three parts – Cold Chain, Safeguarding Vaccines, Monitoring of Cold Chain.

- **Cold Chain** - The cold chain system & vaccine flow in the country is schematically represented below



- **Safeguarding Vaccines –**

The key elements of cold chain are-

- ❖ Personnel – To manage vaccine storage, distribution & cold chain maintenance.
- ❖ Equipment – To store & transport vaccine
- ❖ Procedures – To ensure that vaccines are stored & transported at appropriate temperatures.

- **Monitoring of Cold Chain –**

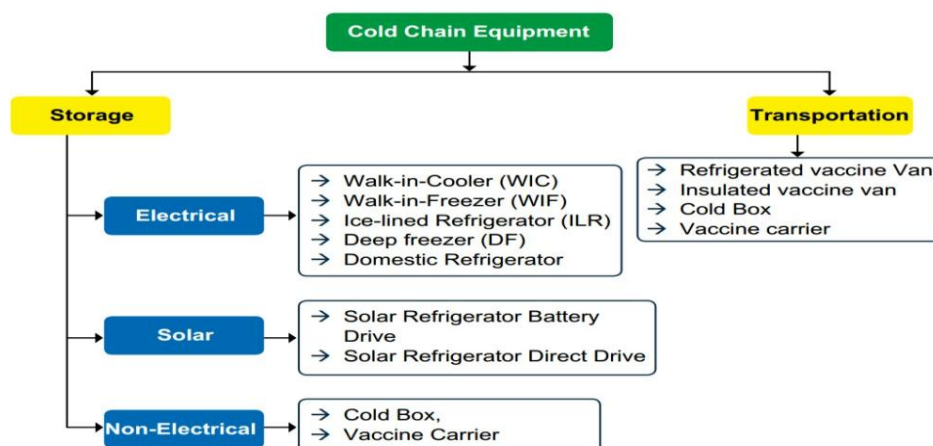
What to monitor ?

- ❖ Availability of cold chain equipment & it's working.
- ❖ Smooth of vaccines & logistics.
- ❖ Maintenance of recommended storage temperature.

Cold Chain Equipment –

At present following equipment are there –

- ❖ Cold Chain Equipment is a set of equipment, which helps in providing recommended temperature for the vaccines to preserve their quality during storage & transportation from the site of manufacture till their administration to the target beneficiary. The equipment used in U.I.P. are classified as follows.



Electrical Cold Chain Equipment - There are equipment of different capacity for storage of vaccines at different levels, which are dependent on electric supply to maintain the recommended temperature.

Walk- in-Coolers (WIC) →

It is a pre – fabricated modular Polyurethane (PUF) insulated panel assembled cold room with two identical Refrigeration units.

They maintain a temperature of +2°C to +8°C. These are used for storage of large quantities of all UIP vaccines like BCG, Hepatitis B, DPT, Pentavalent, IPV, Measles & TT.



Walk in Cooler

- **Walk-in-Freezers (WIF)** →

- This is a pre- fabricated modular Polyurethane foam (PUF) insulated panel assembled cold room with two identical.
- Refrigeration units & a stand by generator set to provide the uninterrupted power supply. The generator set starts automatically as soon as the power-cuts off. An alarm or hooter system is also provided.



Walk in Freezer

These are used for bulk storage of OPV & Rotavirus vaccine & also for the preparation of frozen ice packs for vaccine transportation. They maintain a temperature between -15°C to -25°C.

- **Ice Lined Refrigerator (ILR)**

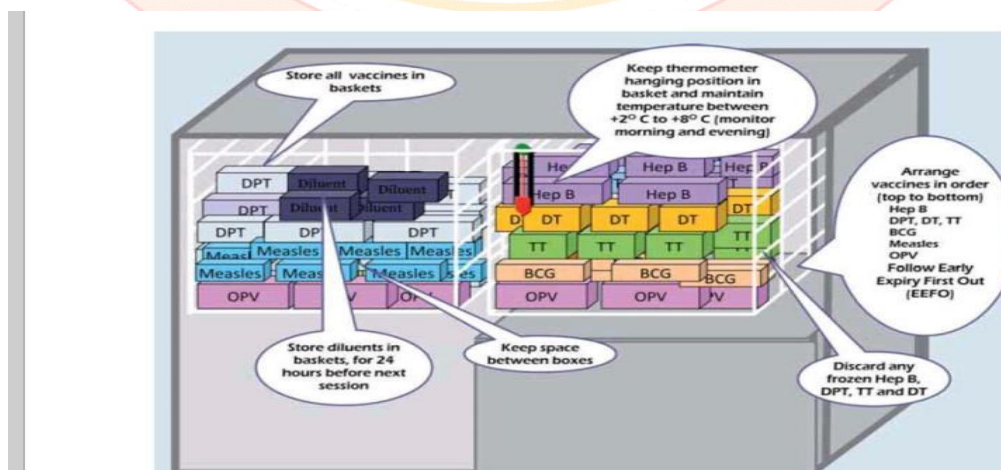
One of the most important equipment in Cold Chain System is ILR which operates on a vapour compression system similar to any conventional type of Refrigerator operating on 220 volts, A.C. main supply.

Parts of the ILR --- Top opening, Handle with lock, Rubber Gasket, Ice – lining (Plywood/PVC), Ice – Packs, Control Panel.

When the ILR is functioning well the water in the containers freezes & cools the cabinet. In absence of electric supply, the ice lining maintains the inner temperature of ILR at a safe level for Vaccines. The temperature maintained in ILR is much longer than Deep Freezers & Domestic Refrigerators. So ILR is an ideal option for safe storage of Vaccines.

ILR maintains the cabinet temperature in the range of +2°C to +8°C. However, within the range there are various temperature zones. Based on the temperature zone, inner part of ILR can be divided in two parts – Upper Part & Lower Part. In most of the ILR models, the lower part is cooler than the upper part because the cooler air is heavier & settles down at the bottom of the ILR. Hence the upper part is preferred location for storing the freeze sensitive vaccines. All vaccines should be kept in the basket provided with ILR.

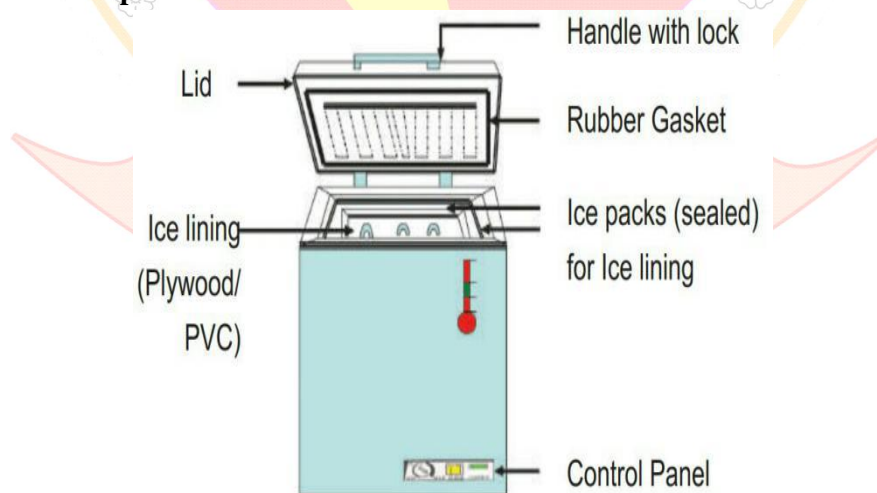
Following picture shows correct Placement of Vaccines in the ILR –



In case basket is not available, two layers of empty ice packs can be laid flat on the bottom of the ILR.
Vaccines should never be keep on the floor of the ILR.

- ❖ **Control Panel** –To monitor the temperature, electric supply, voltage there is Control Panel which is situated at the front right bottom of the ILR. It has –
 - Green Light – It is an indicator lamp which shows that electric Power is available up to the equipment from the stabilizer.
 - Yellow switch – Also called as Super Switch. It is a thermostat bypass switch used when the ambient temp. is more than 45°C or requires lowering down inside temp. quickly.
 - Thermometer – Dial / Digital type.
 - Thermostat – A thermostat is a component which senses the temperature of the cabinet of CCE, so that the system’s temp. is maintained near a desired set point. The thermostat does this by switching compressor on or off to maintain the correct temperature. Thermostat can be mechanical or electronic. In new ILR models electronic thermostats are available.
- ❖ **Holdover time** –
 - Related to ILR Holdover time is very important. It is the time taken for increasing the temperature of vaccines at the time of power failure from it’s minimum range to it’s maximum range, subject to the condition that the equipment is functioning well.
 - Ex. In case of ILR, if the cabinet temperature is 4°C at the time of power cut, then the time taken to reach 8°C from 4°C will be the “ **Holdover time**” for that ILR.
- ❖ **Holdover time depends on the following factors ---**
 1. Ambient temperature – More the ambient temperature less will be the holdover time.
 2. Frequency of opening of lid & use of basket.
 3. Quantity of Vaccines kept inside with adequate space between the containers. (Equipment empty /loaded).
 4. Condition of ice-pack lining. (Frozen/Partially frozen/melted).

Following figure shows parts of ILR :



- **Deep Freezers (DFs)**

This is the equipment, which operates on a vapour compression system similar to any conventional type of refrigerator operating on 220V A.C. mains supply. It has top opening lid to prevent loss of cold air during door opening. The cabinet temperature is maintained

between -15°C to -25°C. This is used for freezing of ice packs. Unlike the ILR, the DF has got little or limited holdover time which is dependent on the number of frozen ice packs in it & the frequency of opening. These are available in different sizes – Large & Small.

The DF which is used for storing vaccines should not be used for preparation of ice-packs, as it may increase the cabinet temperature & can be potentially harmful to the vaccines (OPV).

However adequate frozen ice-packs can be kept permanently inside the vaccine storing DF for increasing the Hold – Over time.

Diluents should never be kept in deep freezers. These should be stored under temperature between +2°C to +8°C at least 24 hours before use & should be transported along with the concerned vaccine (bundling). Deep Freezer-----

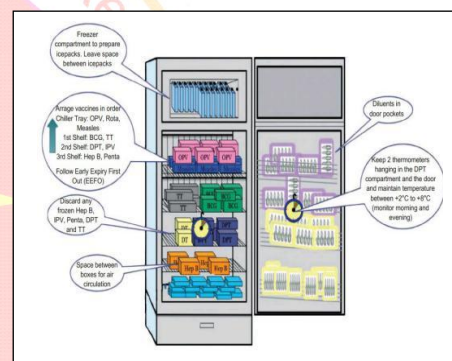


• **Domestic Refrigerators –**

These can also maintain the cabinet temperature between +2°C to +8°C but the Holdover time as well as capacity to store vaccines, frozen ice-packs are very limited.

Refrigerators must be loaded correctly to maintain proper temperature of vaccines, diluents as shown in following picture

- Do not store other supplies such as drugs, ointments, serum, samples, food articles, drinks etc.
- Do not put vaccines on the door shelves. The temperature in the door shelves is too warm to store vaccines & when the door is opened shelves are instantly exposed to room temperature.
- Do not put vaccines in the freezer, chiller or basket.



❖ **Proper arrangement of Domestic Refrigerator is as follows –**

1. Freeze & store ice-packs in the Freezer compartment.
2. All the vaccines & diluents have to be stored in the Refrigerator Compartment.
3. Arrange the boxes of vaccine in stacks so air can move between them, keep boxes of freeze – sensitive vaccine away from freezing compartment, refrigeration plates, side linings or bottom linings of refrigerators where freezing may occur.
4. Keep ice-packs filled with water on the bottom shelf & in the door of refrigerator. They help to maintain the inner temperature of refrigerator in case of electricity failure.
5. There should be placement of vaccines in following ways --
 - Measles, BCG, RVV & OPV on the top shelf.
 - DPT, TT, IPV, Penta, Hep-B, JE vaccines on the middle shelves.
 - Diluents next to the vaccine with which they were supplied.
6. Ice – packs for freezing should be kept in the freezer compartment from top to right in vertical position to avoid leaking & with a space of at least 2mm. Ice – packs should be taken out from the left.
7. Further expiry date vaccines should be kept in the back & closer expiry date vaccines in the front. There should be suitable space in between two vaccine boxes.

Solar Cold Chain Equipment –**Solar system used in UIP are mainly of two types**

1. Solar refrigerators battery drive.
2. Solar refrigerator direct drive.

❖ **Solar refrigerator battery drive** –It operates on the same principle as normal compression refrigerator but incorporate low voltage (12V or 24V) DC compressors in place of mains AC voltage operated compressors.

▪ **Components of Solar Refrigerator**

- a) Vaccine refrigerator / Freezer.
- b) Solar Panel & array.
- c) Array - to – Refrigerator Cable.
- d) Charge Regulator.
- e) Batteries.

➤ **Vaccine refrigerator / Freezer –**

It is a refrigerator cum freezer having basket for storing of vaccines & freezing of icepacks. It has two separate compartments –

1. Vaccine Storage Compartment – It maintains temperature between the range +2°C to +8°C. (Refrigerator).
2. Freezer Compartment – It is for storing Frozen Icepacks. It maintains temperature up to -7°C. (Freezer).

➤ **Solar Panel & Array –**

Solar panels, commonly called Solar Modules are the key components which are used to convert sunlight into electricity. The Solar Array (two or more solar panels connected together) must be permanently fixed from where the modules can receive maximum amount of sunshine. The suitable position for this should be away from trees, tall objects, to avoid shading the array.

➤ **Array – to – Refrigerator Cable –**

This is the cable which connects panel to the control box of the Refrigerator for the delivery of the electricity.

➤ **Charge Regulator –**

When using Lead – Acid Batteries in photo-voltaic systems it is important to protect them against overcharging which would otherwise cause permanent damage. The Charge Controller is installed in the system to perform this task. Similarly, the battery must be protected against over-discharge. The Regulator has an automatic low voltage disconnect facility. If the battery discharged, the Refrigerator will be disconnected before permanent battery damage occurs. Re-connection is also automatic, when the battery is charged.

➤ **Batteries –**

Batteries store the energy transferred from the solar power. It provides power to the compressor through charge controller. Generally the backup period is of 5 days. Batteries are the most important component. It is also weakest link as it requires regular attention.

Nowadays there are two types of batteries in use –

- 1 Lead acid, long life, deep cycle tubular batteries.
- 2 Maintenance free sealed batteries.

❖ **Solar Refrigerator direct drive –**

“Direct drive” technology uses the sun’s energy to freeze water or other phase change material & then uses the cooling from that “ice bank” to keep the refrigerator during the night

& cloudy days. These refrigerators are called “Solar Direct Drive Refrigerators” because they are wired directly to the photo-voltaic generators.

Non Electrical Cold Chain Equipment – These are mainly two –

1.Cold Box.

2.Vaccine Carrier.

Cold Box –A Cold Box is an insulated container which can be lined with ice-packs to keep vaccines & diluents within recommended temperature during transportation & emergency storage of vaccines / ice-packs for short period (as per holdover time).

These are useful to collect & transport vaccine supplies from state to regional vaccine stores / district vaccine stores/PHC.

Based on the capacity, cold boxes used in UIP are classified into two types Small & Large.

Small Cold Box –

It's capacity is 5-8Litres.

Capacity of doses 1200-2000.

Hold Over Time – more than 90 hrs.

Large Cold Box –

It's capacity is 20-22Litres.

Capacity of doses 4000-5500.

Hold Over Time – Six days.



Uses

- I. Collect & transport large quantities of vaccines.
- II. Store vaccines for transfer up to five days, if necessary for outreach sessions or when there is power cut.
- III. As a contingency measure store vaccine in case of breakdown of ILR.
- IV. Also used for storing frozen ice-packs e.g. In emergency & before campaigns etc.

How to pack the Cold Box –

- I. Place conditioned ice-packs at the bottom & side of the cold box.
- II. Stack vaccine & diluents in the box.
- III. It is desirable to keep a thermometer inside the cold box.
- IV. Do not use frozen ice-packs in the cold box, if freeze sensitive vaccine are transported or stored.
- V. Place packing material between DPT/ Penta/ IPV/ TT/Hep B vaccine & the icepack to prevent vaccine from freezing.
- VI. Care should be taken that, the vials of DPT, Pent, IPV, TT, & Hep B vaccines should never be placed in direct contact with the ice-packs& they should be surrounded by OPV/BCG/Measles/JE vaccines.
- VII. After placing the required quantities of vials, place one row of ice-packs above, place a plastic sheet to cover the ice-packs kept on top to ensure full hold over time & securely close the lid.
- VIII. Do not remove the rubber seal of the cold box.
- IX. Do not place any weight or other cold boxes on the lid.
- X. Do not open the lid when not required.

Precautions of Cold Boxes when they are not in use –

- I. Clean & dry after every use.
- II. Do not keep any load over the cold box.
- III. Do not use cold boxes as a chair/stool.
- IV. The lid of the box should be kept unlocked & opened in the store while box is not in use. This will increase the life of rubber seal.
- V. Do not tamper with the rubber seal.
- VI. Check that the rubber seal around the lid is not broken; if broken replace immediately.
- VIII. The cold box should not be used in case the rubber seal (gasket) is missing.
- IX. Knock & sunlight can cause cracks inside the wall & lid of the cold boxes. Examine inside & outside surface after every use for cracks.
- X. Lubricate the hinges & lock routinely.
- XI. Do not keep one cold box above another. Place them in racks.

Vaccine Carrier –

These are made up of insulated material, the quality of which determines the cold life of the carrier. Four ice packs are laid in the vaccine carrier as per manufacture's guidelines. Conditioned ice-packs should only be placed & the lid of the carrier should be closed tightly. These are used for carrying small quantities of vaccines (16 -20 vials) from PHC to sub --centres or session sites.

Uses - To carry vaccine from last CCP to outreach sessions & bring back the open vials from the session sites for storing & subsequent use.

How to pack vaccine carrier

1. Confirm that there are no cracks in the walls of the vaccine carrier.
2. Take out the required number of ice packs from the deep freezer & wipe them dry. Keep them out side for conditioning before placing into carrier.
3. Place four conditioned ice packs in to the vaccine carrier along the sides
4. Wrap vaccine vials & ampoules in thick paper before putting in polythene bag so as to prevent them from touching the ice packs.
5. Place the plastic bag in the centre away from the ice packs. This will prevent labels from peeling off from the vials.
6. Place foam pad on top of ice packs.
7. If more than one vaccine carrier is being carried for a single session site, keep the whole range of the vaccines required for the day's use in each carrier so that only one carrier is opened at a time.

Precautions during use of the vaccine carrier

1. Ensure that some ice is present in the ice packs while conducting immunization sessions.
2. Ensure collection of vaccines in the vaccine carrier on the session day only.
3. Avoid dropping, knocking or sitting on the vaccine carrier.
4. Do not leave the vaccine carrier in the sunlight.
5. Close the lid tight & securely.
6. Keep the interior of the vaccine carrier clean & dry after every use.

➤ Equipment & vehicles used for Transportation

Transportation equipment forms an important link in the entire cold chain system. There are two major types of transport vehicle used.

- Refrigerated vaccine van.

- Insulated vaccine van.
- Cold box.
- Vaccine carrier.

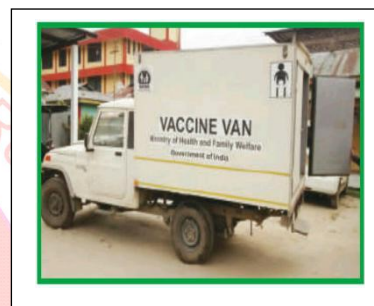
Refrigerated Vaccine Van

It can be used for transportation of vaccines in bulk quantity. This can be used to provide transportation solution from GMSD to SVS to RVS where the vaccines are handled in bulk quantity. It can provide temperature range as per the specific requirement of vaccine like +2°C to +8°C or -15°C to -25°C. This van does not require the cold boxes or ice packs for vaccine transportation.



Insulated Vaccine Van

It is used for transportation of the vaccine by road in bulk quantity. The insulation helps in maintaining the ambient temperature of the cargo unit which assists in maintaining the holdover time of vaccine containing cold boxes. All vaccines should only be transported in cold boxes with required number of frozen/conditioned ice packs.



Some important precautions are as follows

- ✧ The loading of the cold boxes should be done at a cool & dry place.
- ✧ Loading should be in minimum possible time.
- ✧ Close the rear door of the vaccine van immediately after the loading.
- ✧ Start for destination immediately.
- ✧ Same precaution should be taken during unloading.
- ✧ Shift the vaccine to the cold chain equipment immediately after reaching the destination point.

Already explained about cold box & Vaccine Carrier.

Associated Equipment For Cold Chain

These equipment have a special role to play in the cold chain system. They are as follows --

1. Ice packs.
2. Equipment used for supply of alternate power source for cold chain equipment.
 - ❖ Solar Hybrid Photovoltaic System (SHPS)
 - ❖ Diesel Generator Set (D.G. Set)
 - ❖ Grid Inverter
 - ❖ Solar Inverter
3. Automatic Voltage Stabilizer

Ice Packs & their Use

Ice packs are key component of the cold chain. Ice packs are plastic containers filled with water. The standard ice packs used in UIP for cold box & vaccine carrier are of 0.3/0.4 litre capacity.

Type : Water filled plastic containers.

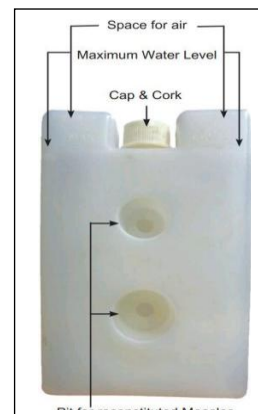
Water Fill : Do not fill the entire ice pack. Fill it only up to the

level mark on the side. Do not fill above the mark of maximum water level because water requires space for expansion after freezing.

Usage : 1 Helps in maintaining desired temperature range for safe vaccine storage.

2 In functional ILR, If the basket is not available for storing vaccines, then two rows of empty ice packs are placed on the bottom of the ILR as the bottom of the ILR is cooler than the upper part.

Best Frozen : In WIF & DF under the temperature range of -15°C to -25°C.



Conditioning of ice packs :

1. When ice packs are removed from a Deep Freezer, they are normally between -15°C to -25°C.
2. If placed immediately inside a cold box & vaccine carrier, freeze-sensitive vaccines may freeze accidentally.
3. This ice pack should be kept at room temperature to allow the temperature of ice at the core of ice pack to rise to 0°C. This process is called conditioning. An ice pack is said to be adequately conditioned as soon as beads of water cover it's surface & the crackly sound of water is heard on shaking it.
4. Conditioning is done to prevent freezing of the freeze sensitive vaccines.
5. Freezing of vaccine can also take place during storage & transport. (Cold box, Vaccine Carrier)
6. Freeze sensitive vaccines can be damaged if comes in direct contact with the frozen ice packs.
7. Conditioning of ice packs prevents freezing of vaccine during transport, in emergency storage in cold box.
8. At start of session day, bring out frozen ice packs, from the deep freezer & close the door. Lay out on a table at the room temperature leaving a 5 cm space all round each ice pack till it sweats.
9. To know whether ice pack has reached the stage of conditioning, observe for sweating of ice packs & shake it to listen the crackling sound of water.

Discussion & Conclusion -- This is briefly information about cold chain equipment. Government of India successfully run & maintain Cold Chain system for free Immunization.

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Address

• Vikram Nagar, Boudhi Chouk, Latur.
• Tq. Latur, Dis. Latur 413512 (MS.)
• (+91) 9922455749, (+91) 8999250451

Email

• aiirjpramod@gmail.com
• aayushijournal@gmail.com

Website

• www.aiirjournal.com

CHIEF EDITOR – PRAMOD PRAKASHRAO TANDALE

Garbhini Paricarya : Antenatal Care in Ayurveda**Dr. Sable Sonal Shivaji**

PG Scholar streerog prasuti,
CSMSS Ayurved Mahavidyalaya, Kanchanwadi
Corresponding Author-
email Id- drsonal9762@gmail.com

Dr. Jayashree S. Deshmukh

HOD and Professor streerog prasutantra ,
CSMSS Ayurved Mahavidyalaya Kanchanwadi,
Aurangabad

Abstract:

Systemic supervision (examination and advice) of a women during pregnancy is called garbhini parichaya. Women have special dietary need during pregnancy. During pregnancy the mother's nutrition bears great impact on fetus growth. In Ayurveda classics there are certain aahara (diet) and vihar for antenatal care for healthy pregnancy in which Masanumasika paricharya is one of them. It also stress on the healthy state of mind and body to beget healthy pregnancy. Antenatal care in ayurveda includes medicated milk preparation along with basti , pathyapathya also advice to women throughout pregnancy. In this article antenatal care advice in different samhita of pregnant women, month wise regimen has been presented.

Introduction:

A female is not only beautiful but also one of the most important creation of the God especially for her ability to reproduce. Pregnancy is a beautiful phase of women life. Life of women is not complete until and unless she got pregnant and give birth. Giving birth to child also called as a second life of mother because of maternal mortality in India. Due to many factors of maternal mortality need of antenatal care is important in today's era. Garbhini paricharya is important aspect in Prasutantra because healthy mother and healthy birth of child is important part of society. Maternity period includes five main phases a) fertilization, b) prenatal, c) antenatal, d) intranatal, e) postnatal . In this motherhood is very often appositve and fulfilling experience. In ayurvedic text all this phases and suggestion for good health of women in this phases are well described. Ayuveda prescribes specific nutritional measures for growth and health of women during pregnancy. Ayuveda compares human conception to germination and sprouting of the seed and transformation into a sapling. Ayuveda gives great importance to the quality of seed i.e ovum and spearm, in addition guideline for correct sexual intercourse outlined. Child bearing age for male and female explained. Prenatal care are given in Ayurvedic classics. General supervision in pregnancy is described in charaka and sushrut samhita. There are separate chapters of general management specific management and diseases regarding the pregnancy. Ayuveda advice same degree of care and awareness as taken by moden science in the management of the pregnant women.

Obectives of Garbhini Paricharya:

1. Healthy growth and development of fetus.
2. To maintain the mental and physical health of mother.
3. To minimize the complication during labour.

Garbhini Paricharya:

Garbini paricharya (antenatal care) means systemic examination and advice of women during pregnancy. Garbhini paricharya starts from the beginning of pregnancy till birth of child.

Ayurveda has described two type of management for garbhini.

1. General management (samanya aahar vihar)
2. Specific management (masanumasik garbhini paricharya)

Samanya Aahar Vihar in Garbhini :

- Mansa (meat) – It provides more nutrition to fetus.
- Milk – provides pushti and drudhatva .
- vata doshahar aahar vihar.

Along with the diet Kashyapa says that all the diet should be taken considering the place of living,time, season (rutukal) and digestive capacity of pregnant women.²

According to Yogratnakara shalith shashtik (rice) , mudga (gram), wheat, butter, ghee , milk, curd, honey, sugar, banana, jackfruit, amalaki, grapes, sweat and cold substances are healthy for pregnant women.³

Vagbhata says that pregnant women with recurrent abortion should take Phalaghrita. It is advantageous to fetus.⁴

VIHAR – first thing in the vihar of the pregnant women advice by Acharya is she should be blessed with happiness she should involve in spiritual activity worship diety. Wear a clean and white garments. Avoid red color garments she should decorated with ornaments. Take bath daily with perfumed and incense water.

Contraindicated Aaharvihar in pregnancy –

Avoid spicy , heavy , pungent substances , wine and all alcohols , excessive meat , intoxicating substances. Avoid coitus , ride over a vehicle , night awakening , day sleep , carrying heavy weight , abnormal sitting position.

Specific management (month wise regimen) :

In different Samhita acharya described different monthly regimen .

From all the samhitas collected month wise regimen described in above table.this helps in reducing the symptoms related to pregnancy and healthy fetal growth.^{5,6}

Month	Chikitsa	Benefits of regimen
1 Month	Plane milk	In 1 trimester nausea , vomiting , fatigue , dehydration this all symptoms prevented by sweet and liquid diet.
2 Month	Milk medicated with madhura drugs.	
3 Month	Milk with ghee and honey.	
4 Month	Milk and butter, meat of wild animal.	In 2 trimester fetal growth occurs proteins are required which are more in meat.
5 month	Milk and ghee , meat.	
6 month	Madhura drugs medicated milk with ghee. Gokshura siddha ghruta / yavagu	In 6 month mother suffers from edema on feet so Gokshura act as diuretics .
7 month	Pruthakparnyadi siddha ghruta	Fetal weight gain starts in 3 trimester ghee helps in the weight gain of fetus.
8 month	Ksheer yavagu with ghee. Asthan basti with badaraushadhi siddha, anuvasan basti medicated with madhura drug.	Symptoms of constipation occurs in pregnancy basti helps to relieve it.
9 month	Anuvasan basti	Medicated oil tampons helps to soften vaginal passage thus helps in normal labour.

Discussion:

Garbhini paricharya is well documented in ayurvedic period to samhita period. Garbhini paricharya prescribed during samhita period are very much cope with antenatal care according to modern gynecologist. Nausea and vomiting are the main complication experienced during first trimester of pregnancy due to this there is possibility of dehydration and malnourished. For that in

samhita liquid diet and milk is advice in first trimester instead of heavy and solid food. Madhura drug will help in maintenance of proper health of mother and fetus. In garbhini paricharya milk is ideal component of diet it is the main source of calcium, lactose and butter fat and protein. In six month and onward pregnant women suffer from edema on feet so in sixth month gokshura siddha ghruta is advice which act as a good diuretic hence it prevent water retention and its complication like PIH. Prithakparnyadi ghruta also act as diuretic hence it is prescribed in seven month. Most women experience constipation in late pregnancy. Use of asthapan basti siddha with badara, shatpushpa, atibala, patala etc. with honey and ghruta which relieve the symptoms of constipation and this may affect the autonomus nervous system which help in regulating the function of myometrium during labour. Tampon of medicated oil may destroy pathogenic bacteria of vaginal canal prevent puerperal sepsis. It also soften and relax the vaginal passage so vaginal delivery of baby become easy.

Conclusion:

Garbhini paricharya mentioned in samhita period is very much scientific and useful for maternal care. Ancient Ayurveda knew the importance of women health for healthy pregnancy. For that they prescribed monthly dietary regimen and lifestyle practice in whole pregnancy. in first trimester milk and milk product are advice to reduce dehydration. In second trimester gokshura and pruthakparnyadi siddha ghruta which helps in preventing edema, improve strength and immunity. Basti in third trimester relieve constipation and smother the birth passage it helps in easy vaginal birth and prevent tear of birth canal. Garbhashthapaka drugs are also using during pregnancy to work against any etiology of abortion or IUD (intrauterine death) and result in healthy pregnancy.

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Address

• Vikram Nagar, Boudhi Chouk, Latur.
• Tq. Latur, Dis. Latur 413512 (MS.)
• (+91) 9922455749, (+91) 8999250451

Email

• aiirjpramod@gmail.com
• aayushijournal@gmail.com

Website

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CHIEF EDITOR – PRAMOD PRAKASHRAO TANDALE

**Management of diet in Sthaulya in accordance to Ahar
VidhiVisheshayatan– A literary study**

Dr. Pritam J. Rathi¹

Assistant Professor,
Samhita Siddhant Dept.,
C.S.M.S.S. Ayurved College,
Aurangabad

Dr.Smita V. Dhurde²

Professor and H.O.D.,
Samhita Siddhant Dept.,
C.S.M.S.S. Ayurved College,
Aurangabad

Abstract –

Modern era is more challenged with various lifestyle disorders. Sthaulya is one such lifestyle disease. Atisampuran, guru, sheet, medovardhak ahar lead to Sthaulya. Growth and development of human body depend mainly on Ahar. Diet management has important role in treating any disease. For proper management of diet, one should think according to Ashtavidhahar vidhi visheshayatan, which are described in Charak Samhita VimanSthana 1st adhyaya. One can plan diet in sthauya by considering Ashtavidhahar vidhivisheshayatan.

Key words – Sthaulya, Ashtavidhahar vidhivisheshayatan, Diet

Introduction –

In present life style, food habits of people are changed which lead to many diseases including sthauya. Ahar is important factor for growth and development of human body. In sthauya, there is excess growth of Mamsa and Medadhatu¹ due to atisampuran, guru, sheet, medovardhak ahar². Quantity of food, timing of taking food etc. are also responsible for sthauya. In sthauya there is Kaphavruddhi and vatavruddhi in koshta due to obstruction. Fanning action of Samanvayu in koshtais responsible for increasing action of jatharagnion food finally leading to kshudavruddhi in sthauya³. So Ahar having guru guna and aptarpan action is useful in sthauya⁴. Kapha vatashamak & medoharahaar should be used in sthauya⁵. To plan such diet, Ashtavidhaharvidhi visheshayatan can be taken in consideration.

A literary review of Ashtavidhaharvidhi visheshayatan is done to focus on sthauya chikitsa.

Aim –

To study the importance of Ashtavidhaharvidhi visheshayatan in diet management of Sthauya.

Objective –

1. To review Ashta vidhahar vidhivisheshayatan from Ayurvedic compendia.
2. To establish role of Ahar vidhivisheshayatan in Sthauya .

Material –

For the purpose of literary review of Ashta vidhahar vidhi visheshayatan and Sthauya Ayurvedic texts are studied in detail.

Also Ayurvedic journals and internet media are viewed for related factors.

Methods – Conceptual study of Ashtavidhahar vidhivisheshayatan and Sthauya.

Literature review –

In Charak Samhita sutrasthana 21st adhyaya, Sthauyalakshan and chikitsa are explained in detail. Atisthul is included in ashtauninditpurusha by Acharya Charak. Due to medo-mamsavruddhi, person has chalsphik-udar-stan and decreased energy, without proper metabolism⁶. Thoughatikrusha and atisthul both are difficult to treat, atisthul is more difficult. Kapha-vatahar and medohar chikitsa is

indicated for Sthaulya. Use of proper medicine and regimen are important for complete treatment of Sthaulya,

In Charak Samhita viamansthan 1stadhaya,Ashtavidhaharvidhi visheshayatan are explained.

The word Ashtavidhahar vidhivisheshayatan comprises of five words

Ashatau – eight

Ahar – food

Vidhi – method

Vishesh – particular

Aayatan– abode

These eight types of direction of consumption of food are Prakruti, karan, samyog, rashi, desha, kala, upyogsanstha, upyokta.⁷

During Sthaulya chikitsa, before ingestion of any kind of food one should think of Ashtavidhahar vidhi visheshayatan.

1. Prakruti- It means quality of food. Guru,laghu ,ushna, tikshna etc.qualities should be considered. Prakruti means quality of food in its natural form.

In Sthaulya, it is advised to take ahar having guru guna and aptarpan quality. Generally food having guru guna with ushna, tikshna, ruksha, chhedan etc. qualities are useful.

Though snigdthaguna leads to Sthaulya ,it is necessary to some extent for maintaining health .One should eat unctuous because it tastes well, eaten food stimulate the unstimulated digestive fire, gets digested quickly, carminates flatus, develops the body, provide firmness to sense organs, increases strength, produces clarity of complexion⁸.

Some useful and harmful food for Sthaulya⁹

Useful	Harmful
Yav,kulattha, Mudga	Masha,
Takra	Curd,
Adraka, Surasa, , Lashun ,shushkamulak, All the content in haritvarga in shushkaavastha	Panir (Guru,Madhur)
Karvellak, vartak ,tumbi (lauki)	

2. Karan – This is also called sanskar. The term sanskar means a process in which there is change in the qualities of food. It includes processes like use of water, heat, churning, cleaning, keep on standing, keeping in specific container.

Curd obstructs conveying channels and churning curd i.e. buttermilk enhances agni.

Water is kaphvardhak but warm water reduces kapha.

One should take warm food because it tastes well, stimulates digestive fire, gets digested quickly, carminates flatus, reduces kapha dosha¹⁰.

Refrigerated food should be avoided as it creates stambha ,guruta,, blockage of channels and also leads to vatakaphavrudhi due to excess shit guna.

3. Samyoga– Combination of two or more food items together is called samyoga. Combination of food creates new qualities or new effect which cannot be seen in individual food before combination.

One should take foodconsisting of items non antagonistic in potency¹¹.

Milk + fish

Milk + fruit are harmful.¹²

Water + honey is useful in Sthaulya.¹³

4. **Rashi**– Amount of food is called as rashi. The rashi is of two types
- total amount of food eaten
 - each entity of food eaten

Excess amount of Madhur, Guru and Shitahar results in kaphavruddhi and leads to sthaulya, so such food should be taken in less quantity¹⁴. Atisaampuran is hetu of sthaulya so one should restrict quantity of food to a certain extent which will not create illness.

When food taken in proper quantity, it promotes longevity in its entirety without affecting tridosha, it easily passes down to the rectum, it does not impair the power of digestion and it gets digested without any difficulty¹⁵.

5. **Desha** – Here desha have two meanings,

- Place of origin of food which explains deshasatmya
- Body which consume food. Kaphavathar and medohar food is useful in Sthaulya.

One should take food in proper place equipped with all accessories. While eating in favorable place one does not fall victim to psychic disturbance due to such factors found in otherwise places¹⁶. Psychic disturbances affect the process of digestion. Psychic disturbances may lead to frustration and depression. The body tries to counteract depression or frustration by keeping the mind engaged in certain other activities. An easy way is to engage mind in munching on junk food or even healthy food when you are not hungry¹⁷.

6. **Kala** –

It includes 1. Condition of body i.e. whether it is healthy or sick. 2. Seasonal variation¹⁸.

In Sthaulya there is early digestion of food due to agni enhanced by samanvayu. So patient of Sthaulya become hungry earlier as compare to normal person. If food is not taken when patient feel hungry, agni will digest dhatus in the body. So Sthaulya patient demands more food. One can manage this condition by giving food having guru guna and aptarpan quality.

7. **Upyogsanstha** –

It includes rules for consumption of food by considering digestion of previously eaten food. When one eats after the previous food is digested, the doshas are located in their own location, agni is stimulated, appetite is arisen, entrances of the channels are open, eructation is pure, heart is normal, flatus passes down and urges of flatus, urine and faeces are attended, the eaten food promotes only the lifespan without affecting any dhatu¹⁹. This rule is also beneficial for Sthaulya patients.

One should not eat too fast or too slow, while talking, laughing and without concentration²⁰.

8. **Upayokta** –

It means individual who consumes food. Every person should take into consideration his own Constitution (Prakruti), digestive power (Agni), suitability developed by practice (Oaksatmya) etc²¹.

Discussion –

- Atisthaulya is included in ashtaunindit and it is difficult to treat.
- Ashtavidhaharvidhivisheshayatan are Prakruti, karan, samyog, rashi, desha, kala, upyog sanstha, upyokta. By considering this we can plan the diet in Sthaulya
- In Sthaulya it is advised to take ahar having guru guna and aptarpan quality. Generally food having guru guna with ushna, tikshna, ruksha, chhedan qualities are useful.
- Use of sanskara like giving heat, churning etc. is useful.
- Water with honey is useful in Sthaulya.

- Sthaulya patient should restrict quantity of food to a certain extent which will not create illness. Excess consumption of Madhur, Guru and Sheet ahar results in Sthaulya.
- One should eat when the previous food is digested. One should take food in proper place equipped with all accessories and not eat too fast or too slow, while talking, laughing and without concentration.
- One should think of Constitution (Prakruti), digestive power, suitability developed by practice etc.

Conclusion –

Diet has prime importance in Sthaulya management. Diet of Sthaulya patient can be managed by considering ashtavidhahar vidhi visheshayatan i.e. prakruti, karan ,samyog, rashi, desha , kala, upyogsanstha, upyokta. All these eight factors determine the utility of food are jointly responsible for bringing about the requisite benefits.

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Address

• Vikram Nagar, Boudhi Chouk, Latur.
• Tq. Latur, Dis. Latur 413512 (MS.)
• (+91) 9922455749, (+91) 8999250451

Email

• aiirjpramod@gmail.com
• aayushijournal@gmail.com

Website

• www.aiirjournal.com

CHIEF EDITOR – PRAMOD PRAKASHRAO TANDALE

Patho-Physiology of Rheumatoid Arthritis (Amavata) And Their Ayurvedic Management

Dr.Sagar Krishankumar Kotambe

Pg Scholer
Department Samhita & Siddhant,
C.S.M.S.S. Ayurved Mahavidyalaya,
Kanchan Wadi, Aurangabad.

Vd.Mrs.Dhurde Smita (M.D.Ph.D.Samhita)

Guide & HOD,
Department Samhita & Siddhant,
C.S.M.S.S. Ayurved Mahavidyalaya,
Kanchan Wadi, Aurangabad.

Abstract:-

Rheumatoid arthritis (RA) is an autoimmune disease that can cause joint pain and damage throughout our body. The joint damage that RA causes usually happens on both sides of our body. So if a joint is affected in one of your arms or legs, the same joint in the other arm or leg will probably be affected, too.

Treatments work best when RA is diagnosed early, so it's important to learn the signs. Read on to learn everything you want to know about RA, from types and symptoms, to home remedies, diets, and other treatments.

Aim:- The aim of article is to discuss the pathogenesis and management of Rheumatoid Arthritis (Amavata).

Objectives:- To create awareness of treatment of Rheumatoid Arthritis(RA) according to Ayurveda.

Type of study:- Descriptive and Conceptual study.

Literary review:- According to Ayurveda (Samhita's) our shairs(Body) is made up of dosha, dhatu and malas. All these responsible for maintaining body.Roga (disease) is the effect of disequilibrium of dhatus and health is the result of equilibrium of doshas & dhatus.

Keyword:- Rheumatoid arthritis (RA), Amavata, Autoimmune disease.

Introduction:-

Amavata is not proved to be fatal, Amavataw.s.r. to Rheumatoid Arthritis is one of the apprehensive disease that mankind faces today. Even though, it cripples the affected patients. This dreadful disease initiates as joint stiffnessultimately it can cause of many others. It can affect many facets of a patient's life, occupational and community relationships, even with his family. It affects not only the social and economic position of the individual and his family but is leads to the draining of national resource due to the work hours lost and as well as resulting production.

R.A. is the most common persistent inflammation arthritis, occurring throughout the world and all ethnic groups, the prevalence is lowest in black Africans, Chinese and highest in PIMA (River side people) Indians, in Caucasian is 1.0-1.5% with female to male ratio is 3:1.

Rheumatoid Arthritis(R.A) an auto-immune musculo-skeletal disorder, explained in modern medicine has a clause resemblance with the clinical entity of Amavata. In recent year an intense study of different condition primarily involving the musculoskeletal structure(Rheumatology) has been made and it revealed that inflammatory or degenerative changes occur in disease like R.A.

The current available medical intervention cannot satisfy the objectives of an ideal therapy in R.A. The available pain reliving agents associated with substantial risk of gastrointestinal and bleeding.

Causes:-Occurs when immune system attacks the synovium — the lining of the membranes that surround your joints.

The resulting inflammation thickens the synovium, which can eventually destroy the cartilage and bone within the joint.

The tendons and ligaments that hold the joint together weaken and stretch. Gradually, the joint loses its shape and alignment.

Don't know what starts this process, although a genetic component appears likely. While your genes don't actually cause rheumatoid arthritis, they can make you more susceptible to environmental factors - such as infection with certain viruses and bacteria - that may trigger the disease.

Risk factors-

Factors that may increase risk of rheumatoid arthritis include:

- **Sex.** Women are more likely than men to develop rheumatoid arthritis.
- **Age.** Rheumatoid arthritis can occur at any age, but it most commonly begins between the ages of 40 and 60.
- **Family history.** If a member of family has rheumatoid arthritis, may have an increased risk of the disease.
- **Smoking.** Cigarette smoking increases your risk of developing rheumatoid arthritis, particularly if you have a genetic predisposition for developing the disease. Smoking also appears to be associated with greater disease severity.
- **Obesity.** People who are overweight or obese appear to be at somewhat higher risk of developing rheumatoid arthritis .

Sign and symptoms of RA:- In the early stages, people with RA may not initially see redness or swelling in the joints, but they may experience tenderness and pain.

These following joint symptoms are clues to R.A.-

- Joint pain, tenderness, swelling or stiffness for six weeks or longer
- Morning stiffness for 30 minutes or longer
- More than one joint is affected
- Small joints (wrists, certain joints of the hands and feet) are affected
- The same joints on both sides of the body are affected
- Along with pain, many people experience fatigue, loss of appetite and a low-grade fever.

The symptoms and effects of RA may come and go. A period of high disease activity (increases in inflammation and other symptoms) is called a flare. A flare can last for days or months.

Ongoing high levels of inflammation can cause problems throughout the body. Here of some ways R.A. can affect organs and body systems:

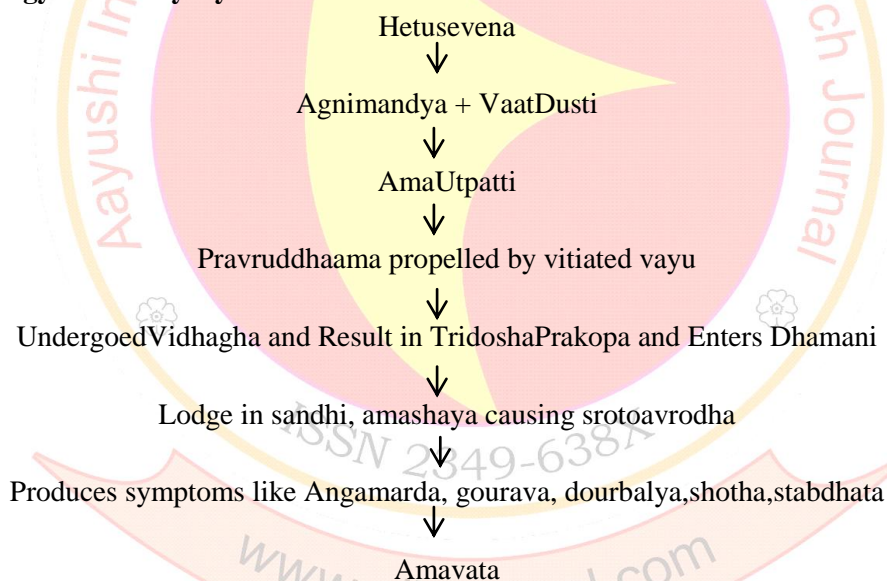
- **Eyes.** Dryness, pain, redness, sensitivity to light and impaired vision
- **Mouth.** Dryness and gum irritation or infection
- **Skin.** Rheumatoid nodules – small lumps under the skin over bony areas
- **Lungs.** Inflammation and scarring that can lead to shortness of breath
- **Blood Vessels.** Inflammation of blood vessels that can lead to damage in the nerves, skin and other organs
- **Blood.** Anaemia, a lower than normal number of RBCs.

Pathophysiology:-

- Genetic, epigenetic and environmental factors.
- The MHC class II gene, *HLA-DR4*, is the major susceptibility haplotype in 50-75% of Caucasian patients with R.A.
- DR1 is more important in Indian and Israelis , and DW15 in Japanese.
- Porphyromonas gingivalis, present in mouth of people with periodontal disease, appears to stimulate the production of ACPA linked to R.A.

- The clinical onset – infiltration of the synovial membrane with
 - Lymphocytes
 - Plasma cells
 - Dendritic cells
 - Macrophages.
- CD4+ T lymphocytes, include Th1 cell and Th17 cells play a central role by interacting with other cell in synovium.
- Lymphoid follicles form within the synovial membrane in which T cell – B cell interactions leads B cell to produce cytokines and autoantibodies, including RF and ACPA.
- Synovial macrophages- activated by immune complexes – produce proinflammatory cytokines, including TNF,IL-1,IL-6 and IL-15.
- proinflammatory cytokines acts on synovial fibroblasts, to promote swelling of the synovial membrane and damage soft tissues and cartilage.
- Activation of osteoclasts and chondrocytes drive destruction of bone and cartilage.
- The R.A. joint is hypoxic and this promotes new blood vessel formation.
- The inflammatory granulation tissue formed by the above sequence of event spreads by the over and under the articular cartilage, which is progressively eroded and destroyed.
- Later, fibrous or bony ankylosis may occur.
- Muscles adjacent to inflamed joints atrophy and may be infiltrated with lymphocytes.

Pathophysiology of R.A. by Ayurveda:-



Diagnosis:-

Rheumatoid arthritis can be difficult to diagnose in its early stages because the early signs and symptoms mimic those of many other diseases. There is no one blood test or physical finding to confirm the diagnosis.

During the physical exam, your doctor will check your joints for swelling, redness and warmth. He or she may also check your reflexes and muscle strength.

Blood tests- People with rheumatoid arthritis often have an elevated erythrocyte sedimentation rate (ESR, or sed rate) or C-reactive protein (CRP), which may indicate the presence of

an inflammatory process in the body. Other common blood tests look for rheumatoid factor and anti-cyclic citrullinated peptide (anti-CCP) antibodies.

X-ray help track the progression of R.A. in joints.

MRI and USG test- can help to judge the severity of the disease.

Management of R.A. :-

➤ According to modern point of view main goals of therapy of R.A. are

1. Relief of pain
2. Reduction of inflammation.
3. Preservation of Functional capacity .

The drugs of modern medicine are mainly divided into 3 groups –

I. Non-steroidal anti-inflammatory drugs.

II. DMARDS- Disease modifying rheumatic drugs.

III. Glucocorticoid drugs.

- a) As first line of treatment , normally aspirin like nonsteroid anti-inflammatory drugs along with low dose glucocorticoid are used.
- b) As second line of treatment DMARDS line gold compounds , D-pencillamine, Antimalarials, sulfasalazine etc. are used.
- c) Some time immune suppressive drugs like Azathioprine, Cyclophosphamide etc. are used.

➤ Ayurvedic line of Treatment of R.A. (Amavata)

Shodhan:-

1. Snehpana (Ingestion of unctuous substances -: various oils specially prepared with Rasna, Dashmoola, Nirgundi are used for this purpose. Especially castor oil is considered as the best oil to be used in the treatment of amavata.
2. Langhana (fasting)-: it is done by means of complete absence of food, or by giving preparations of MudgaYusha, IajaManda, Peya(rice water soup), kulith(horse gram) and Yava (barly).
3. Swedana (fomentation) is very useful mode of treatment in amavata. Specially complete dry sweda in the form of Rukshakutisweda (sauna bath), Dry fomentation-using sands like dry substances, Upanaha (local application) of non-unctuous substances are very effective in relieving the pain.
4. Virechan (Purgatives)-: Virechan with castor oil is very useful in treating amavata.
5. Basti (medicated enema) various medicated enemas like VaitaranBasti, DashmoolaKwathBasti, KsharBasti, ErandmoolaYapanBasti are useful in relieving the pain in amavata

Shaman Chikitsa :- commonly used drugs

1. Decoctions

- Rasna-panchakkwatha.
- Rasnasaptakkwatha
- Panchakolkwatha.
- Dashmoolkwatha with erandataila.

2. Churna:-

- Ajamodadyachoorana
- Panchakolchoorna with lukewarm water
- Shunthichoorna
- Almabushadyachoorana
- Vaishwanarchoorna

- 3. Vati / Guggulu**
 - Simhanadguggulu
 - Brihatyogarajguggulu
- 4. Ghrita**
 - panchakolaghrita
 - rasnadighrita
- 5. Taila**
 - Erandataila
 - Saindhavadyataila
- 6. Lepa**
 - Shunthilepa
 - Bachang-tentulepa
- 7. Rasaushadhi**
 - Amavatari rasa
 - Rasrajras

Pathya-apathya -

	Pathya	Apathya
Food	Yava(barley) , Kulattha , Raktashali(rice) Vastuk, shigru, punarnava, karvellak, paeawar, adrak rasona, jangalmansa(meat), hot water	Flour of amsh, sweets, Fast food, uncooked food, salty , spicy, oily food, cold water, curd , jiggery , milk, ice creams .
Behavior	Pranayama, Yoga, Meditation .	Daytime,sleeping, Vegavadharan, exposure to cold , excess of stress.

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Address

• Vikram Nagar, Boudhi Chouk, Latur.
• Tq. Latur, Dis. Latur 413512 (MS.)
• (+91) 9922455749, (+91) 8999250451

Email

• aiirjpramod@gmail.com
• aayushijournal@gmail.com

Website

• www.aiirjournal.com

CHIEF EDITOR – PRAMOD PRAKASHRAO TANDALE

Ayurveda As A Science**Vd.Kulkarni Milind.D**

P.G.Scholar,
CSMSS Ayurved Mahavidyalaya,
Kanchanwadi, Aurangabad
Maharashtra, India

Vd.Hingane. Anjali :

Asso.Professor,
CSMSS Ayurved Mahavidyalaya,
Kanchanwadi, Aurangabad

Vd.Dhurde Smita

Professor,
CSMSS Ayurved Mahavidyalaya,
Kanchanwadi, Aurangabad

Abstract

Ayurveda has provided healthcare since thousands of years to mankind and it is still a result oriented therapy even today. But in current scenario, scope of Ayurveda has become limited as compare to the vast canvas of modern medical sciences. Also it is being questioned now for its inclusion within the scientific perspective as it differs in language of expression, which is difficult to understand on the basis of current sciences. Present article is an attempt to review and understand the structure and contribution of Ayurveda towards healthcare so as to conclude its integrity as Clinical Science.

Key words : Ayurveda, Indian Healthcare system, Traditional Healthcare system, Clinical Science.

Introduction:

Care of life starts right from the start of life itself. Every organism which born, strives for its existence and survival. So it won't be inappropriate to say that the journey of Healthcare dates back to journey of existence of life itself.

All over the history of Healthcare world-wide, Ayurveda is one of the oldest (and eldest as well) branch of Healthcare.⁽¹⁾ It would be definitely logical to say that it must be bearing true scientific principles as it has survived for thousands of years and is still competently applicable in current era.

But there has been many misunderstandings regarding Ayurveda. Currently Ayurveda has been considered as an Alternative Medicine and there are questions regarding its consideration within the sphere of scientific perspectives. Quest of Knowledge, systematic and logical efforts of years together and resulting expertise, forms the basis of any scientific community. This is reflected in Ayurveda from its conception. Present article is an attempt to understand and analyze the scientific approach of Ayurveda and clear the misconception and objections with logical reasoning and evidence based discussion.

Ayurveda is not just a mythological or traditional health care system but rather a real health science.

The methodology of Indian education system was that of Gurukul system since thousands of years. But after the foreign invasions, this system was eventually declined (e.g. the destruction of universities like Takshashila and Nalanda). Though there was extensive web of schools teaching all over Indian continent, but the background of the schools were mostly religious.⁽²⁾ So naturally the stigma of mythology was attached to Ayurveda due to attachment with Religious teaching or it was considered as traditional healthcare system. But structurally, Ayurveda is having very scientific approach in its development.

As per authentic scripts, knowledge of Ayurveda was transferred from Devine world to Human world in the form of basic principles (Sutras) as it is. But even to receive this knowledge from the Devine world, one of the most intellectual, studied and competent sage was elected to represent and not the one who is politically or economically influential.⁽³⁾

Apart from this mythological beginning, rest of the journey or development of this knowledge of healthcare in the Human world was ever evolving and experimenting all the time. As the challenges of application of these principles (sutras) went on changing in various time-frames, various angles and shades of health aspects were explored and time tested. There were many debates, difference of opinions over various health issues as per studies of different expertise. These were resolved in various conferences, concluding on the acceptable solution, based on most scientific and logical reasoning.⁽⁴⁾ And the non conclusive were rejected. Seven chapters in Charak Samhita are named after conferences held at that time. Vatakalakaliya Adhyaya, Yajja-Purushiya Adhyaya and Atreya Bhadrakapya Adhyaya, are the few to name from Sutra-sthana. Even today also, current scientific community follows the similar foot-steps to accept any scientific theorem. Thus apart from its said mythological origin, the approach of Ayurveda was very structural and scientific right from beginning. It is not like close ended, absolute or ultimate religious texts or tradition with scope of only explanation and not expansion.

It is well known fact that the technique of Rhinoplasty has its roots in Indian Surgical techniques of Shusruta. When the surgery was in its initial developmental phase in western world, a report was published in 1794 over the Rhinoplasties performed by Kumhar Vaidya in Gentleman's magazine Calicut. Joseph Constantine Carpue studied this surgery for many years in India and gained expertise. He then performed individually in 1815 and thus introduced his practise to the western world.⁽⁵⁾ Sushruta Samhita has not only detailed about few prosthetic or minor surgical procedures like abscess and wound management or cauteries but also includes a quite great range of major surgeries including abdominal, ano-rectal, uro-genital, prostate, fractures and dislocations, caesarian section and even cataract surgeries.⁽⁶⁾ Many of the surgical instruments used in today's modern surgery have striking similarity and as if seems to be the modified versions of the surgical instruments mentioned in Sushruta Samhita.⁽⁷⁾ Thus Ayurveda since long has been a live clinical science.

Not only surgery or medicine, but since its origin, Ayurveda has been classified into eight branches of healthcare - Surgery, ENT, Medicine, Paediatrics, etc. called as Ashtanga Ayurveda.⁽⁸⁾ Not all the branches were able to survive in due course of time because of various reasons, but the approach was definitely very systematic. As on today also we can see various branches of modern healthcare are now flourishing as a specialty of particular subject. Development is integral part of science and for that it has to be always opened.

Similarly Ayurveda is also an open ended science, which urges and appreciate the disciples to contribute and expand the science with own experiences, expertise and knowledge. Charak Samhita says that the list of medicinal formulas given in the text is just representative. For an average practitioner this is sufficient for medical practice and for an intellectual, this will serve just as a guideline. They can and should formulate and contribute more than this as per their knowledge and judgment.⁽⁹⁾

While describing the qualities of a practitioner, Charak Samhita says - A practitioner is suppose to have a continuous quest of knowledge, should be a logical thinker with scientific attitude. Not only that, a practitioner should continuously upgrade himself/herself with continuous clinical practice, should follow all ethics and should follow the experienced scientific faculties.⁽¹⁰⁾ And this is what even the current scientific community in medical profession expects. This gives the relevance of approach of Ayurveda as a science and not just a myth.

Ayurveda has a definite scientific methodology.

To state a scientific discovery or invention or a new theory, one has to follow a standard scientific protocol of presentation all over the world. And the discovery/invention/new theory is accepted after approval of scientific community through a variety of experimental verification, logical

tests, peer reviewed research articles and discussions at various levels via conferences/workshops. The presentation includes Hypothesis, Introduction to problem, Means and Methodology, Result, Discussion and Conclusion. On similar lines, CharakSamhitamentions the necessity of Scientific Symposiums or Conferences for approval / disapproval of new scientific contributions. It has given forty four steps of scientific discussions / assessment for approvals, including those like - Pratinidya, Sthapana, Pratinidhapan, Hetu, Upanaya and Nigamanawhich are having very close resemblance with the current scientific presentation protocol.⁽¹¹⁾

Though as per difference in time frame, there may be changes in applicability, but principally there is a definite scope to consider that Ayurveda is based on a sound scientific methodology.

As any scientific texts have many references, cross references and complex theories, it needs a different acumen to read and understand the scientific language. At the end of the text, CharakSamhita has mentioned this need and has given Thirty Six step formula or method to read and understand any scientific text. This is called as Tantra-Yukti. i.eYukti (key)to understand a Tantra (Scientific text).⁽¹²⁾

Being clinical science, Ayurveda has classically mentioned the causes of disease, diagnosis, classifications, prognosis and its medical or surgical management in all respective branches. There is a huge data of medicinal formulations like - herbal, polyherbal, herbo-mineral as well as synthetically prepared mineral compounds mentioned with methods of preparations, purifications, standardization and drug doses also in various reference texts.

Not only medicinal, but Ayurveda has also emphasized the importance of preventive healthcare. For sound mind and sound body, Ayurveda has given guidelines with benefits for diet, daily hygiene, healthcare and ethical behaviour.⁽¹³⁾ It has also recognized the impact of environment or seasonal changes on health and given guidelines for better acclimatization.⁽¹⁴⁾ Even today also we can see thatmajority of the minor ailments are due to seasonal changes. Ayurveda has also addressed the epidemics, its causes and responsible public as well as individual health behavior to overcome it.⁽¹⁵⁾

Along with health behavior, Ayurveda has also mentioned about the Professional behavior. It has described the duties and responsibilities of the Doctor, Nursing staff and Patient, it has given guidance about ethical as well as Good Clinical Practices.⁽¹⁶⁾⁽¹⁷⁾ This issue has been realized and getting more pronounced on the background of Corporatization of Healthcare Industry and day by day strained doctor-patient relationship. There is increasing demand of inclusion of Ethical Practices in medical academics.

Thus Ayurveda has definitely a scientific and methodical approach encompassing almost all aspects influencing or contributing the human health. Though the means may have changed as per available resources and societal requirements at different time frames, but the core concept of human healthcare is much the same as per modern medical sciences.

Ayurveda has a rich textual base with periodic update in every era.

Though there are references in the form of many written scripts of Ayurveda, but on the background of huge and continuous socio-political changes for over years together, many scriptures vanished in black hole of time. What we read as Ayurveda today,are really an edited and re-edited versions of few of them. The process of edition and modification went on continuously from generations together, since thousands of years. So naturally proofs of the experiments or explorations of any particular theory may not be evident at this juncture, but the outcome of the therapeutics definitely directs us to believe in its integrity.

Being surgeon, Acharya Shushruta has emphasized the need of study of internal parts of body. He has mentioned the method of human body dissection with detail anatomical description of number of bones, muscles, ligaments and internal parts of human body.⁽¹⁸⁾

Ayurveda has never been simply a textual knowledge; rather it has been a live clinical knowledge. It is the clinical practice and clinical experiments, which has kept the Knowledge of Ayurveda alive. Ayurveda has never been a blind bookish follower and neither the contributing authorities have expected it. The live clinical experiences of generations in different era has added the database and kept it ever updating. A few name to include -AsthangHridaya by Acharya Vagbhata is concise compilation of General Medicine and Surgery (6 A.D), MadhavNidan (7A.D.) dedicated to clinical diagnosis, Sharangdhar-Samhita (13 A.D.) dedicated to Pharmaceuticals, various Nighantus like Bhavaprakash (16A.D.) dedicated to compilation of various phyto-botanical information and its medicinal properties (materiamedica), Ras-shastra dedicated to mineral or synthetic medicine formulations and its therapeutic use, etc.

There is never a last word in Science. Beauty of science is in its dynamic nature, which keeps on adding new inputs from time to time. With few periodic exceptions, Ayurveda has kept it-self updated as per societal needs.

The Principles of Ayurveda and current scientific parameters of Health.

Ayurveda defines Health as “Balanced state of body encompassing all physical systems, with sound state of senses, soul and mind.”⁽¹⁹⁾ Even today also WHO has defined health almost on similar lines as – Health is a state of complete physical, mental and social well being and not merely absence of disease or infirmity.⁽²⁰⁾

The modern concept of Homeostasis of Milieu Interior to maintain the health is very much similar with that of Ayurveda.⁽²¹⁾ Ayurveda says that balance of internal systems is important to maintain health and imbalance create disturbances in systems that leads to disease or disorder.⁽²²⁾

The basic concept and parameters of Ayurvedalike - the concept of Tridosha, Panchamahabhuta, Rasa, Guna, Virya, Vipaka, Parabhava, etc. are not yet been completely explainable on the basis of current scientific parameters. So the whole Ayurvedic science becomes questionable, which is based on these unexplainable parameters. But still, it will be unjustified to say Ayurveda to be non-scientific exactly, as it is still result giving therapy. So with retrograde analysis, if we are getting results on the basis of certain theory or hypothesis, then there is definitely a space to consider its parameters within the scientific perspectives. The theory can be labeled as under explored or unexplored with a scope of development, rather than totally rejecting it.

Secondly, according to principle of survival of the fittest, if the science with certain principles is surviving since thousands of years and is still applicable, then the principles must be having some universal truth, (which may be hard to decode or understand on current scientific parameters?).

One more argument goes in favor of Ayurveda is (though can be considered as benefit of doubt) – the scientific theories about certain phenomenon, with strong logical reasoning, assumed as hypothesis and which were not clearly understood for years together, were proved to be correct in due course of time. E.g. Theory of Heliocentrism i.e. Earth moves around the Sun and not the Sun which moves around the Earth. This theory was first stated by scientist Aristrachus in 3rd B.C. and was rejected. But it was revived in 16th century by Nicolus Copernicus and followed by Johannes Kepler in 17th century and now widely accepted theory with modifications and new development.⁽²³⁾

Recently the Interdisciplinary studies are showing some promising attempts to understand the basic concepts of Ayurveda. In a major break-through, Prakriti Parikshan, the phenotypical classification of individual based on Tridosha theory, has been able to link with the Genotypical base, asserting the ‘Individualized Medicine’ approach of Ayurveda.⁽²⁴⁾

Similarly, attempts of understanding the peculiarity of Ayurvedic drugs are also going on. Nano-medicine is gaining importance now to minimize the drug dose. Studies of Ayurvedic Medicine - Bhasma (metallic oxide compounds) has revealed its nano-particulate nature.⁽²⁵⁾

Ayurveda has evolved by thoughtful clinical observations and experimentations of years together. Targeted interdisciplinary attempts would definitely help to understand its core concepts which seems to mystical today for modern science.

Mainstream Healthcare Science VS Alternative Healthcare Science.

Till 12th century, Ayurveda was having a progressive development. After foreign invasions and during Islamic rule, it slowed down a little bit. With few exceptional periods, the socio political situations were not stable enough due to continuous wars and battles in Indian continent.⁽²⁶⁾ So the conditions were not highly favorable for development of Science, Arts etc. But amid all such chaotic situations, the schooling system was still maintained throughout the cities, towns and villages through Gurukuls, Pathshalas, Madarassas. Subjects like mathematics, arts, economics and business, warfare techniques and medicine was also being taught as specialty subjects⁽²⁾. During the Islamic rule, Unani system of medicine was also developed and promoted with preference along with Ayurvedic system of medicine.⁽²⁷⁾ Though during this era, Ayurveda did not experienced any new and great development, but still upto pre British era, Ayurveda was mainstream Medical Science that was being practiced successfully and effectively in India.

The education system in Indian continent was well spread than the western world till 18th century.⁽²⁾ But, there was difference in background and approach towards knowledge. While the Indian education system was still having religious background, during the same period, western world was experiencing the modern age of great change that started from Renaissance era. There was dynamic revolution of scientific attitude and perspectives. Every fact and phenomenon were being challenged and tested on the basis of more realistic and measurable parameters. Notions that were proved were being accepted and implemented by the society, irrespective of religious approval. Education was almost completely freed from the religious clutches and myths. Also, the whole change was supported by the then existing rulers in western world.⁽²⁸⁾

Britishers came India with this background and attitude. So with advent of British rule, the whole Indian system of medical education was gradually wiped out, without assessing its worthiness.⁽²⁹⁾ Ayurveda, as a healthcare system, was completely sidelined and then never been able to gain the mainstream status again. So naturally, with all this unfavorable background, there was a great set back to the development of Ayurveda as health science. Though however it was very much connected to lifestyle, food-style, culture, customs and environment of Indian continent, but due to lack of support by rulers, it remained confined to traditional individual practice and in the form of home remedies only. Any science, however strong its principles maybe, it needs continuous up-gradation and experimentation for its development on a larger scale with support from the government. So due to lapse in development and lack of government support for almost century or two, Ayurveda lagged behind in comparison with the modern medical science and has been considered as alternative medical science today.

Ayurveda is not a science of lost world, but a science with lapsed era.

Applicability of Ayurveda in current scenario.

There is a very popular phrase saying – Need is mother of all invention. Development occurs in an attempt to provide a solution for an existing or anticipated need in any field including Healthcare.

Development in field of surgery with the help of anesthesiology and invention of antibiotics has changed the perspective of medical science altogether.⁽³⁰⁾ Advanced technologies have helped in development of radiological and pathological diagnostics bringing accuracy in diagnosis of patient. Life saving gadgets like ventilators and defibrillators and has taken it to a different height. Development of different drug delivery routes which are making the medicine to work in any state of the patient is definitely creditable. All such developments have lead to expansion of secondary, tertiary and critical care in modern medical sciences.

But still Primary healthcare encompass the larger part of healthcare. Seasonal diseases, lifestyle related disorders, autoimmune disorders are some of the major parts of primary healthcare. These are all related to change in lifestyle. Lifestyle related disorders are steadily rising now and has become one of the major concerns in healthcare. Change in lifestyle and its impact on health have been very well recognized by Ayurveda. That's why it has given a high emphasis on Lifestyle Modification as well as Preventive Healthcare.⁽³¹⁾ Along with medical management, this domain can really be a stronghold of Ayurveda. Even many of the diseases of secondary or tertiary care are also effectively managed by Ayurveda through Panchakarma and medical management. Unfortunately, what is lagging in Ayurveda, is documentation and evidence building (apart from its authentic texts), thus leading to ambiguity about its applicability.

Ayurveda is a holistic healthcare science which guides about healthy mental and physical lifestyle, preventive care, along with medicinal management. If combined with current technologies, it definitely has potential to justify the changing health needs of today's world.

Ayurvedic medicine and efficiency of Ayurveda.

Ayurveda is just not about herbal medicine. It is a Health science with strong medical therapeutics based on its Own Unique Parameters. So testing the clinical viability / reliability of herbs or herbal formulations from Ayurveda on Modern scientific parameters is not testing Ayurveda. It is about testing an Allopathy drug with Phytochemical origin with a reference link from Ayurveda. Ayurveda has its own parameters of patient assessment and the drug therapy is based on those parameters and assessment. Understanding the underlying chain of patho-physiological events that leads to the expression of the disease / disorder is the key of medical management. Appropriate intervention at certain stages leads to the treatment and its outcome. The way of modern medicine is disease or disorder specific, the way of Ayurveda is more person specific. So the choice of drug according to Ayurveda may vary from person to person for the same disease / disorder. Hence if the choice of grouping patient is not done as per Ayurvedic parameters, drug which may seem to be effective in one group may not show equally effective outcome in another group, thus questioning its usefulness. So the efficacy of particular Ayurvedic medicine has to be judged on the Ayurvedic parametric assessment to get its real outcome, then only it can be labeled as efficient or inefficient. If it is not understood properly, then the reference link may not give expected results and invariably Ayurveda will be labeled as ineffective therapy (when actually the Phyto-chemical Allopathy drug under testing is found to be less effective / ineffective because of its inappropriate lead).

Medicine is just one of the tools of the therapeutics. It is not the medicine which is only responsible for the outcome of the treatment. For judgment of efficacy of any therapeutics, the logic behind the therapy is more important and not simply the medicine. Today we can see the market is flooded with Ayurvedic products. e.g cosmetics, pain balm, energy drinks, tea, wellness products, nutritional and health supplements, etc. endorsing the usefulness of Ayurveda.⁽³²⁾ It is not market hype created by the corporate sector, it is deep rooted faith and belief of people in safety, efficacy and authenticity of Ayurveda. Unfortunately this trust has been en-cashed by the market for mostly Over The Counter (OTC) products only and genuine Ayurvedic therapy is sidelined.

Ayurveda is not simply about herbal medicine. It is a healthcare system that is finely woven in cultural texture of Indian continent with wide range of simple home remedies for minor ailments to serious medical therapeutics. The need of hour is to reduce its casual look and focus its expansion in the area of genuine Therapeutic Medical Management.

Discussion:

Ayurveda has very strong and long standing base and contribution in healthcare. With a definite methodology, and rich textual, it has an appreciable database. Its approach towards healthcare is definitely systematic, analytical and scientific. It has been live Clinical Science since long. Except for last two centuries it has also continuously updated for the changing needs of the society. But with advent of modern medical sciences, Ayurveda was sidelined during and after British era and it got disconnected from the mainstream.

Modern science has definitely brought a huge change in all spheres of life. There is kind of explosion of inventions, discoveries and information in all the aspects of materialistic knowledge in last two centuries and modern medical science in particular, is immensely benefited. Because of technological developments, new diagnostic tests, minimum invasive surgical techniques and life saving critical care, advanced medical management was possible. Development of Pharmacology as a separate entity has literally boosted modern medical science to a new high. Newer and newer scientific developments in every aspect are contributing to medical science to become less painful and more user friendly.

On this background, Ayurveda as on today has definitely a limited share in therapeutics of overall medical field in India itself.⁽³³⁾ But looking at its contribution for thousands of years, it definitely seems to have a potential to contribute more. It is need of hour to collaborate and co-ordinate with modern science for further development. This will be helpful to bridge the two different approaches which are concerned with the same subject of human healthcare. Acharya Sushruta has also said that to implement a particular branch of science, one should collaborate and take inputs from other related branches as well.⁽³⁴⁾

Irrespective of approach, the ultimate aim of healthcare is to improve the quality of health and increase the sustainability of human being.

So as per health needs of current time frame, Ayurveda has to develop new protocols as per the quickly changing lifestyles. Apart from its huge database, there is need of organized real time documentation, as evidence based practice is becoming need of hour. Experimentation is a key of development. For its expansion, Ayurveda needs experimentation in all the sectors. Particularly in the Pharma industry, to improve its applicability. Drug developments and new delivery systems with Ayurvedic Ideology will make Ayurveda more user friendly and broadly acceptable. Though the OTC or FMCG market of Ayurvedic products is increasing in millions and billions, but huge conscious efforts are required to increase its 'Therapeutic Use' so as to cater the healthcare needs of increasing population. With sound conceptual background and Clinical wisdom of thousands of years, Ayurveda as a healthcare science, definitely has potential to meet the current challenges.

Principles of modern science are experimentally proven reproducible facts. Clinical experimentation is a key of Ayurveda that has helped to survive the system from thousands of years. So ideally the theory on which the results are based must also to be considered as true. Though Ayurveda is Clinically proven but Theoretically Unproven on modern experimental parameters. Hence the question that - is it a Science or mysterious hypothesis? becomes more complex. But reviewing the history and development of Ayurveda, though currently it may seem to have unsolved theoretical base as per modern scientific parameters, we can definitely say it as an applicable Clinical Science.

Conclusion:

Ayurveda not only as Healthcare Science, but also as a lifestyle has been finely woven in Indian cultural texture since thousands of years. But developmental lag due to unfavorable conditions in last two centuries has limited the scope and expansion of Ayurveda. Also difference in language of expression makes it difficult to connect with language of current science. In spite of such drawbacks, looking at its basic structure, approach and contribution towards the healthcare, Ayurveda can definitely be considered as a Live Applicable Clinical Science.

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• Vikram Nagar, Boudhi Chouk, Latur.
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CHIEF EDITOR – PRAMOD PRAKASHRAO TANDALE

**A Critical Analysis on Clinical Perspective of Virechanawith
Special Reference to Bruhat Trayee****Vd. Seema Himmatrao Gawali,**

P. G. Scholar,
Samhita siddhant department,
CSMSS Ayurved College,
Aurangabad, Maharashtra, India.

Vd. Anjali Hingane

Guide,
B.A.M.S., M.D.
Samhita Siddhant department.
CSMSS Ayurved College, Aurangabad

Dr. Smita Dhurade

Pro. & H.O.D.
B.A.M.S., M.D., Ph.D.
CSMSS Ayurved College,
Aurangabad

Abstract:

The Ayurvedic management of diseases consists of Shodhana and Shamana treatments. Shodhana Chikitsa is performed mainly by employing Panchakarma, it includes, Vamana, Virechana, Asthapana Basti, Anuvasana Basti and Nasyakarma. Virechana is considered as the best treatment for morbid and increased Pitta Dosha. This paper serves as a collection of references pertaining to Virechana Karma during ancient period of Ayurveda Samhitas, along with some information on the method of Virechana Karma explained in ancient textbooks of Ayurveda Samhitas.

This paper focuses on in depth analysis of virechana karma for various Vyadhis and different Awasthas. Also paper consists of collection of different Kalpas for different Awasthas.

Key words: Shodhana, Panchakarma, Virechana, Purgation.

Introduction

Virechana is one among the five purification therapies in Ayurvedeya. It is supposed to eliminate mainly morbid pitta dosha from the body. It is practiced after proper snehana and Swedana. The word virechana means merely not evacuation of bowel. The elaborate explanation is available in classics about the procedure and different Virechana yogas. There are lot of formulations mentioned in Kalpashthaana of Charaka, Sushruta and Vaagbhatt'a.

In routine practice it is observed that the range of Virechana drugs used is very less. Compare to what has been mentioned in classics. Some of the drugs are almost extinct from the practice and those which are available are also not used up to its maximum potential.

Clinically in which stage which drug can be given is needed to be explored a lot. The references regarding these usage according to specific clinical condition and specific stage of the clinical condition is scattered all over the text. If this all references can be compiled together, then it may give us more elaborate idea and may help in routine practice.

Keeping this view in mind this article work was undertaken. In the present article the references regarding Virechana from Charaka, Sushruta, Ashtangasamgraha and Ashthangahrudaya is compiled and arranged according to disease. E.g. under title Jwara you will find all the references regarding jwara with different clinical condition from above mentioned classics.

Material And Methods

In the present article those references came with word "Virechana" and "shodhana" is compiled. References with sramsans, bhedana and anulomana are not mentioned here because it may not reflect the classical Virechana procedure always. Along with that the general classification is also discussed in brief. Virechana yogas from Kalpashthaana are not mentioned in detail as it is already in compiled form in the classics.

Virechana**Etymology:**

The word Virechana has three components (Vaachaspatyam)

Vi - Upasarga (Prefix)

Ricir - Rice dhaatu (Root)

Lyt' – Pratyaya (Suffix)(Maladeha Nihssarene)

According to Shabdakalpadrooma:Rechana is derived from root word-Richi, dhaatu and Lyut' Pratyaya (Mala Bhedana)

Virechana word is formed by the root Rici dhaatu, Vi – Upasarga with 'Nich' and 'Lyut' Pratyayas giving meaning 'Vis' eshena Rechayateei'.

The word Rechana is commonly used for evacuation. As the evacuation of dosha is done by both Vamana and Virechana. Therefore sometimes the word Virechana broadly applies for both. But in general. The word Virechana denotes evacuation of the dosha through 'Guda'. (Charkrapanni, Ch.K. 1/4)

Definition:

Tatradoshharanam adbhogaam 'virechana sanjyakam' (Ch.K. 1/4)

The act of expelling doshas through adbhoga is known as virechana. Here the meaning of adbhoga is 'Guda' commented by charkrapanni.

Virechana karma is considered as the best treatment for evacuation of morbid pitta dosha.

Synonyms of Virechana:

Praskandana is one of the synonyms of virechana (Charkrapanni, Ch.Su. 13/80).

Classification of virechana dravya:

Ayurvedic classics have described the main drugs for virechana in the chapter dealing with panchakarma. In addition to it, numerous scattered references are available in the literature regarding virechana action of drugs.

According to references available virechana drugs may be classified in following 6 groups:

(ch.su.1, ch.su.2, ch.su.4 ch.su.9 ch.su.13, ch.su.25, ch.su.38, 39,44, ch.k.7-12, A.S. su. 6, 7, 12, 15, 17, A.s.k.2-3, A.H. su.5, 6, 9, A.H.k.2, sha.pu.4, Sa.U.4 S.Su.39, S.SU.46, S.Chi.33, S. Chi.44)

A) Virechana drugs according to their origin and parts used:

a) **Animal origin**–Urine(ch.su.1/94-97; A.s.su 14/4), Milk(Ch.Su.1/107-114), Takra [Butter milk] (A.S.Su. 14/4)

b) **Plant origin** –

i. Moolinee virechanadrugs –

The roots which have been recommended for Virechana are Hastidanti, Shyamatrivrita, Adhoguda (Vidhara), Saptala, Pratyagasreni (Danti), Gavakshi, Vishanika, Ajagandha, Pravanti, Kshireeni (Ch.Su.1/78-81), Shankhinee, Svarnakshiri, Chi.traka, Kinihee, Kusha and Kasha (S.su.39/4), Vacha, Shala harusvapanchamula, vrusChi.va, both punarnavaa, vastak, shaaka (A.s.su.14/4)

ii. Phalani drugs –

Main drugs are Shankhinee, Vidanga, Anupa Klitaka (madhuyashti), Sthalaja Klitaka, prakeerya (Lataakaranja), Abhaya, Antahkoterpushi, Kampillaka and Aaragwadha (Ch.Su.1/82-87), Pooga, Haritaei, Amalakee, Vibhitaka, Neelini, Chaturangula, Eranda, Kampillaka (Su.sa.su.39/4), Piloo, Priyaala, Kuvala, Badara, Karkandhu, Kashmarya, Parooshaka, Draakshaa (A.s.su. 14/4) etc.

It is to be noted that Charaka recommended the use of fruit of Shankhinee while Sushruta has recommended its root for Virechana.

iii. Ksheerini drugs –

Snuhee and Arka (Ch.Su.1/115-116), Saptachhada (saptaparna), Jyotishmati (S.Su. 39/4).

iv. Tvak - Barks of Pootika, Tilvaka (Ch.Su. 117/118); Kampillaka, Ramyaka Patla (S.Su. 39/4) etc.**c) Miscellaneous:**

As madya, dhaanyaamla (A.S.Su. 14/14) Guda, Ikshu Rasa, Payasa, Krishara, Ushna Jala, some minerals – Swarna, Kaansya, Manashila, Gandhaka, Ratna, Uparatna, Samudraphena also have sara properties.

B) Virechana drugs according to their mode of action

Acharya Sharangadhara has classified the drugs from their mode of action.

a) Anulomana: Means – sending or putting in right direction

The drugs, which move the Malas downwards after digestion and breaking their bandha, are known as Anulomana. e.g. Haritakisushruta considers sara as the synonym of anulomana. According to Dalhana, anulomana causes expulsion of vaata and kapha (S.Su. 46/529).

b) Sransana: Means – sramsana is to slip or to fall down.

The drug which brings the semi-digested and sticy mala without causing their digestion is known as Sransana. e.g. Aragvadha

In the context of jwara Chi.kitsa it has been mentioned that sramsana eliminates the pitta and kapha situated in pakvaashayaa (Ch.Chi. 3/172)

c) Bhedana: Meanings of bhedna are breaking, splitting, dividing, separations etc. The Drugs which disintegrate the Abaddha (unformed) or Baddha (formed) or Pindita (dried focal mass) forms of Malas by facilitating penetration into it and then evacuating through the lower gut is known as Bhedana. e.g. Katuki. Bhedana is a process in which shareera mala nirharana is brought about (Gangadhar Ch.Su. 4/9) Acharya Charaka has described a group of drug named as Bhedaniya. This includes Suyaha (Trivrit), Arka, Urubuka (Eranda), Agnimukhi (Kalihari), Chi.tra (Danti), Chi.traka, Chi.rabilva, Sanhini, Shakuladani (Katuki) and Svarnakshiri (Ch.Su. 4/9).**d) Rechana:** The drugs which eliminate Pakvam (digested) and Apakvam (undigested) Malas or Doshas by making them watery through the lower gut is known as Rechana. E.g. Trivrit. The Rechana and virechana words seem to be similar, but the Virechana represents the complete therapy which includes poorvakarma, virechana and samsarjana karma; while the rechana is the action of some types of drugs used in virechana. There are certain drugs which will help in proper virechana or which will synergize the action of virechana dravya is known as virechanopaga. The drugs described are Draksha, Kasmarya, Parusaka, Abhaya, Amalaki, Bibhitaki, Badara, Karkandu and Piloo (Ch.Su. 4/13).

C) Virechana drugs according to intensity of action:

According to the degree of potency of the drugs the virechana may be classified into the following categories.

- a) **Mrudu Virechana: CH. K. 12/56.** The Drugs, which are Manda in Veerya, when combined with opposite Virya or given in low dose, given to Ruksha patient and causing less purgation is known as Mrudu Virechana. Charaka has the view that the physician should not hesitate to use Mrudu Virechana drugs in weak patients having more Doshas because repeated elimination of Doshas in small quantity may cure the disease.(ch.k.12/56-58, 67-69) The patient who have not taken Virechana Drugs in past and whose Kostha is unknown in such patients Sushruta recommended the use of Mrudu Virechana drugs in the beginning and after knowing the Kostha required drug may be prescribed. (s.Chi. 33/44). Sharangadhara recommended that the Mrudu Virechana drugs i.e. Draksha, milk, warm water, castor oil etc. should be used in Mrudu Koshti patient (sha. U.4/13-14) Drugs effective in Mrudu Koshta are Guda, Sugar cane juice, Mastu, Ulloditadadhi, Payas, Kshira, Sarpi, Kashmari, Triphala, Pilu and Tarunamadya (ch. Su. 13/66-67)
- b) **Madhya Virechana:** The drugs which are moderate in qualities are known as Madhya Virechana drugs. These drugs are specifically indicated in the patients having Madhya Roga (disease with moderate symptoms). The administration of these drugs in Balavana patient is useless, because they are unable to eliminate Dosha completely (Ch.k. 12/55-68) Sharangadhara recommended the use of Trivrut, Katuki and Aragvadhya for Madhya Kostha. (sha.u.4/13-14)
- c) **Tikshna Virechana:** The drugs, which cause numerous motions (Mahavega) and eliminates the Doshas in large quantity by Kshipra (quick) and gentle (sukha) purgation without causing either much Gani is known as Tikshna Virechana. According to Charaka recommended the use of these drugs in the Balvana Rogi, presenting all the symptoms of the disease i.e. Tikshana Vyadhi. (ch.k.12/58) Snuhi Kshira is the best Tikshana Virechana drug among those drugs.

D) Virechana from Ruksha and Snigdha point of view:

The use of sneha virechana and rooksha virechana have been recommended in many places in Ayurveda.

The drugs which are used in the form of oil or the preparation containing Sneha is known as Sneha Virechana e.g. Castor oil. Vagbhatta the use of Sneha Virechana in all patients except Snigdha patient (A.H.Su.18/5) The use of Sneha Virechana in the patients who have taken higher dosage of Sneha is contraindicated because, due to this, the moving Doshas may again adhere in the Srotas. (su.Chi.33/41) (ch.si.6/9).

The preparations, which do not contain Sneha, can be used as Ruksha Virechana. It has been recommended on in the Snigdha patients who have comparatively taken more Sneha. (ch.si.6/9).

E) According to Kalpana

This is for maintenance of active principle for longer period and convenience of taking drugs as – Choorna, Varteekriya, Asava, Arishta, Avaleha, Sneha and Kashaya etc.

According to Sushruta following 8 preparations are useful,

- i. Ghruta Yoga,
- ii. Taila Yoga,
- iii. Kshira Yoga,
- iv. Madya Yoga,
- v. Mutra Yoga,
- vi. Mansarasa Yoga,

- vii. Bhakshana Yoga
- viii. Avaleha Yoga. Kshira,Rasa, Kalka, Kashaya, Kwatha, Shita are respectivelyLaghu. (su.Chi. 44/90-91)

VI. Virechana In Various Disorders

Jwara:

Ch.Chi. 3/219-233

In bahudosha cothditions

1. Mrudveekaa or Aamalakee swarasa
2. Aamalakee swarasa or aamalakee fried in ghruta
3. Trivrut choorna with ghruta and honey
4. Triphalaa swarasa with ghruta and honey Aaraghwadha
5. ksheera
6. Mrudveekaa swarasa
7. Trivruta or traavarnaana along wwith milk
8. Abhayaa along with mrudveekaa
9. Draakshaarasa along with hot milk as anupaana

SH.U. 39/306

Triphala, shyamaa trivruta and pippali along with honey and sharkara.

A.H.CH. 1/98-99 A.S. CHI. 2/14

pakva or shithila dosha or vishmadyaja jwara

1. Triphala, shyamaa trivruta pippali and kesara modaka
2. Vyoshaadya corona with sitaa and honey) IN,
3. Aaragvadha
4. Ksheera
5. Mrudveekaa rasa
6. Triphalaa or traayamaana siddha ksheera

A.S.CHI. 2/14

1. Triphalaa kwatha
2. triphalaa kwatha along with ghruta and hot water as anupaana
3. mrudveekaa swarasa

2. Raktapitta:

CH.CHI. 4/57

1. Trivruta and abhayaa
2. Aaragvadha phala
3. Traayamaana or gavaakshee moolam

All the above yogas should be given with more quantity o (prabhuta) madhu and sharkaraa.

Su.U. 45/ 15

Draakshaa, madhuka and kashmarya along with sitopala

3. Gulma:

C. Chi. 5/152

- 1) Neelinee ghruta: kapha gulma - Dose: 2 pala and in vaata gulma – 1 pala It can be given mixed with yavaagoo or manda

2) Sudhaaksheera hhaavita trivrut choorna I 1-karsha along with ghee and honey.

Pittaj gulma: pakvaashaya sthita:

Tiktaka ghruta or tilvak along with molk or hot water

CH.CHI. 5/105

Vaatagulma:

Neelinee corona with ghruta

Ch.Chi. 5/105

Vaatagulma:

Neelinee, trivrut dantee, pathyaa and kamapillaka siddha ghruta along with vidanga kshaara and naagara

A.S.CHI.16/17

Pittaja gulma:

1. Eranda taila with milk.
2. Triphalaa or traayamaana siddha ksheera

Pittaja gulnia with kaphanubandha:

Eranda taila with vaaruneemanda

A. S. Chi. 16/23

Virechana administration in rookshushnajanya gulum emergency condition:

1. Triphalaadi kwiatha
2. Traayamaana ghruta
3. Draakshaa ghruta
4. Traayamaana siddha Ksheera with Luke warm milk as anupaana

A. S. Chi. 16/32

Danteeharitakeevateha: intake for continuous 25 days

Indication: Gulma, arsha, shwayathu, kushtha, kaamilaa, arochaka, grahanee, paandu, hrudroga, utklesha, pleeha, udara, vishamajwara.

A. S. Chi. 16/21

Pittaja gulma: due to snigdha ushna hetu

1. kampillaka with honey
2. Draakshaa and abhayaa

4. Kushtha:

Ch. Chi. 7/45

Trivrut, dantee and triphalaa is mentioned as best drug of choice for virechna. Above drugs can be mixed with sauveeraka, tushodakaa, aasava, or seedhu.

A. H. CHI. 19/19-20, A. S. Chi. 21/45

Mahaavajraka ghruta:

For virechana in krura koshtha,

Indication: Kushtha, kshwitra, pleeha, vardhama, ashmaree and gulma

A. S. Chi. 21/9

1. kumbha, nikumhha and triphalaa
2. Maanibhadra vataka

A. S. Chi. 21/10

Patolaadee shodhana yoga: given for 6 days continuously

Indication: Pittakapha shopha, kushththa, dushta, naadivrana, arsha, bhagandara, grahanee, paandu, haleemaka, kaamilaa, vishamajwara, hrudvedanaa and basti vedanaa.

5. KRUMI:

A. H. Chi. 20/15, A. S. Chi. 22/24

After Nirooha, virechana can be given with trivruta kalka mixed with triphalaa and pippali kashaaya

6. Visarapa:

Ch. Chi. 21/66-67

1. Trivrut choorna mixed with ghee or milk and hot water or mrudveekaa swarasa can be given as anupaana.
2. Traayamaana siddha Ksheera
3. Trivrut with ghee
4. Triphalaa with aamalakee svarasa

A. S. Chi. 20/3

Niraama and ksheena kapha:

Draakshaa, trivrut, triphalaa and traayamaana for virechana

A. S. Chi. 20/3. A. S. Chi. 20/13

Kardama visarpa

Trivrut choorna, sarpee and ksheer along with draakshaa swarasa or hot water as anupaana.

7. Udara Ch. Chi. 13/125-132, A. H. Chi. 15/4-21

Naaraayana choorna: major content is saatala and trivrut

Virechana in snigdha koshta

- | | |
|-----------------------------|------------------------|
| 1. Udara : Takra | 2. Gulma: Badaraamhoo |
| 3. Aanadhavaata: Suraa | 4. Vaataroga: Prasanna |
| 5. Vitsanga: Dadhimanda | 6. Arsha: Daadimaambo |
| 7. Parikartika: Vrukshaamla | 8. Ajeerna: Ushnaambo |

Also it can be used in condition like bhagandara, paandu, shwaasa, kaasa, galagraha, hrudrooga, grahane, kushtha, mandaagni, jwara, damshtaraavisha, garavisha, krutrima visha, moolavisha

CH. CHI. 13/119, A. H. CHI. 15/10-12

Patolaadya choorna:

Mushti maatra with gomootra for virechana

All types of udara jaatokodara, kaamala, panduroga, shvayathu.

CH. CHI. 13/137, A. H. CHI. 15/25

Hapushaadya choorna:

Anupana: Dadima, triphala, maamsarasa, mootra, sukhodaka.

Indication: all types of gulma, pleeha, all types of udara, shvitra, kushtha, vishamaagni, sarujavaata, shotha, arsha, panduroga, kamala, haleemaka.

Ch Chi. 13/68-70, A. S. Chi. 17/20

balawaan rogi in Pittaja Udara

1. Trivrut siddha Ksheera
2. Uroobaka siddha Ksheera.
3. Saatala and traayamana kashaaya
4. Aargvadha kashaaya

if kapha anubandha is there then with gomootra and in vaataanubandha with tiktasarpee.

A. S. Chi. 17/20

5. Shyaamaatrivrut and triphalaa siddha ghruta

Ch. Chi. 13/141-142, A. H. CHI. 15/31

Snuheeksheera ghrta

Udara, gulma and garadosha

A. H. Chi. 15/66

Pittodar

Snuihiksheera

A. h. Chi. 15/59

Pittodara:

Shyaamaa, tribhandee and triphala

A. H. CHI. 15/53-54

Vaatodara:

Tailvaka sarpee or mishraka sneha

A. S. CHI. 17/2

Eranda taila along with mootra or ksheera daily for one or two months continuously

A. S. CHI. 17/2

Balawaan rogi:

1. Snuheeksheera along with mootra/aasava/arishtha/sura

2. Virechana dravya kashaya added with more quantity of naagara and devdaroo

A. S. CHI. 17/21

Shleshmodara:

Snuheeksheera siddha ghruta

A. S. Chi. 17/22

Sannipaatodara:

1. Saptalaa and shankhinee niryaasa siddha ghruta for 15 or 30 days.

2. Mahaavrukshaksheera siddha mootra.

8. Grahanee:

Ch. Chi. 15/231, A. H. Chi. 10/87

Atyagni: ksheena kapha, kupita pitta with vaata

Shyaamaa and trivrut siddha Ksheera or only Ksheera can be given for virechna frequently

CH. CHI. 15/ 79, A. H. CHI. 10/22-24

Vaataja grahanee: Niraama avasthaa

9. ATISAARA:

CH. CHI. 19/58

Pittaja atisaara: If bahudoshaaand deeptaagni condition, is present then virechana with only milk can be sufficient.

Su. U. 40/33

If passing of maLa is in little quantity and with more frequency and pain then virechana can be given with lukewarm abhaya and pippali kalka.

Su. U. 40/130, A. H. CHI. 9/15

In deeptaagni persons, doshabahula condition is present with hard and constipated stool then virechana can be given with,

Vidanga, triphalaa and pippali kashaaya

Su. U. 40/130

1. Eranda siddha payasa

2. Only payasa

A. S. Chi. 11/16, A. S. Chi. 11/16

Puraana atisaara: In balawaan and vibaddhamala condition,

1. Triphalaa choorna with kosha Ksheera.
2. Palaashaphala kwaatha siddha kosha Ksheera.
3. Traayamaana siddha Ksheera.

10. ARSHA:

A. S. CHI. 10/38

Virechana in Aunbandha dosha:

1. Madeeraa/mastu/mootra with pippali
2. Haritakee fried in ghruta with guda
3. Haritakee fried in ghruta with guda and kumbha or nikumbha together
4. Trivrut choorna with triphalaa rasa
5. Abhayaa, aamalakee, vidanga and equal parts of trivrut choorna
6. Maanibhadra guda
7. Mishraka sneha
8. Sukumaraka sneha
9. Neelinee ghruta

11. PAANDU:

C. Chi.16/135, A.H. Chi. 16/53-54, A. S. CHI. 18/29

Haleemak:

Trivrut triturated with aamalakee swarasa

Ch. CHI. 16/56-58, A. H. CHI. 16/6-8

Pittaja paandu:

1. Luke warm dantee phala rasa along with kaashmarya kashaaya in anjali pramaana
2. Draaksha in anjali pramaana

Ch. Chi. 16/56-58

1. Trivrut choorna along with sharkara (2 times of trivrut choorna) in ½ pala maatra
2. With Ksheera and mootra or only Ksheera and only mootra

A. H. Chi. 16/6-8

1. abhaya pasted with mootra
2. Triphalaa siddha mootra
3. Swarna ksheeri, trivrut, shyamaa, bhadradaaroo and mahaushadha pasted with one Anjali gomootra or kashaaya prepared in gomootra or siddha ksheera.

12. Kaasa:

CH. CHI. 18/65, A.H.CHI. 3/27, A.S.CHI. 4/14

Pittaja kaasa:

1. If Tanu kapha is present then Virechana with trivrut along with madhura dravya
2. Oif kapha is Ghana then Trivrut should be given along with tikta dravya.

Ch. Chi. 18/150, A.H. Chi. 3/152-153, A. S. Chi. 5/42, A. S. Chi. 4/42

Kshayaja kaasa: weak patients and in bahudoshha condition, mrudu virechana can be given with shampaaka and trivrut swarasa.

A. h. Chi. 3/152-153, a.s. Chi. 5/42, a.s.Chi. 4/42

Tilvaka kashaya and vidaaree swarasa siddha sarpee

13. Swarasa:

a. h. Chi. 4/7, a. s. Chi. 6/7, 8

In Tamaka shwaasa if dhmaana and udaavarta is present then virechana can be given with kosha amlaphal and saindhava

14. Rajyakshmaa:

A. H. Chi. 5/3, A. S. Chi. 7/2-4

1. Trivrut, shyaamaa and aargvadha along with sharkara, madhu, sarpee and ksheera.
2. Draakshaa, vidaaree and kaashmarya along with maamsarasa.

15. Vaatavyaadhi:

CH. Chi. 28/84-85, A. H. Chi. 21/10, A. S. CHI. 23/4

Mrudu snehasamyukta Virechana:

1. Tilwaka ghruta
2. Saatlaa ghruta
3. Eranda taila along with ksheera.

S. CHI. 4/27, a. s. Chi. 23/19

Snigdha virechana can be given with

1. Tilwaka ghruta
2. Ashoka ghruta
3. Ramyak ghruta

16. Vaatarakta:

Ch. Chi. 29/83, a. h. Chi. 22/11-12, a. s. Chi. 24/10

In bahudosha condition,

1. Eranda taila mixed with ksheera
2. Abhaya kashay or abhaya fried with ghee.
3. Trivrut choorna in ksheera or draksharasa as anupana.

Ch. Chi. 29/83

4. Kashmarya, trivrut, draaksha, triphala and parushaka kashaya along with saindhawa and madhu.

A. S. Chi. 24/10

Pitta pradhana awastha:

trivrut choorna with ksheera aahara

17. Mootra Kruchchha:

Su. u. 59/22

pittaja mootrakruchchha:

ikshu, ksheera and draksha together for virechana

18. Mootraghata:

A. S. Chi. 33/14

tilwaka ghruta in all types of mootraghata, especially in ashmaree and sharkara

19. Ashmaree:

A. S. CHI. 11/40

Tilwaka ghruta for virechana

20. Hrudroga:

S. U. 43/47-19

vataja hrudroga:shyama trivrut kalka siddha ghruta

A. h. Chi. 6/42, A. s. Chi. 8/3

Pittaja hrudrog:

draakshaa, ikshoo, niryasa and parushaka along with sita and madhu.

21. Chhardee:

SU. U. 49/22, A. H. Chi. 6/7-10, A. S. Chi. 8/3

mashura shodhana aushadhi like draksha swarsa and ikshoo swarasa with tilwaka sarpee

22. Vidradhi:

Su. Chi. 16/8, A.H. Chi. 13/3

trivrut for virechana

SU.Chi. 16/8, A.H. Chi. 13/3, A.S.Chi.15/10

pakwa vidradhee:

tilwaka ghrut or traayamaana ghrut

A. S. Chi. 15/17

vaatavruddhi:

1. Mishraka sneha
2. Sukumaar sneha
3. Tilvaka sneha
4. Eranda tail
5. Koshaamra phala sneha

23. Vruddhi:

A. H. CHI. 13/3

Chala awastha of vruddhi:

1. trivrut sneha
2. kashamra, tilwak, eranda, sukumarak ghrut or mishraka sneha

24. Apasmaara:

A.S.U 10/9

kaphaja apasmara:Trivrut shyamaa, drawantee, saptalaa and snuhee along with mootra

25. Naasaroga:

Pittaj pratishyay:

Draakshaa, patola, shreeparnee, moorya and trivrut kwaatha mixed with trivrut pathyaa and poogaphala choorna

26. Netraroga:

Su.U. 17/29

Raktapittaja drushtiroga:

triphala ghruta

kaphaja drushtiroga

trivrut for virechana

A. H. U. 13/49, A. S. U. 20/17

Vataja timira:

Triphala and panchmoola kashaya along with ksheera and errand tail

A.H.U. 13/68, A.S.U. 20/18

pittaja timira:

elaa and trivrut choorna along with sharkara and madhu

A.H.U. 13/68, A.S.U. 20/19

Kaphaja timira:

Pooga, abhayaa, shunthi, krushna, kumbha and nikumbha kwaatha

A. H. U. 16/31, A. S. U. 20/3

Sashopha and alpa shopha netrapaaka:

1. Draakshaa and pathya kwaatha
2. Trivrut kalka siddha ghruta

A. H. U. 9/16-18

Pittotklishta and raktotklishta vartm:

trivrut is suggested as best for Virechana

A.S.U.12/5

1. Triphiliaa kwaatha along with triphalaa kalka.
2. Triphala kwaatha mixed with braamhee choorna

A. H. U. 9/24, 31, A.S.U. 12/13

Kukoonaka:

1. abhaya, pippali and draaksha kwatha virechana should be administrate to dhatree
2. saptala siddha ghruta

A.S.U. 19/10

abhishyanda:

1. Tilwak siddha ghruta
2. Tilvak siddha ghruta along with tilvak kashaya anupana

27. Vyanaga:

A. S. U. 37/21

Pittaja Vyanga:

abhaya Virechana with ikshurasa

28. Granthi:

A. S. U. 35/4

Pittaja granthi:

Hareetaki with draakshaa and ikshu rasa.

29. Stanya Dushti:

CH. CHL. 30/251

Vaataja stanya dushti: considering dosha and Kaala

1. Trivrut or abhayaa along with triphalaa swarasa
2. Abhayaa along with madhu or only abhayaa

30. Lootavisha:

A.H. U. 37/77

Triphalaa, neelinee, trivrutaadeebhi

A. S. U. 44/29

triphala, trivru, trikatu and saindhava

31. Mooshikavisha:

A. H. U. 38/23

Trivrut, neelinee and triphala kalka

32. Alarka visha/jalatraasa:

A.H.U.38/35,A.S.U.46/49,S.U.7/51

Arkaksheera virechana.

33. Dooshivishaa:

A. S. U. 40/81

kaashpokta virechna: indicated in visharoga and dooshivisha

34. Pakavaashayagata Garavisha:

SU.K. 1/42

If daaha, moorchha, atisara, trushna, indriyavaikrutya, aatopa, paandutaa, kaarshyaris present then virechana can be given with.

Neelineephala sarpee.

35. Prior To Rasaayana Therapy:

CH. Chi. 1/1/25-28, A. H. U. 39/11, 12, A. S. U. 49/11

Hareetakyaadee choorna along with hot water aatopa, pandutaa, kaarshya is

Discussion

Shamanaand Shodhana were primarily focused to treat various types of vyadhi. It became clear from screening of Samhitas that Shodhana karma is widely elaborated but the references found inscattered manner.

In panchakarma, Virechana is simple procedure, itcould be done easily. So it is widely used as Shodhana karma in routine. It is more acceptable to patients. In addition to the acceptability and popularity,theVirechana isconsidered as the best treatment for prakupit Pitta Dosha.

As here information is arranged according to Vyadhis, different awasthas of that vyadi and different kalpa for that awastha. So now one can quickly get knowledge about which kalpa should be used for particular Vyadhi in particular awastha.

So it is the need of time tocollect all references of Virechana from other samhitas e.g. Kashyap samhita, etc.at one place toget its thorough knowledge at a glance.

Conclusion

1. Trivrut is the best drug mentioned for virechana and it has been found with more number of references compared to other Virechana drugs mentioned in the classics.
2. The concept of Snigdha Virechana (Virechana ghruta) in Vaatavyaadhi is needed to be explore more as it is now confined with one or two drugs in routine practice.
3. Most of the formulations mentioned in the classics are extinct from the practice because of unavailability of drugs.
4. Importance of disease specific Virechana drug should be highlighted in clinical practice.
5. Different formulations of available drugs may be explored more.

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• Vikram Nagar, Boudhi Chouk, Latur.
• Tq. Latur, Dis. Latur 413512 (MS.)
• (+91) 9922455749, (+91) 8999250451

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CHIEF EDITOR – PRAMOD PRAKASHRAO TANDALE

Review on Premature Greying of Hairs (Palitya)- An Ayurvedic Approach**Vd. Aarti B Kuril¹**

Assistant Professor,
Samhita Siddhant Dept.,
C.S.M.S.S. Ayurved College,
Aurangabad

Dr.Smita V. Dhurde²

Professor and H.O.D.,
Samhita Siddhant Dept.,
C.S.M.S.S. Ayurved College,
Aurangabad

Abstract:

Nowadays premature graying of hairs (Palitya) is a common cosmetic problem affecting young generation particularly in tropical and developing countries like India. Young generation seems to concentrate more on the external application type of products like dyes, shampoos, hair serums and spa treatments which are of minimal importance as long as the strength and health of hairs is concerned. Ayurveda whereas totally focuses on the internal health and growth of hairs. Premature graying of hair (Palitya) is the disorder of hair due to vitiation of Pitta and Vata dosha by Rasavaha, Asthivaha Srotas dushti and etiological factors in the form of diet, daily life style, psychological pattern of an individual and last but not the least the external environmental factors. Physiologically graying of hairs is the sign of old age and Pittaja Prakruti individuals. But it is certainly not expected to happen in the early years of life which states the underlying pathology. As once damaged grey hairs cannot be restored to their original color but the further damage can be definitely prevented by means of Samshodhan (cleansing procedures), Shamana (pacifying procedures), Nasya (nasal instillation of medicated oils and ghee) and Shiroabhyanga (head massage with medicated oil).

Keywords: Ayurveda, Palitya, Graying of hairs, Nasya

Introduction:

The stress and strain of modern life, environmental changes like air and water pollution induces premature ageing. Palitya is an accompaniment of premature graying and possesses a clinical challenge to the medical practitioners. Palitya is a common process occurring in people as they aged, some of individuals experience Akala Palitya due to familial History and pathological conditions.

Unfortunately contemporary medical science does not offer any satisfactory treatment other than artificial coloring of hair (dyeing). This regular dyeing leads to many adverse effects like hair fall and other scalp disease. Understanding hair and related problem reflects the psychological and pathological conditions of whole body.

Ayurveda has explained concept of akala Palitya in from different point of views and that too with satisfactory treatment without any side effects.

Main motive of Ayurveda is-

“प्रयोजनं चास्य स्वस्थस्य स्वास्थ्य रक्षणमातुरस्यविकारप्रशमनं च ॥”

च.सू. ३०/२६

Thus Akala Palitya (premature graying of hairs) can be included in the swasthya rakshana domain of Ayurveda.

Palitya is considered as Rasapradoshaj Vikara (Cha su.28/). Acharya Charaka has described Palitya under Shirogata Vyadhi (Cha.Chi26/). Causative factors of Palitya are- Krodh, Shok and Sharirik Sharma which increases Shariroshma leads to Palitya (A.Hru.U). For all Shirogata Vyadhi Nasya (Cha si.9/88) is important treatment because-

“द्वारं हि शिरसो नासा तेन तद् व्याप्य हन्ति तान्॥“

च.सि.९/८८

There are various types of Nasya (Cha.si.9/88) described in Ayurvedic literature for treatment and preserving health.

Aim of the study

The aim of article is to Elaborate discussion over Pathogenesis and management of Palitya and drawing of application oriented conclusion out of the discussion

Objective of the study

- 1) To create awareness of treatment of Palitya according to Ayurveda.
- 2) To create awareness of etiology of Palitya according to Ayurveda.

Ayurvedic aspect of Palitya

According to Ayurveda hair (Kesha) is Mala (material that is to be excreted) of Asthi Dhatu Palitya are hair disorders which occur due to internal factors like Rasadushti, Asthi-Dhatu Dushti or due to Sthanik Dushti i.e.Dushti at the scalp region.

A) Classification of palitya:

All Ayurvedic texts include palitya under the same category. The difference of opinion lies only in the title given to that category, as follow

Classification of Palitya:

S.N.	Name of the Text	Category	Name of Chapter	Reference
1	Charka Samhita	Shiroroga	Trimarmiya-Chikitsadhyaya	C.S.Chi.26/132,133
2	Ashtang Hridaya	Shiroroga	Shiroroga-Vidnyanam	A.H.U.23/29
3	Susruta Samhita	Kshudraroga	Ksudraroga-nidam	SU.Ni.13
4	Madhav-Nidan	Kshudraroga	Ksudraroga-nidam	M.N.55/28,29,32
5	Sarangdhar Samhita	Kapal-roga		Sha.Sa.6/42

D) Definition of Palitya:

क्रोधशोकश्रमकृतं शरिरोष्मा शिरोगतः ।

पित्तं च केशान् पचति पलितं तेन जायते ॥ (सु.नि.१३)

Hetusevan like krodha, shrama etc leads to increase in shariroshma which further vitiates pitta leading to change in colour of hair .This change is called palitya.According to Charakacharya, all three doshas are involved in aetiopathogenesis of Palitya, while according to Sushrutacharya only ‘Pitta’ Dosha is involved.

Types of palitya

S.N.	Sharangdhar Samhita (Sha.sa.6/22)	Vagbhat (A.H.U.23/29)	Yogratnakar	Bhel samhita (Bh.S.Su.26/11)
1	Kalajanit palitya	Vataja	Vataja	Vataja
2	Akalajanit Palitya	Pittaja	Pittaja	Pittaja

3	-	Kaphaja	Kaphaja	Kaphaja
4	-	Shirajodbhava	-	Ativyayamjanya
5		-	-	Vridhhavasthajanya

Nidana Panchaka Of Palitya

Nidana	Vata Prakopaka	Pitta Prakopak	Kapha prakopaka	Rakta Prakopaka
Aharaja	Sheet,Ruksha Gunatmak;Tikta Rasatmak; Sheetambupan.	Tikshna Gunatmak; Amla,Lavan- Rasatmak; Atimadyapan	Guru,sheet Gunatmak;Amla, Lavana Rasatmak; Atyambupan, Aam	Tikshna,Vidahi Gunatmak; Amla, lavana Rasatmak.
Viharaja	Vegavidharan, Prajagan Atimathun, Raja, Dhum, Heemsevan; Ucchabhasya Atirodan, Bashpanigraha;	Atapsevan; Prajgran		Diwaswap
Mansika	Atishok;atibhay	Atikrodha		
Agantuj	Abhigat			Abhigat

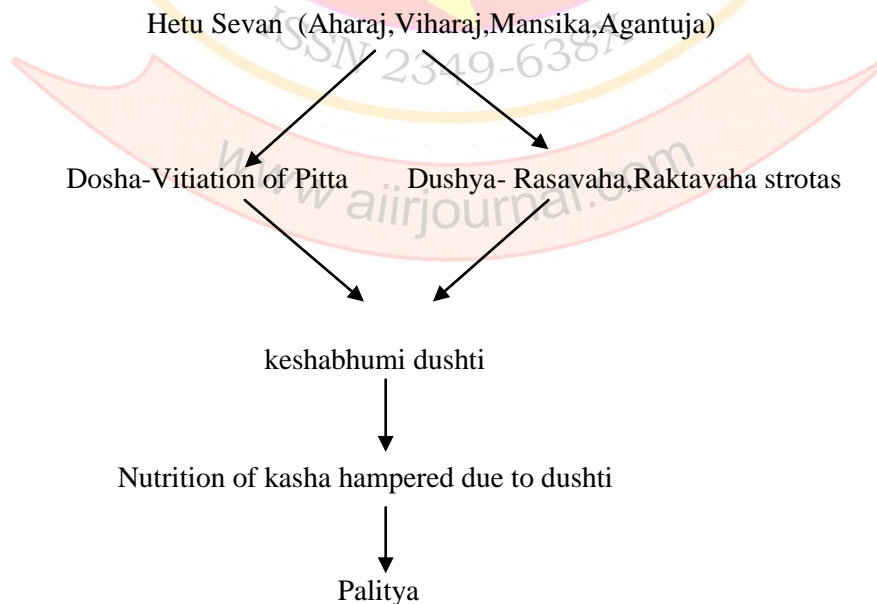
C) Roopa (Lakshanas):

➤ **Palitya Lakshan**

- Gradual change in colour of hair from black to white.
- Palitya due to vitiated vata dominance – hair appear blackish grey and rough.
- Palitya due to vitiated Kapha dominance –Hair appear white and shining.
- Due to pitta –Hair has yellowish tinge and burning sensation of scalp.

D) Samprapti (Su.Ni.13)

Aetiopathogenesis of Palitya :



Samprapti ghataka-**Samprapti ghatukas of Palitya**

Dosha	Vayu (Prana, Vyana); Pitta (Bhrajaka)
Dushya	Rasa, Rakta, Mansa
Upadhatu	Tvaka
Strotasa	Rasavaha, Raktavaha, Asthivaha
Strotodushti prakara	Sanga, Vimarga gamana
Adhishthana	Keshabhumi-Tvacha
Swabhava	Mrudu
Agni	Jaatharagni; Dhatwagni (rasa, Rakta, Asthi)
Roga marga	Bahya Rogamarga
Vyakta sthana	Shira-Tvak(Scalp)

Management of Palitya-

As main motive of Ayurveda is to maintain the health of healthy individual & relieving suffering of unhealthy person. Ayurveda describes everything for maintaining health which includes Dincharya (Daily regimen), Ritucharya Palan (Seasonal regimen) etc. Nasya and Shiroabhyanga are healthy habits to be followed by individual.

1. Nidana parivarjana.
2. Treatment of Vata Pitta Shamana.
3. Shamana Nasya for Palitya
- Nasya Karma is said to be one of the Pancha karma which also best treatment for Palitya. E.g. Nasya with Markavadi Taila, Anu Taila, Panchendriya vardhana taila.
4. Yogasana and Relaxation.
5. Active exercise.
6. Shodhana chikitsa for Sharirashuddhi.
7. Rasayana chikitsa for avoiding Palitya.
8. Pathya aahara sevana.

Discussion-

Ayurveda is science of life it provide treatment as well as prevention of Varios disorder including Palitya. Life style change is main cause of many disorders, so by changing these thing and adopting hair care stated by Ayurveda can help to cure as well as prevent this problem.

Hair Care in Ayurveda

In Dinacharya, Ritucharya Adhyaya hair care is discussed indirectly. Here, they suggest some procedures which keep hair healthy Some of them are as follows :

- 1) **Shiroabhyanga:** Oil should be regularly or daily applied on scalp, it is called Shiroabhyanga also keeps away Palitya (Ch. Su. 5/81).
- 2) **Shirovirechana :** The importance of Nasya to prevent and to cure the diseases of hair like Palitya.

Conclusion:

By ayurvedic management Palitya can be prevented and treated. Dincharya, Ritucharya palan, avoiding apathya aaharas, Vihara and Manasik hetu also by Ayurvedic management like Shiroabhyanga, Nasya.

Also different types of cosmetic like Shampoo, gel, Hair which directly and indirectly causes harm to health and hair should be avoided.

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The Literary Study of Adhoshakhagat Avedhya Siras

Shashank K. Maldhure¹, S. S. Bhagwat², R. R. Jape³

PG Final Year¹, Guide² Dept. of Rachana Sharir, HOD³ Dept. of Rachana Sharir
 C.S.M.S.S Ayurved Mahavidhyala, Kanchanwadi, Aurangabad, Maharashtra, India

E-mail: dr.shashank.maldhure@gmail.com **Mobile:** + 91- 8600333784

ABSTRACT

Background- The ‘Sira’ term is used collectively for blood vessels (Arteries, Veins, Capillaries, and Lymphatics) which denote the circulatory system. Some siras are not suitable for venepuncture. These siras are called Avedhya sira. A surgeon should not perform venesection on this siras which definitely can cause disability or death. The sites are available in classic texts but the exact location and anatomical description not yet described. Therefore, it requires great research work to get a clear concept. **Aim & objectives-** To correlate Adhoshakhagat Avedhya Siras mentioned by our mentors with modern anatomical structures and review in contemporary science. **Materials and methodology-** Ancient Ayurvedic classics were reviewed and compiled references for said subject were critically studied to comprehend the Avedhya siras in lower extremities. **Observations & Results** – Scattered references are available in Ayurvedic classics and Modern Anatomy (surgical & clinical) texts regarding Avedhya Sira.

Preliminary knowledge of Avedhya Siras is very important for Physicians as well as surgeon. The Avedhya Siras stated in Ayurveda compendia can be correlated with blood vessels, vein in Modern Anatomy.

Keywords: Sira, Avedhya Siras, Siravedha, Venesection.

INTRODUCTION:-

The term Sira, at one place reflects a meaning of blood vessels while at other place, it means nerve. In such condition it is very difficult to know doubtlessly about it [like Modern Anatomy]. ‘Sira’ is one of such structures with its structural, clinical & surgical significance. The important descriptions about ‘Sira’ are mentioned by our mentors in Ayurvedic classical text like; Sushruta Samhita, Charak Samhita, Ashtang Hriday and other text books. In Sushruta Samhita 4 types of Sira – Aruna Varna (Crimson), Neela Varna (Blue), Gour Varna (White) and Rohini (Red) which are relevant with Dosh – Vatta, Pitta, Kapha, Rakta.¹ The term Sira stands for channels through

which substances or physical forces flow.² Siras carries the Rakta Dhatu which helps to nourish the body and maintain healthy state.³ Their ramifications are like venations of the leaf. The Siras begins from the umbilicus from which they spread upwards, downward and obliquely throughout the body.^{1, 2, 3,}

Among the 700 Siras in the body as per the classics which are classified on the basis of Dosha, Adhishtana, Vedhya and Avedhya which is mentioned in Sushruta Samhita, 98 Siras are Avedhya; which are strictly prohibited for puncturing, if by mistake or by stupidity of the Chikitsak these are punctured it leads to harmful results.^{1, 2, 3} There are several examples of disease those are cured by Sira Vedhan process like Grudhrasi (Sciatica), Vishvachi (Eczema), Unmad (Insanity or Madness), Apasmar (Epilepsy or seizure disorders)etc.⁴

According to Sushruta, Marma is the vital spot in the body where confluence of Mamsa (Muscles), Sira (Blood Vessels), Snayu (Ligaments), Asthi (Bones) and Sandhi (Joints) present. In these places prana resides specially by nature, therefore any trauma on any one of these Marmas invariably causes death.^{1, 5, 6} The Sira which are located over the vital points (Marmas) are Avedhya (contra-indicated for puncture). Sushruta has clearly mentioned the Vedhya siras especially in connection with the diseases which are cured by Siravedha. There are 100 Siras in each Shakha (Limbs/Extremities) of which 4 Siras are Avedhya, they are; Jaaladhara-1, Urvi-2 and Lohitaksha-1. Jaaladhara Siras are deep blood vessels

where as Urvi and Lohithaksha siras are superficial blood vessels.¹ Acharya Dalhana in his commentary on Lohithaksha and Urvi Siras, mentions that these Siras are similar to the Lohithaksha and Urvi Marmas and its Viddha Lakshana may also be taken as the same.^{5, 6} Lohithaksha and Urvi are Sira Marmas and are said to be Vaikalyakara Marmas.⁷ The knowledge of Marmas is said to be half of study of Shalya Tantra.⁸ Acharya Vagbhata also had the same opinion on the total number of Siras. He then further explains that those Siras which are fused together, formed in to lumps, very minute, curved and those located inside the joints should not be Vedha.⁹

Even though the descriptions of these siras are available in Ayurvedic Samhita the structures which are related to this region, their anatomical description and their surgical importance need further more explanations. As per our mentors mentioned Avedhya Siras not suitable for Siravedha, if done so leads to disability or death. Siravedha is the half of treatment in Shalya Tantra. Therefore Avedhya siras are to be taken care of during surgery & clinical procedures.

AIM & OBJECTIVES:-

- To correlate the Adhoshakhagat Avedhya Siras mentioned by our mentors with modern anatomical structures.
- Review of Adhoshakhagat Avedhya Siras in contemporary science.

- To study the Avedhya Siras in lower extremities with its clinical and surgical significance

MATERIALS & METHODOLOGY:-

All sorts of references has been collected and compiled from various available Ayurvedic classic texts like Samhita, available commentaries and text books along with modern science. Research articles from various websites related to Avedhya Siras (Contra Indicated Vein) were accessed. The collected literature was critically revived and it an attempt was made to correlate the Adhoshakhagat Avedhya Siras with the structural aspect of the lower extremities. Based on the correlation and, the conclusions were drawn.

REVIEW OF LITERATURE

Structure of Sira

According to Sushruta, Structure of Siras are like the fine fibers in the leaf of a tree, thick at their roots and becoming finer towards the end, the branches of the Sira resemble the tendrils, the first branch gives out a branch and this again gives out another branch and so on. The blood flows in all the sira which are “like water channels going out to the different areas of a garden or agricultural field.”^{6,9}

This drushant of leaf very well correlates with the structural aspect of blood vessels. Large arteries leave the heart and branch into smaller ones that reach out to various parts of the body. These divide still further into smaller vessels called arterioles that penetrate

the body tissues. Within the tissues, the arterioles branch into a network of microscopic capillaries. Substances move in and out of the capillary walls as the blood exchanges materials with the cells. Before leaving the tissues, capillaries unite into venules, which are small veins. The venules merge to form larger and larger veins that eventually return blood to the heart. The walls of arteries, veins, and capillaries differ in structure. In all three, the vessel wall surrounds a hollow center through which the blood flows. The walls of both arteries and veins are composed of three coats, but they differ in thickness. The inner and middle coats of arteries are thicker than those of veins. This makes arteries more elastic and capable of expanding when blood surges through them from the beating heart. The walls of veins are more flexible than artery walls. This allows skeletal muscles to contract against them, squeezing the blood along as it returns to the heart. One-way valves in the walls of veins keep blood flowing in one direction. The walls of capillaries are only one cell thick. Of all the blood vessels, only capillaries have walls thin enough to allow the exchange of materials between cells and the blood.^{10, 11, 12, 13}

Adhoshakhagat Avedhya Siras

Some Siras are not suitable for venepuncture. These Siras are called Avedhya Sira. If a surgeon performs Vedhya Karma on there Siras, it would definitely cause disability or death. Any venesection which is direct cause of severe blood loss or falling of blood pressure can cause death. To avoid these mis happenings our mentors had

mentioned these ninety eight restricted veins for the venesection at particular sites. Rest of the veins can be a choice for the vedhya karma in certain diseases.^{1, 9}

There are 16 Avedhya Siras present in the Shakhas (Extremities).^{1, 9} Amongst the 16 Avedhya Siras of the extremities named as 1 Jaldhara, 2 Urvi and 1 Lohitaksha in each lower extremities.

Jaal:-

Network of each muscles, blood vessels, ligaments, and bones are four, they are situated in ankles bound & mixed together with holes by which the entire bony is falling net like holes.¹⁴

Modern science: -

There are no specific guidelines for Avedhya Siras (contra indicated veins). All veins can be considered for puncturing as per necessity & emergency.

Structure of Vein–

Venous return to the lower extremity is provided by two sets of veins namely the superficial and the deep veins. The main superficial veins are superficial to the deep fascia and are often located at or below the investing layer of superficial fascia in the subcutaneous tissue. Deep veins are situated deep to the deep fascia and often accompany the artery and the nerves supplying the lower limb forming a neurovascular bundle.^{10, 11}

Venous blood flow is a passive flow (not supported by a smooth muscle pump such as the heart). The direction of the flow is maintained by the valves within

the vein which prevents flow reversal. The valves found near the entry of a tributary. Venous channels are smaller, return blood from different tissue of body. The wall of vessels is thin and transparent, it carries of elastics fibers (hence its property of contraction & dilation).^{11,}

Veins consist of three layers:

1) Tunica adventitia- outer layer & consist of connective tissue which surrounds, protected & support vessels.

2) Tunica media –middle layer & consist of muscular tissue & nerves fibres which stimulate to contract or relax. (Stimulation by medulla oblongata)

3) Tunica intima- inner layer & constructed of smooth endothelial cells which facilitates the blood cells etc. endothelial cells develops fold known as semilunar valves. These valves noticeable bulges in veins, mostly present in larger blood vessels & which purpose of blood move toward heart by preventing back flow.^{11, 12, 13,}

Venesection Indications, location and causes¹⁵

Indications: -

- Thrombosed veins – these feel hard and cord.
- Tortuous, sclerosed, fibrosed, inflamed, fragile veins

Location:-

- Veins that cross over joints, bony prominences and those with little.

Causes:-

- Medications – (e.g.-anticoagulants, steroids, thrombocytopenia)

- Injury, disease or treatment may prevent the use of a limb (e.g. amputation, fracture, cerebrovascular accident).
- Surgery on one side of the body, for example, mastectomy and axillary node dissection, as this can lead to impairment of lymphatic drainage.
- Hematological factors decreased level of Hb% (Hemoglobin) and PLC (Plate Late Counts)

DISCUSSION:-

Profound knowledge of any science is obtained by critical review, observations and researches in the field. Adhoshakhagat Avedhya Siras is the functional complex part of over body. It is need of hour to highlight the every aspect related to Adhoshakhagat Avedhya Siras in our science.

Jaaldhara in lower extremities can be considered as great saphenous vein. Due to siravedha causes severe blood loss which leads to death or deformities, harmful effect. In Marma Sharir there is 41 sira marma considered out of which 2 Urvi & 1 Lohitaksha belong to that category. Urvi is considered as femoral vein in lower extremities, which can cause severe blood loss by puncturing them. Lohitaksha is considered as profunda femoris vessels in lower extremities. In Sushruta Samhita it is considered as “Lohitakshyem Marnam”.^{1, 5, 6, 9, 17, 18} Weinstein, et al (2007), Venepuncture of veins in the lower limbs is associated with a higher risk of complications due to the increased presence of valves and the fact that, comparatively, the blood flow in the lower limb is diminished.¹⁹

Table 1: showing Avedhya Siras which should not be punctured

Regions/ locations	Numbers	Sanskrit names	According to Dr. B. G. Ghanekar (Sushruta Sharirasthana commentary) modern Science correlation of Avedhya Siras (16)
Sakthies (lower Extremities)	8	(a) Jaaladhara-1 (b) Urvi -2 (c) Lohitaksha-1	Great sephanous veins, Femoral veins, Profunda femoris

The main symptoms of Marma injuries are bleeding and unconscious. In this contest Sushruta said that – “there are four types of siras in the body.”¹⁷ They generally lie in the site of Marmas and supply nutrition to Snayu (Ligaments), Asthi (Bones), Mans (Muscles), and thus maintain the body.¹⁸ When Marmas are

injured the vayu is increased and encircles the siras, it causes severe pain. Because of this, pain consciousness is gradually lost”. Here sira is the structure that gives nutrition to the body and maintains the body. Same point is noted in Modern science ever structure in the body receives blood supply for nutrition & nerve supply

for motor and sensory functions. Every structure is supplied by neurovascular bundle; it contains artery, vein & nerve. In sira marma concept all these structures are considered under the term of sira.¹⁸

B.M.N. Kumar (2013) et al Sushruta considered the 4 types of siras that is Vata, Pita, Kapha and Raktha where as Vatavaha siras seeing the colour Aruna Varna (Crimson Red) and character filled with vayu (pulsation) denotes that in Modern Anatomy these two are characters of artery. In Pittavaha siras seeing the colour Neela Varna (Blue), it suggests that in Modern science veins are blue in colour because these carry deoxygenated blood. In Kaphavaha siras seeing the colour Gowra Varna (White), it suggests that in Modern science lymphatics are white in colour because these carrying clear fluid lymph. In Rakthavaha siras seeing the colour Rohini (Red) and function nourishes the Dhatus, it suggests that in Modern science capillaries are red in colour and exchange the nutrients in tissue level.¹⁸

The dilating vein causes stretching of the valve base precipitating valve dysfunction. These stretched valves are less mobile and produce intra luminal flow obstruction. Due to the high flow and shear stress, they also develop inflammatory changes (thickening often referred to as myxoid degeneration by pathologists) which in turn can lead to fibrosis and eventually the development of stenosis of the vein wall.²⁰ A combination of altered flow, increased pressure and inflammation; all triggered by intra luminal obstruction caused by a dysfunctional valve, results in a plethora of problems including neo-intimal hyperplasia. Such stenosis can increase the pressure within the needle access

segment (pressure is a function of volume flow and diameter of the stenotic outflow).²¹ The vascular access surgeons routinely destroy any valves they come across in the operative field. This produces stasis of blood in some of the tributaries resulting in thrombosis and eventual scarring down the tributaries. The inflammatory response from thrombosis could result in variable amounts of structural alteration in the main out flowing veins. Valves open in the direction of the flow; valves have to be incompetent for a tributary to act as an outflow. Similarly, any valve in a vein branch has to be rendered incompetent to obtain a reversal of blood flow direction. Due to the development of a “swing point stenosis”, could result in the obliteration of the deep venous outflow to the extremity. This places the limb at a higher risk for venous hypertension with any other kind of peripheral access, thus limiting the further access options. Dorsal venous plexus Vedhan (punctured) leads to direct cause of severe blood loss or falling of blood pressure can cause death or deformity.^{22, 23, 24}

CONCLUSION:-

Adhoshakhagat Avedhya Siras is emphasized as a preventive measure as well as therapeutics for several disorders. Adhoshakhagat Avedhya Siras and Marmas are not same in extremities, but they are anatomically closely related. Sira are one of the important components of Marma, according to definition of Marma. Avedhya Siras are the anatomical structures which are either deep vessels or superficial vessels which can be leaded the harmful affect by

Siravedhaya them. So these are the guidelines for surgeon & physician to avoid the Siravedhaya of these 8 Avedhya Siras in lower extremities.

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Shashank K. Maldhure, S. S. Bhagwat, R. R. Jape

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Address

• Vikram Nagar, Boudhi Chouk, Latur.
• Tq. Latur, Dis. Latur 413512 (MS.)
• (+91) 9922455749, (+91) 8999250451

Email

• aiirjpramod@gmail.com
• aayushijournal@gmail.com

Website

• www.aiirjournal.com

CHIEF EDITOR – PRAMOD PRAKASHRAO TANDALE

Be an Organ Donor: Be Alive Forever**Dr.Renuka Kolamkar**

(Corresponding Author)

PG Scholar (Rachana Sharir)

C.S.M.S.S. Ayurved College,

Aurangabad, Maharashtra

Dr.R.R. Jape

Professor & HOD

Dept. of Rachana Sharir,

C.S.M.S.S. Ayurved College,

Aurangabad, Maharashtra.

Dr.S. S. Bhagwat

Associate Professor,

Dept. of Rachana Sharir,

C.S.M.S.S. Ayurved College,

Aurangabad, Maharashtra.

Abstract:

'Organ donation' is the act of donating an organ or tissue by a person to a patient who is in need of it. Demand for organs and tissue is growing day by day worldwide. Organ donation by one person can save lives of many others.

'Organ transplantation' is moving an organ from one person (donor) to another (recipient) who is in need of it. Organ transplantation is the safe procedure that gives hope to thousands of people with end stage organ failure.

In this article need of organ and tissue donation, ways to increase awareness about organ and tissue donation, organ and tissue transplantation and detail knowledge about it is discussed.

Key words: Organ donation, Tissue donation, Organ transplantation.

Introduction:-

'Organ donation' is the process of donating Organs or biological tissue to living recipient, who is in need of transplant.^[1]

The purpose of tissue or organ donation is replacing recipients damaged or absent organ or tissue or by donors healthy organ or tissue.

The donor is the person providing organs or tissues to recipient who receives it through a surgery called 'transplantation. Donors may be living or brain dead. Any healthy willing person of age upto 80 years can be a donor excluding HIV, Hepatitis infected patients, active cancer patients and patients with chronic illness who can not be donors. A living donor can change his decision of donation at any time.

Distributions of donated organs depends on donor- recipient match which is based on number of factors including blood and tissue typing, medical need, time on the waiting list and geographical location.^[2]

Medical science has made tremendous progress in recent times in the field of transplant procedures. Organ and tissue transplantation improves and increases the life expectancy of patients suffering from end stage organ failure.

History:

'Sushrut Samhita' is one of the ancient texts of Ayurveda. In Sushrut Samhita there is description that various tissue and organ transplant procedures have been successfully performed in past. 'Sushruta' the first Indian surgeon used autografted skin transplantation in 'nasa sandhan' means nose reconstruction as well as to repair torn ear and ear lobes and damaged lips. Even today procedures described by sushruta in 600 B.C. are referred and studied by many surgeons and practitioners by the name 'Indian method.'^[3] For that great work sushruta is called 'father of surgery'.

As Modern medicine is regenerative skin transplants, kidney, lungs, liver, pancreas, heart and corneal transplants are successfully performed in the past decades worldwide. In recent times Modern medicine has succeeded to grow organs or tissues from stem cells for transplantation.

Types of organ donation:-Donation may be in the form of biological tissue or organ. Though human tissues or organs anatomically are of several types, medicolegally they are of only two types i.e. regenerative and non regenerative. Regenerative tissues or organs are human tissues or organs, which, even if removed from their respective places in the anatomy, have the capacity to rejuvenate or replicate within the body. On the other hand, non regenerative tissues or organs if removed from human body will not be regenerated.^[4] There are following types of organ donation –

- a) Living donation
- b) Deceased donation
- c) Vascularized Composite Allografts^[5]

a) Living donation:

In this type of organ donation donor remains alive and donates renewable tissues, cells, or fluid (e.g. blood, skin) or donates an organ or a part of an organ in which the remaining organ can regenerate.

Organs which can be donated by living person are –

- a) Single kidney
- b) Partial donation of liver
- c) Partial donation of lung lobe
- d) Partial donation of small bowels
- e) Healthy cell extracts from the failing organs^[6]

b) Deceased donation:

It is the process of giving an organ or part of an organ at the time of donor's death for the purpose of transplantation to another living person who is in need of it.

Organs and tissues which can be donated after natural death are –

- a) Eyes
- b) Skin and fascia
- c) Heart valves
- d) Bones and tendons
- e) Cartilage
- f) Veins and arteries
- g) Middle ear bones

C) Vascularized Composite Allografts (VCA):

Vascularized Composite Allografts involve the transplantation of multiple structures that may include skin, bones, muscles, blood vessels, nerves, and connective tissue. The most commonly known type of VCAs is for hand and face transplants. This groundbreaking form of therapy returns vital function and identity to people who have suffered a devastating injury or illness.^[5]

Organ Transplantation:

Organ transplantation is a medical procedure in which an organ is removed from one body and placed in the body of recipient, to replace a damaged or missing organ. The donor and recipient may be at the same location, or organs may be transported from a donor site to another location.^[6] Through 'Organ transplantation' surgery donor provides organ or tissue to needful recipient.

Transplantation of human organs Act, 1994 (Amendment 2011, 2014):

This act was enacted for removal, storage and transplantation of human organs for therapeutic purposes and for the prevention of commercial dealings in human organs.

Authority for removal of human organs

Any donor (≥ 18 years of age) may authorize the removal before his death of any organ of his body for therapeutic purposes.

- 1) If any donor had in writing (in presence of two or more witnesses) or in documents like driving license authorized the removal of any organ after his death for therapeutic purposes, the person lawfully in possession of dead body should allow the doctor all reasonable facilities for removal.
- 2) When no such authority is there, person lawfully in possession of dead body can authorize the removal of any organ including eye/ cornea of the deceased person.
- 3) When human organ is to be removed, the medical practitioner should satisfy himself that life is extinct in such body or in case of brain stem death, it has been certified by:
 - i. The doctor in –charge of hospital in which the brainstem death has occurred.
 - ii. An independent doctor, being a specialist nominated by the above in-charge from the panel of names approved by Appropriate Authority.
 - iii. A neurologist or a neurosurgeon, nominated by the in-charge from the panel.
 - iv. The doctor treating the person whose brainstem death has occurred.

Under any circumstances, brainstem death tests should not be performed by transplant surgeon or any doctor in the transplant team or a member of the Authorization Committee.

After next of the kin or person in lawful possession of the body authorizes removal and gives consent for donation of human organ(s) or tissue(s) or both, the registered medical practitioner of the hospital through transplant Coordinator should inform the registered Human Organ Retrieval Center by telephone/fax/electronic mail for removal, storage or transportation.

Removal of organs can not be authorized wherein:

- i. An inquest may be required to be held in relation to such body.
- ii. A person who has been entrusted the body solely for the purpose of cremation.

Authority for removal of human organs in case of unclaimed bodies in hospital or prison:

- If not claimed by any near relatives within 48 hours from time of death, the authority lies with the management of hospital or prison or by employee of the hospital or prison authorized by management.
- If there is reason to believe that any near relative of the deceased person is likely to claim the body even beyond 48 hours, no authority should be given.

Authority for removal of organs from bodies sent for postmortem or pathological examination:

Person competent under this Act can give authorization, if such organ is not required for the purpose for which the body has been sent.^[7]

Importance of time factor for transplantation:

The viability of transplantable organs falls sharply after clinical death. Liver must be taken within 15 minutes, Kidney within 45 minutes, Heart within an hour, Organ required for transplantation can be removed even though the circulation and respiration have not ceased due to artificial maintenance.^[8]

The approximate maximum time of preservation for following organs/ tissues is: Lung(4 to 6 hours); Heart(4 to 6 hours); Liver(24 hours); Pancreas(24 hours); Kidney(72 hours); Corneas(14 days); Bone(5 years); Skin(5 years); Heart valves(10 years).^[9]

Types of transplant:

1) Auto graft:

A transplant of tissue from one to oneself (e.g. skin grafts, vein extraction for CABG, etc.)

2) Allograft:

It is the transplantation of organ or tissue from a genetically non identical member of same species.

Most transplants are allografts.

3) Iso graft or (Syngenic graft):

In this type organs or tissues are transplanted from one to genetically identical other person. (Identical twin transplant.)

4) Xenograft:

It is a transplant of organs or tissue from one species to another species.

e.g. Porcine heart and heart valves transplants.^[10]

Discussion:

When a deceased person is potential donor, the doctor checks whether he / she have been registered as a donor and his/her family members or close relatives have given consent for it.

In different countries rules regarding Human organ donation and transplantation are very precise and clear for dealing with the problem than in India.

In India there are many misconceptions and lack of knowledge about organs and tissue donation. Because of cultural and religious reasons, family beliefs, disfigurement after death, people hesitate to give consent for organ donation, some think that they are too old age to donate or donors get anxious about their own health in living type of donation.

Statistical data denotes that in India tissue donation and transplantation percentage is very less as compared to other countries worldwide. Corneal transplantation lightens the life of blind person or patients with severe eye disease or injury. Heart valve transplants can save patients suffering from diseased or damaged valves, Skin grafts used in burn patients help to regain their confidence. Bones, ligaments and tendons used in reconstructive surgeries enables the recipient to get back to work and live a normal life. Tissue transplantation has been proved beneficial to many people as it relieves pain, improve and enable recipient's physiological and psychological status.

Conclusion:

Organ donation is a great service as it saves lives. It breaks away all kinds of discrimination and dispels myths.

Organs and tissue donation is the precious gift for needful recipients and life giving opportunity for donors. Along with recipients, organ and tissue donation affects the families and supporters of those in need of transplantation. By providing sensitive and emotional support for donor families we can make bridge between donation and transplantation.

Many organizations work for Organs and tissues donation programme. Under those Organizations one can will and register to donate Organs. To increase public awareness about organ and tissue donation at proper time and proper place is the need of present time.

We can increase awareness about organ and tissue donation through public campaign, hospital camps, advertising through televisions and other social medias, seminars must be arranged in schools and colleges so that all age group people must get inspired and understand the importance of that noble work.

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REVIEW ON PARADI GUNAS

Dr. Ujwala M. Divekar^{1*}, Dr. Rajesh Kumar S. Upadhyay²

¹Asso. Professor, Samhita Siddhant Dept. C.S.M.S.S. Ayurved College, Kanchanwadi, Aurangabad.

²Professor and H.O.D. Agad Tantra Avum Vidhi Vaidyak Dept, C.S.M.S.S. Ayurved College, Kanchanwadi, Aurangabad.

***Corresponding Author: Dr. Ujwala M. Divekar**

Asso. Professor, Samhita Siddhant Dept. C.S.M.S.S. Ayurved College, Kanchanwadi, Aurangabad.

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ABSTRACT

In Ayurveda as per utility of gunas in Sharir Rachna, Sharir Kriya and Treatment has suggested forty one gunas Paradi gunas are a group of gunas which begins with para. Nyaya darshan also described the paradi gunas. Paradi gunas are ten in number. All of ten paradi gunas have special characteristics and importance in treatment i.e. Abhyas guna is useful in maintaining hygiene and in treatment. Regularly intake of such articles which are conductive to the maintenance of good health and are capable of preventing attacks of disease.

KEYWORDS: Ayurveda, Paradi, Gunas, chikitsa.

INTRODUCTION

Paradi gunas are general attributes of drugs used in processing and prescribing of drugs. In charak samhita the synonym of Paradi is siddhiupay chikitsa guna. Paradi gunas are para(superiority), apara(inferiority), yukti(propriety), samkhya(number), sam yog(combination), vibhag(disjunction), pruthaktwa(separation), pariman(measurement), samskara(transformation), abhyas (repetition).^[1]

Paratwa and Aparatwa

Paratwa means pradhan(main) and Aparatwa means apradhan.

परत्वं प्रधानत्वमपरत्वम प्रधानत्वम I^[2]

The terms paratwa and apartwa are taken in vaisheshika sense, then a place which is far off will be regarded as para and nearer one would be apara. Old age would be para in relation to young one. Paratwa and Aparatwa in relation to place, time age, measurement, vipak, virya, and rasa may be illustrated as follows

देशकालवयोमनपाकवीर्यरसादिषु परापरत्वे I^[3]

The desert is superior than marshy land. The visarga kala is superior than adan kala. The young one is superior to other ages. The normal measurements as described in the sharir sthana are superior to other measurements. The wholesome vipak, virya and rasa are superior to unwholesome ones.^[4]

Yukti(Propriety)

Yukti has been described in paradi gunas and also as special praman Yukti is not described by Nyaya darshan. Yukti implies selection of proper therapy with due regards to nature of doshas vitiated.^[5]

युक्तिश्च योजना या तु युज्यते I

The intellect which perceives things as outcome of combinations of multiple causative factors valid for the past, present and future is known as yukti. It is useful in the fulfilment of three objects dharma, artha and kama.^[6]

The rapeutical property depends upon the dose of therapy and time of administration.

Samkhya(number)

The attribute which provides accurate knowledge and known by one, two, three etc. words is number or samkhya. It remains in all nine substances.⁷ The knowledge regarding number is acquired by seeing and by touching. The samkhya plays a very important role in medical science as well as Ayurveda. The age measurements of the body recognized by different numbers. Therapeutic preparations are also named before some numbers for example Panchasakar churna, Triphala, Trikatu. Panchakarma therapy is famous for its five type activities. Thus the samkhya guna is used frequently in philosophy and in medical science too.^[8]

Samyoga

The feeling of A is combined to B is produces by samyoga In philosophy two types of samyoga are described. 1) Karmaj samyoga 2) Samyogaj samyoga. According to Charak samyoga is of three types. 1) Dvandva karmaj, 2) Sarva karmaj, 3) Eka karmaja. The samyoga is very useful in medicinal and other day to day life. Life itself is samyoga of sharir, indriya, satwa, atma. Diet and medicines are useful for health with there various combinations but some combinations are harmful for health for example he combination of fish and milk is contraindicated as it produces disease relating of blood. Chakrapani describes two types of combinations according to their results. 1) Prakruti Samsamvaya 2) Vikruti visham samvaya^[9] In the pharmacological formulation the combination attribute (Samyoga) is practically used which substance in which dose and for what duration should be kept together will provide the most usefulness for health.

Vibhag

The gunas which destroys the combination is known as division (vibhag). It regards the absence of combination factors and it contrary to samyoga guna. Nyaya darshan describes three types of vibhag. 1) Dvandva karmaj, 2) Sarva karmaj, 3) Eka karmaja. In philosophy types of vibhag are 1) karmaj vibhag, 2) vibhagaj vibhag.^[10]

Pruthaktwa

Pruthaktwa is separate from other than a different object from this. It is very useful in establishing the distinguished entity of different articles While examining the patient as well as the disease, the recognition of particular disease is established through differential diagnosis.^[11]

Pariman:-(Measurement)

It is light, small, heavy or large are the experiences attained due to pariman attribute. It has four types 1) Anu-Light 2) Mahat-Great, 3) Hrasva-Small 4) Dirgha-Large. It is found in all nine substances. In medical science this attribute has a special utility. In Ayurveda Magadh and Kalinga mana were used in various respect of measurement. Healthy persons have a rational measurement of different organs. Too tall and too short persons are described as Nindaniya. The proper pariman of medicine and diet prove good health.

Samskara:-(Transformation)

According to Vaisheshik Darshan action is produced by samskara.^[12] The term Samskara also means to ready, to polish or to refine. In Manusmriti sixteen samskaras are mentioned for the purification and complete development of man. According to Charak samhita Samskara is karan or transformation of quality.^[13] Types of Samskara-1) Vega:-I is produced by action and remains in Prithvi, Jal, Tej, Vayu and Mana. 2) Bhavna:- In Ayurvedic refererences the term Bhavna is also used in the sense of impregnation.

3) Sthitisthapaktwa:-The attribute which ables a substance to re-establish in its previous position.^[14]

Samkara is very useful in Ayurvedic medicines. Food as it is primary essentiality and most useful from the first day of life, has been given complete attention by Ayurvedic scholars. Curd by nature aggravates oedema when churned even with fat contents of it remaining in fact, it alleviates oedema.

Abhyas(Repetition)

Repetition of the same for many times is abhyas. It has not been included in twenty four gunas. The repeated use of useful diet and medicine is required for its complete advantage. The repeated and regular in take of Shashatik, Sali, Mudga, Rock salt, Amalki, Rain water, Sarpi, Jangal mansa, Honey having homologous qualities result in enhancement of dhatus.^[15]

Sankhya, Pariman, Pruthaktwa, Samyog, Vibhag, Paratwa, Apartwa are described in Vaisheshik darshan.^[16]

MATERIALS AND METHODS

For the present review of paradi gunas detailed literary study is performed. The detail content of and references are analysed from available texts referred are Charak Samhita, Padarth vidnyan, Vaisheshik darshan, Tarkasangrah.

METHODS

Descriptive and conceptual

CONCLUSION

After studying the all the aspect we came to conclusion that Paradi gunas plays very important role in the line of treatment

- 1) Yukti plays important role for selection of proper therapy.
- 2) Samyoga plays important role in medical and other day to day life like diet and medicines which are useful for health.
- 3) Samskara is responsible to change the property of drug.
- 4) Samkhya is useful in the numbering of bones, muscles, organs, blood vessels etc.

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IMPORTANCE OF VYAYAMA FOR HEALTHY LIFE

¹*Vd. Fulse Sanjiv D. and ²Vd. Upadhyay Rajesh S.

¹Professor and HOD, Dept. of Kriya Sharir, C.S.M.S.S. Ayurved Mahavidyalaya, Aurangabad, Maharashtra, India.

²Professor and HOD, Dept. of Agadtantra Avum Vidhi Vaidyika, C.S.M.S.S. Ayurved Mahavidyalaya, Aurangabad, Maharashtra, India.

***Corresponding Author: Vd. Fulse Sanjiv D.**

Professor and HOD, Dept. of Kriya Sharir, C.S.M.S.S. Ayurved Mahavidyalaya, Aurangabad, Maharashtra, India.

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ABSTRACTS

Like proper diet and proper sleep Vyayama (Physical exercise) is also essential for better health. Lack of physical exercise our body become unhealthy and will not live longer. The regular physical exercise or Vyayama causes lightness of body, reduces the body fat, improves level of performance, promotes jatharagni (power of digestion), properly differentiated and firm physique, no disease occurs to those persons whose body is made firm with exercise. To those who resort to daily exercise, even foods that are mixed or apposite properties or which are not digested properly; are digested quickly. Vyayama improves our mental health, it reduce the risk of cardiovascular disease. Keeps us happier, lowers our blood pressure, lowers blood cholesterol, lower the risk of type – 2. Diabetes mellitus. Exercise should be done during cold and spring season and in all other rtu or exercise should be undertaken to one's half of the strength. Vyayama should not be undertaken after having meals, sexual intercourse, Kasa (Cough), Swasa (dyspnea), weak person, tuberculosis patient, bleeding conditions, injured and dehydrated patient. Exercise should be avoided in children and in old age also. Persons having indigestion should avoid Vyayama. The complication of excessive vyayama are Kasa, fever, vomiting, vertigo, the psychological debility, thirst, swasa (dyspnea), bleeding disorders. Therefore one should not indulge in severe exercise of any form.

KEYWORDS: Vyayam, Exercise, Health, Regular.

INTRODUCTION

Ayurveda is a ancient science of life. Ayurveda described the *hita* and *ahita* (wholesome and unwholesome), *sukha* and *dukha* (Happy and unhappy) life.^[1] The life which is healthy and welfare of the society is called *hitayu* otherwise it is *ahitayu*. Similarly when the person is healthy is known as happy otherwise he will be unhappy. The equilibrium of *dhatus* (Body constituents) in qualities as well as in their actions is called *prakriti* or health and their disequilibrium is called *dukha* (disease).^[2] In the state of health equilibrium of *dhatus* should be maintained as it is the object of Ayurveda.^[3] Physical exercise or Vyayama prevents the body from disease. Physical exercise maintain the equilibrium in the body. Physical exercise should be undertaken one's half of the strength. Excessive exercise is harmful to our body. Exercise should avoid in children and older persons. To maintain health and reduce our risk of health problems, health professionals and researchers recommend a minimum of 30 minutes of moderate exercise per day.

Aims and objects

1. To study the importance of Vyayama for health.
2. To study detail about Vyayama as per Ayurveda.

3. To study about relationship of Vyayama and rtu.
4. To study about Vyayama according age.
5. To study about the limitations of Vyayama.
6. To create awareness about maintaining good health for better life for society.

MATERIAL AND METHODS

This is a conceptual study, Data is collected from Ayurved Granthas (texts), physiology books and internet.

DISCUSSION

Activities which produce exertion to the body are known as Vyayama. Healthy growth, brilliant complexion, well manifest divisions of the body, keen digestive fire (power of digestion), absence of lassitude, stability, feeling of lightness, cleanliness, ability to withstand exertion, fatigue, thirst, heat and cold; and best of health, all these accrue from physical exercises, nothing also than it (physical activity) exists which is best to reduce corpulence (obesity), enemies will not be able to vanquish/ defeat the person who does exercises habitually; old age does not invade him quickly, the muscles of the body become stable (strong) in the person who does exercises daily habitually. Diseases will not occur in persons who do physical exercises and get their

body trampled by foot (by others) just as small animals do not go near the lion; it makes the body beautiful to look at even of those persons who are deficient in age, physique and qualities. Even incompatible (unhealthy) foods consumed by person who indulge in physical exercises, foods which are either properly cooked or improperly cooked get digested without any trouble. Physical exercises are always beneficial for strong persons, and who consume fatty foods; it is most beneficial for these persons especially during cold and spring seasons. Exercises should be done daily in all the seasons by men who desire their own wellbeing. Physical exercises should be done to the level of half of the strength of the person. Otherwise, it will kill him; when Vayu (Vata) residing in the region of the heart comes up through the mouth (in other words- more upward breathing) that is the sign of half the strength of the person. Exercise should be done in accordance with age, strength, physique, habitat season and nature of food; otherwise the person gets affected by diseases. Consumption, thirst, loss of taste/ appetite, vomiting, bleeding diseases, dizziness, exhaustion, cough, phthisis, fever and dyspnea are diseases produced by excess of physical exercises. Exercises should be avoided by patients of bleeding disease, emaciation, consumption, dyspnea, cough, injury in the chest (lungs) and by the person who has taken meal just then; who feeling exhausted after meal or copulation, who is suffering from thirst and dizziness.^[4] One should not practise, exercise, laughing, speaking, traveling on foot, sexual activities and night wakings, in excess even if one is accustomed to these. exercise is contra-indicated for persons who are emaciated due to excessive sexual activity, weight lifting and those who are in grip of anger, grief, fear and for the children, for the old persons and for persons having vatika constitution and profession of speaking too much. One should not do exercise while he is hungry and thirsty also.^[5] After doing exercise all the parts of the body should be massaged comfortably.^[6] Regular performance of Vyayama; body is not turned flaccid easily; ageing and grayness do not attack with speed.^[7]

Features of correct exercise

Perspiration, enhanced respiration, lightness of the body, inhibition of the heart and such other organs of the body are indicative of the exercise being performed correctly.^[8] As per yogaratanakara (a grantha) Vyayama should be undertaken up to 'Balardha' level, 'Balardha' level should be judged by the appearance of perspiration over forehead, Nose, body joint region and axilla.^[9]

Modern concepts for physical exercise

The effects of exercise on the Body systems^[10]

The body's main physiological support systems are the musculoskeletal, cardiovascular, respiratory, digestive, immune, nervous and endocrine system.

1. The effects of exercise on the musculoskeletal systems

The skeleton creates a supporting framework and protects the body's vital organs; the bones also act as a reservoir for calcium and other minerals. Weight-bearing exercise strengthens your bones and helps prevent osteoporosis. Exercise also increases muscle strength, coordination, and balance. Your muscles (and connective tissue linking the bones) are important for maintaining upright posture against gravity and enabling movement. They also produce heat. Movement of the joint lubricates them with synovial fluid, reducing stiffness. Stretching exercise can facilitate mobility and flexibility of the joints, increasing your range of motion.

2. The effects on the cardiovascular system

At the centre of the cardiovascular system is your heart. Along with the blood vessels, it forms a network for carrying blood containing oxygen and nutrients of the body, and removing waste (CO₂). Physical training strengthens your heart and normalizes blood pressure, lowering your risk of heart disease.

3. The effects on the immune system

The blood vessels are supported by lymph vessels and nodes (which make your immune cells). the lymphatic system removes toxins and returns them to the blood circulation. Exercise boosts lymph flow thus promoting a health immune system, which is crucial for fighting infections.

4. The effects on nervous system

Your nervous system consists of the brain and nerve. It's function is to receive, store, process and send information. It controls functions such as heart rate and breathing, as well as motor movement. Exercise Calms your nervous system, as a result of better circulation and reduced muscle tension. Recent studies have shown that regular exercise may also improve thinking skills and enhance memory.

5. The effects on the endocrine system

The endocrine system is closely associated with the nervous system, it send Hormones to the body to control growth, blood sugar levels, body temperature and metabolism. Exercise regulates your hormonal balance, enhancing organ function and physical fitness and lifting your mood.

6. The effects on Digestive system

Your digestive system breaks down food into usable nutrients and eliminates waste products. Over time, it tends to get sluggish and works less efficiently. Exercise contributes to proper functioning of the digestive system and aids the elimination waste.

7. The effects on the respiratory system

The lungs provide the body with oxygen, which is necessary for cellular survival. Exercise increases the flow of oxygen- rich blood to the body and contributes to

the elimination of carbon dioxide. The effects of exercise on respiration are seen almost immediately.

The benefits of Regular physical activity^[11]

- Physical exercise improve our health
- Physical exercise reduce risk of cardiovascular disease
- Physical exercise maintains our weight
- Lower blood cholesterol
- Lower the risk of diabetes
- Lower our blood pressure
- Make strong bones, muscles and joints
- Lower the risk of osteoporosis
- Feel better with more energy. feel more relaxed and sleep better
- Reduce our risk of breast and colon cancers
- Improve our mental health and mood
- Increase our chances of living longer
- Keeps happier
- Reverse up our sex life

Therapeutic benefits of Regular exercise^[12]

Practice of regular exercise is an important component of management of many diseases.

Energy Expenditure of Various exercises

Exercise	Energy spent (Kcal/ Min)
Active standing	3
Cooking	4
Making bed	4
Slow walking (3 Km/ H)	4
Fast walking (6 Km/ h)	6
Dancing	7
Active gardening	8
Climbing stairs	11
Prolonged Jogging	12
Swimming (50 M/ min)	15
Running (12 Km/ h)	16

5. Exercise prevents osteoporosis. Regulated exercise program stimulates osteoblastic activity, facilitates bone mineral metabolism and preserves the geometry. Immobilization and inactivity stimulate osteoclastic activity and produce bone loss.

6. Specific exercises are prescribed for treatment of osteoarthritis as they improve muscle strength and front stability.

CONCLUSION

From above description we came to conclusion that Vyayama or physical exercise is essential for healthy life. It maintains our physical as well as mental health. Exercise should be undertaken one's half of the strength. It should be done in all seasons. Excessive exercise should be avoided. Vyayama is contraindicated in children and old persons. We suggest that before going to start Vyayama contact family doctor or family physician, if the person feels feet then exercise start.

1. Practice of regular exercise is known to reduce insulin resistance. Tissue sensitivity to insulin and glucose tolerance improves with exercise. Exercise increase the number of insulin reception and promotes activity of glucose transports. Hence exercise therapy is very useful in the treatment of diabetes mellitus.

2. Regular exercise is known to decrease sympathetic tone. Therefore, exercise like morning walk is the best mode of treatment of hypertension.

3. Exercise improves coronary perfusion and causes neovascularization of myocardium. Therefore, regular practice of slow and mild exercise helps patient suffering from chronic myocardial infarction.

4. Exercise, if practiced regularly decreases body fat mass. Especially, brisk walking in the early morning is very effective in this regard. Physical activities like walking, running, swimming, dancing and jogging known to induce energy expenditure that in the long run is very effective in reducing obesity (see table) therefore, this is the best way to check obesity and obesity- induced disorders.

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IMPORTANCE OF VAIDYA (PHYSICIAN) ACCORDING TO AYURVEDA

¹*Dr. Rajesh Kumar S. Upadhyay and ²Dr. Ujwala M. Divekar

¹Professor & Hod Agad Tantra Avum Vidhi Vaidyak, CSMSS Ayurved Mahavidyalaya Kanchanwadi Aurangabad Maharashtra, India.

²Asso. Professor, Samhita Siddhant Dept. CSMSS Ayurved Mahavidyalaya Kanchanwadi Aurangabad Maharashtra, India.

*Corresponding Author: Dr. Rajesh Kumar S. Upadhyay

Professor & Hod Agad Tantra Avum Vidhi Vaidyak, CSMSS Ayurved Mahavidyalaya Kanchanwadi Aurangabad Maharashtra, India.

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ABSTRACT

According to Acharya Charak the role of physician is in any disturbances in the equilibrium of dhatus is known as disease and other hand the state of their equilibrium is health, health and disease are also defined as pleasure and pain respectively. Health is a state of happiness or pleasure, vikara or disease, on the other hand, the cause of misery or pain. Misery itself is not disease. Excellence in medical knowledge, an extensive practical experience dexterity and purity. These are the four qualities of a physician. Acharya Vagbhat has also elaborated about the qualities of physician in Ashtang sangrah sutra as getting permission from his teacher to practice medicine and such doctor deserves to be called physician. Physician to be unopposed steadfast friendly and polite. Pleasing in appearance, should have read many sciences and knowing about practice knowledge. He has to be mastered in the science and conversant with Arthashastra. The physician who look after the destitute and sick as his own children. He should neither receive any gift from any women in the absence of husband nor talk to her in secrecy and also should avoid the jokes with her.

KEY WORDS: Vaidya, Vish Chikitsak, Ayurveda, Physician.

INTRODUCTION

Good health stands at the every root of virtuous act, acquirement of wealth, gratification of desire and final emancipation. Diseases are destroyers of health, as well being and life. This has manifested itself as a great obstacle in the way of human life. What could be its remedy? With the end in view, they entered into meditation. Then in their vision they found a savior in Indra (and got an assurance to the effect) he the lord of the god would explain the proper way to counteracting the diseases.

Dharma is associated with the soul itself which is be interred from its result. Artha is the attainment of wealth like gold etc. Kama is the fulfillment of desire like embracing women. Moksha is liberation from the world. Health represents the equilibrium of dhatus in the absence of diseases. Thus health is root cause per excellence of the attainment of all these four objects of human life in as much as one suffering from the disease is absolutely incapable of performing any act conducive to the attainment of any of these four objects.

Indra expounded immortal and sacred science of life consisting of three principle i.e. etiology, symptometology and the knowledge of therapeutics as

means to well being Par excellence to healthy and diseased which had earlier been understood by Brahma.

LITERARY REVIEW: A qualified physician is he who is well acquainted with the principles of treatment who is wise, is well-versed in classics and is prompt in action. The patient who is administered proper emesis and purgation therapies by such physician surely attains happiness and the other hand, if a person who only claims to be physician without having any grounding (in the science of medicine) administers these therapies, the patients would subject themselves to further complications because of the excessive or inadequate administration of this therapies. According Astang hridaya The Physician must be efficient having learnt the science in all its meaning (implication) from a preceptor, must have witnessed the therapies (gained practical experiences) and pure/clean (in body, mind and speech).

According Sushrut Samhita important of Vish Vaidya as Enemies engrossed by valour /heroism and those of wicked mind who develop hatred towards the king, generate poison of anger finding, fault in his behavior and try to kill him by poisoning women who desirous of wealth some times administer different kinds of poisons prepared by them .The Person loses life quickly by

engaging himself with vish kanya (Poison girl). Hence the King should be protected from poison always by physician (Vaidya).

Duty of physician or medical practitioners since the prime object of medical profession is service to humanity. A medical practitioner has certain obligation to the state which he must carry out irrespective of financial consideration. These are by convention known as compulsory duties. The rest are known as voluntary duties.

Compulsory duties of physician- Duty refers to obligation to act or refrain from acting from such a way that a patient's medical condition is appropriately diagnosed and managed so that a patient is not exposed to an unreasonable risk of injury.

Duties of Physician

- 1) Duty to exercise a reasonable degree of skill and knowledge.
- 2) Duties with regards to attendance and examination.
- 3) Duties to furnish proper and suitable medicine.
- 4) Duty to give instruction regarding the use of medicine and diet, timing for taking medicine and about adverse reactions and stop the drug in case of reaction.
- 5) Duty to control and warn to patient about his medical condition and treatment.
- 6) Duty towards children and Adults incapable of taking care of themselves.
- 7) Duty to inform patient of risks.
- 8) Duty with regard poisons he should assist the Police
- 9) Duty to notify certain diseases.
- 10) Duties with regards to operation.
- 11) Duties under Geneva Conventions.
- 12) Duties with regard to consultations.
- 13) Duty in connection with X ray examination.

Aim and Objectives

To study importance of vaidya according Ayurveda.

Objectives

- 1) To detail study about vaidya according Charak, Sushrut, Vagbhat.
- 2) To study about type of vaidya.
- 3) To study about Vish Vaidya and responsibilities.
- 4) To study in detail about character, Vaidya Gun and qualities.
- 5) To detail study about responsibilities of vaidya chaturvidha vaidya vriti.
- 6) To study in detail about vish vaidya in ancient time.
- 7) Requirement knowing about present medical laws, various related medical act.

MATERIAL AND METHODS

On the basis of Ayurved granthas like Charak Samhita, Sushrut, Vagbhatta, Astang Sangraha who described about qualities, properties and work of Vaidya or Physician in ancient time. The detail content of and references are analysed from available texts.

Methods: Descriptive and conceptual Study.

CONCLUSION

- 1) After studying the all the aspect we came to conclusion that the role of vaidya or physician is very important for treating patient.
- 2) The Royal physician is he who is well versed with various causative factors or nidana of all diseases with their detailed symptoms and signs (linga) along and knowledge of treatment measure (prashamana) along with roganam apunarbhava i.e. measures required to prevent the relapse or recurrence of the diseases.
- 3) The physician should be well expert in practical medicine are considered for the treatment.
- 4) The physician should do his duty as described in granthas like Charaka, Sushrut, and Vagbhatta and other texts.
- 5) The Physician should follow all related medical act, CPA, CSA, and all new amended act and rules for practice.

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AN ETIOPATHOLOGICAL STUDY OF SHEETAPITTA, W.S.R.TO URTICARIA

Dr. Prakash Mane^{*1}, Dr. Dahake S. J.², Dr. Jyotsna Gulhane³, Dr. P. B. Jondhale⁴, Dr. Surekha Atram⁵, Dr. Mangesh Udmale⁶, Dr. Sachin Rohani⁷, Dr. Sanjay Babar⁸

¹Associate Professor Rognidan Dept., Dr. D.Y. Patil Ayu. College & Hosp. Pune (MS).

²Professor & HOD Rasshashtra Bhaishajya kalpana Dept., CSMSS Ayurved College, Kanchanwadi, Aurangabad (MS).

³Professor & HOD Rasshashtra Bhaishajya kalpana Dept., S.R.C. Ayurved College, Chikhali, Buldhna (MS).

⁴Professor Kaychikitsa Dept., Dr. D. Y. Patil Ayu. College & Hosp. Pune (MS).

⁵Assistant Professor Kaychikitsa Dept., Dr. D. Y. Patil Ayu. College & Hosp. Pune (MS).

⁶Assitant Professor Rognidan Dept., Dr. D. Y. Patil Ayu. College & Hosp. Pune (MS).

⁷Assistant Professor Rognidan Dept., Dr. D. Y. Patil Ayu. College & Hosp. Pune (MS).

⁸Associate Professor, Shalytantra Dept., Dr. D. Y. Patil Ayu. College & Hosp. Pune (MS).

***Corresponding Author: Dr. Prakash Mane**

Associate Professor Rognidan Dept., Dr. D.Y. Patil Ayu. College & Hosp. Pune (MS).

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INTRODUCTION

The description of Sheetapitta, Udarda and Koth simulates with description of etiology and clinical features of Urticaria. Urticaria is a troublesome disease that manifests as wheals which are edematous pink or red, intensively itchy at their onset surrounded by a bright red flare. It generally occurs between the ages of 20 to 40 years. About 20-30% of individuals have at least one attack of Acute Urticaria in their life time. Acute and Chronic types of Urticaria have a wide variety of allergic etiologies. The common physical Urticarias include Cold Urticaria, Solar Urticaria, Pressure Urticaria, Dermographism and Cholinergic Urticaria. Angioedema occurs alone or in combination with Urticaria, including Urticular vasculitis and physical Urticaria. Urticaria is one of the disease described under allergies according to modern concepts abides equivalent clinical pictures of Sheetapitta, Udarda and Koth. Sheetapitta, Udarda and Koth follows immediately after Kushta in Madhava nidana and Yogaratnakara, as this entire manifest in skin and are caused by three Doshas. Sheeta pitta is diagnosed clinically based on symptoms like Varateedashtavat Shotha, Kandu, Raga being caused or aggravated by exposure to cold or even moist wind. Presentation of Udarda also includes (Swayathu) swelling resulted from Kapha, caused by contact with cold water (Sheeta paneeya samsparsa) particularly during cold season (Shishirartha). Hemadri also mentions Vakshoabhishyanda (discomfort in the chest region), Sheethavepathu (shivering from cold), Sheetapaneeya samsparsa (swelling caused by contact with cold water), Raga (accompanied by redness) and Kandu (itching) as Lakshana of Udarda. Koth presents with almost similar symptom but only difference is the etiological factor Asamyak vamaana or Chardi vegavorodha⁷ (improper emesis / suppression of the urge for vomiting). Similar features are mentioned as symptomatology of Urticaria in modern medical science. Common symptoms of Urticaria comprise intense itching, erythematous intra dermal vascular reaction manifesting as wheals or hives associated with burning sensation, fever and vomiting. Usually only symptomatic treatment is received by patients in primary setup leading to symptomatic relief, but the underlying actual pathology is not properly treated resulting in relapse. But it can be effectively managed by Ayurveda system of medicine. Therefore through this study an effort has been made to analyze etiology and pathogenesis of various types of Urticaria in scientific grounds and classify them under the headings of Sheetapitta, Udarda and Koth, and understand the etiopathogenesis, which would be contributory for initiating preventive steps and effective management.

MATERIALS METHODS AND OBJECTIVE

A clinical study to compare etiology, types, signs and symptoms of Urticaria with Sheetapitta, Udarda and Koth.

Sampling frame: Patients selected from OPD and IPD of KC Department of Dr. D. Y. Patil Ayurved College,

Pimpri Pune (M.S.) and other referrals were included in present study.

Study Design: Clinical observational study

Diagnostic criteria

Patients presenting with dermal swellings known as wheals associated with itching. Each episode of individual lesions which appear and disappear within 24

hrs.' or persists more than 24 hrs with or without arthralgia and myalgia.

Inclusion Criteria: Patients aged between 16 to 60 years of either sex fulfilling diagnostic criteria.

Exclusion Criteria: Patients suffering from other skin diseases such as Eczema, Psoriasis and any other major systemic disorder that may interfere in the course of study. Collection, Tabulation and Statistical Tests: 30 Patient fulfilling diagnostic criteria and inclusion criteria were categorized in to following 3 sub-groups as

Group A- Cold Urticaria,

Group B - Pressure Urticaria,

Group C - Solar Urticaria

And subjected to physical examination, lab investigation followed by detailed history recording with the help of questionnaire related to etiopathogenesis of Urticaria, Sheeta pitta, Udarda and Koth. Later an effort was made to compare sign and symptoms of Sheeta pitta Udarda and Koth with different types of urticaria and find etiology, thereby study etiopathogenesis. Statistical

analysis was carried through SSPS software. The outcome was assessed with relevant statistical tests like Chi Square Goodness of fit to elicit the etiological factors.

P=0.01- 0.001 is considered as statistically highly significant,

P=0.01-0.05 is considered as statistically significant and P> 0.05 is considered as non-significant.

OBSERVATION AND RESULTS

In the present study 50 patients presenting with Urticaria were screened, among them 30 patients who fulfilled the diagnostic and inclusion criteria were registered, out of which 24 patients had Sheeta pitta and 6 patients had Udarda, but none of the patient suffered from Koth in the present study. Among total 30 patients of Urticaria, considering subtypes of Urticaria 20 patients presented with Cold Urticaria, 7 patients with Pressure Urticaria and 3 patients had Solar Urticaria. Based on case Performa and specially designed questionnaire, patients were observed and analyzed as follows.

Table 1: Signs and symptoms of Sheeta pitta, Udarda and Koth.

S. N.	Sheeta pitta Lakshana	N=24		Udarda lakshana N=6			Koth lakshana N=0	
			%		%		0	
1	Varateedashatavat Shotha	24	100	Varateedashatavat shotha	6	100	Varateedashatavat shotha	0
2	Kandu	24	100	Kandu	6	100%	Ati kandu	0
3	Raga	10	41.66%	Raga	6	100%	Raga	0
4	Chardi	03	12.5%	Uroabishyanda	2	33.33%	Bahumandala	0
5	Daha	20	83.33%	Sheethavepathu	4	66.66%	Kshanikotpada vinasha lesions	0
6	Jwara	5	20.83%	-	-	-	-	

Table 2: Distribution Of Chief Complaints And Associated Complaints In Cold Urticaria, Pressure Urticaria, Solar Urticaria.

S. N.	Chief complaints	Cold Urticaria N= 20		Pressure Urticaria N= 07		Solar Urticaria N= 03	
		N	%	N	%	N	%
1	Wheal	20	100	07	100	03	100
2	Itching	18	75%	07	100	03	100
3	Erythematic	19	79%	07	100	03	100

Table 3: Associated Complaints =Total 30 Patients.

S. N.	Chief complaints	Cold Urticaria N= 20		Pressure Urticaria N= 07		Solar Urticaria N= 03	
		N	%	N	%	N	%
1	Vomiting	1	5%	0	0%	0	0%
2	Pricking sensation	10	50%	4	57.15%	2	66.66%
3	Burning sensation	12	60%	3	42.85%	1	33.33%
4	Fever and joint pain	07	35%	0	0%	0	0%

Table 4: Distribution of Sheeta pitta Udarda and Koth in Cold Urticaria, Pressure Urticaria.

S. N.	Sheeta pitta w.r.t. Urticaria	Sheetpitta -24		Udard -06		Koth- 0	
		N	%	N 6	%	N	%
1	Cold Urticaria N= 20	16	80%	4	20%	0	0
2	Pressure Urticaria N= 07	05	71.42%	2	28.58%	0	0
3	Solar Urticaria N= 3	03	100	0	0	0	0

Table 5: Nidanas of Urticaria- subtype Cold Urticaria manifesting as Sheeta pitta.

Nidana	Statistical significance
Excess lavana (salty), Excess amla (sour), Navanna (freshly harvested grains) Cold water after hot drinks, Milk and curd together, Pishtanna (fermented foods) ,Oily food, Dadhi (curd), Chapatti, Masha (blackgram), Sarshapa (mustard), Dal, Peanut , Ragi ,Exposure to cold weather.	Statistically highly significant with p value 0.000
Intake of sour fruits with milk, Curd at night, Fish with milk, Refrigerated food items, Different fruit items like strawberry, jackfruits etc, Horse gram, Non-veg food items like egg, fish, chicken, shellfish, mutton, beef, Alcoholic preparations, Coffee, Tea.	Statistically non-significant with P value >0.05.

Table 06: Nidanas in Urticaria subtype Pressure Urticaria manifesting as Sheeta pitta.

Nidana	Statistical significance
Exposure to cold weather Pishtanna, Chapatti, Banana, Masha,	Statistically significant with p value 0.034.
Milk and curd together, Sour fruits with milk, Maida, Oily foods, Refrigerated food, Excess lavana, Excess amla, Peanut, Dadhi, Vidahi ahara, Fish with milk Bakery, Ragi, Curd at night, Cold water after hot drinks, , Refrigerated food items, Different fruit items like strawberry, jackfruits etc, Horse gram, Non-veg food items like egg, fish, chicken, shellfish, mutton, beef, Alcoholic preparations, Coffee, Tea.	Statistically non-significant with p value >0.05.

Table 07: Nidanas in Urticaria- subtype Solar Urticaria manifesting as Sheeta pitta.

Nidana	Statistical significance
Vidahi Ahara Peanut	Statistically highly significant with p value 0.000.
Curd at night, Cold water after hot drinks, Milk and curd together, Sour fruits with milk, Pishtanna, Oily food, Dadhi, Dal, Chapatti, Excess lavana, Excess amla, Navanna, Masha, Ragi, Bakery, Cheese, Tea, Coffee, Exposure to cold weather, Krodha (anger) Maida, Fish with milk, Refrigerated food items, Different fruit items like strawberry, jackfruits etc, Horse gram, Non-veg food items like egg, fish, chicken, shellfish, mutton, beef, Alcoholic preparations Coffee, Tea.	Statistically non-significant with p value >0.05.

DISCUSSION

In the present study out of total 30 patients, maximum 21 patients belonged to age group between 20-30 years. This study shows a greater incidence of Urticaria in younger age. According to Sushruta samhita, youvana is the period of natural aggravation of Pitta Dosha. This may lead to Rakta Dushti due to indulging in Nidanas, leading to Sthanasamsraya, causing Tvak vikaras. A dominance of female (N=18) more affected than male (N=12_) is seen. The universal data also suggests more prevalence of Urticaria in women supports present observation. All 30 patients presented with all cardinal symptoms of Urticaria like wheal, itching and erythematic. Consideration of sub types of urticarial shows, Maximum number of patients i.e., 20 (66.66%) had cold Urticaria. Pressure Urticaria was found in

07(23.33%) and Solar Urticaria in 3(10 %). It shows higher incidence of Cold Urticaria compared to other 2 forms of Urticaria Out of total 30 Urticaria patients 24 (80%) presented as Sheeta pitta and only 6 (20%) patients presented with Udarda and none of the patients suffered from Koth. A higher incidence of disease Sheeta pitta compared to Udarda and Koth was observed in the present study with special reference to urticaria. Analysis of Nidana of patients suffering from urticaria revealed that, 24 patients suffering from subtype Cold Urticaria, showed excessive indulgence in aharaja nidanas like pishtanna (Kapha Pitta Prakopa), Dadhi (Kapha Pitta,Rakta Dushaka) , Intake of cold water after hot drinks, milk and curd together (considered as Virudha and Tridosha kara), Excessive consumption of oily foods, excess Amla11, Masha (Pitta, Rakta Prakopaka),

Chapatti, Navanna (Kapha Vardhaka), Excess Lavana (leads to Pitta Dushti), Mustard (Tridoshakara), Intake of dal (cause Urticaria by direct histamine liberation or by allergic sensitivity) and Viharaja Nidana exposure to cold weather. The intake of peanut (can produce Urticaria by direct histamine liberation or by allergic sensitivity.) among patients of Cold urticaria and Solar urticaria was statistically significant in manifestation of Sheetapitta. Analysis of Nidana among 8 patients suffering from sub type Pressure Urticaria showed that following Nidanas were statistically significant suggesting a definite role of these Nidanas in manifestation of Sheetapitta. Pishtanna, chapatti, banana, black gram and Viharaja Nidana include exposure to cold weather. Among the Aharaja Nidanas in Urticaria – subtype Solar Urticaria manifesting as Sheetapitta, following were statistically significant, intake of fast food and peanut. Sheeta pitta manifests as skin rash notable as dark red, raised, itchy rashes. In Ayurveda it is considered as Tridoshajanya (Kapha+Pitta+Vata), which gradually spreads to the skin (Twacha) and the other tissues (Raktadi Dhatu). It is diagnosed clinically based upon the symptoms like Raga, Varateedamshtavat Shotha, Kandu and these symptoms are triggered or aggravated by exposure to cold or even moist wind. Udarda is a Kaphaja vikara and manifests with symptoms like Vaksho abhishyanda, Sheeta vepathu, Sheetambu sparsajanya sophra, Raga and Kandu. The same has been described in modern symptomatology of Urticaria, most often has an unknown, nonspecific etiology, but can be related to medications, food and similar vascular stimulating agents. The activation of mast cells and their release of mediators is the unifying mechanism of most Urticaria. Histamine release is associated with mast cell degranulation. There is initially erythema at the injection site secondary to vasodilatation, next the edema leads to a hive or edematous plaque. In the final stage there is an erythematous ring surrounding the hive as the axonal reflex produces more vascular changes. The common symptoms are usually intensely itching intra dermal vascular reaction (wheals or hives) associated with burning sensation, fever and vomiting. According to Madhavanidana, Prakupita Vata and Kapha (PradushtauKaphamarutau) due to Sheetamaruta Samsparshatadi Nidana, in association with Pitta (Pittenasahasambhooya) spreads internally and externally (Bahir-Antahvisarpatah) and results in manifestation of Sheetapitta-Udarda and Koth. Exposure to Sheethamarutha leads to Pradushana of Kapha and Vata due to Samanaguna (Sheethaguna). This Vata and Kapha combine with pitta and circulate all over the body. Bahirvisarpatha of this combination of Vikrutha Tridosha results in Utsannamandala over the Twak. Antharvisarpatha of this combination of Vikrutha Tridosha, resides in Raktadi dhatus and produces other symptoms. The clinical manifestation of Sheetapitta, Udarda and Koth has close resemblance to each other and with Urticaria. General characteristic of nearly all these conditions is Varatidamshtavat shota associated with Kandu and Raga. Based on the predominant Doshas

involved in the pathogenesis, these three can be distinguished from one other. This implies that Kapha-pitta doshas cause Udarda and Vatapitta predominant Doshas cause Sheetapitta and Kapha pitta Pradhana Rakta Dushti leads to Koth. Hence it can be put forth that in Sheetapitta pitta Samsrustha Vata plays a dominant role and in Udarda, Pitta Samsrustha Kapha has a significant role. Possible Samprapthi (etiopathology) of Sheetapitta, Udarda and Koth has contributions from both external as well as internal mechanism. Dosh Dushya Samoorchana leads to Dusti of Tridoshas mainly Brajakapitta leading to Agnimandya which can be considered as release of different mediators by hypersensitivity reactions resulting in different types of urticaria. The eliciting factor voiced for Urticaria especially for Cold Urticaria include cold air/water/wind/food/objects is similar to the Nidana mentioned for Sheetapitta, Udarda and Koth ie, Sheetamaruta Samsparsha /Sheeta Paneeya Samsparsha. Prakriti of a person, Rithu (climate variation), Desha, Dosh condition, Agni, are key factors for these disorders to appear.

CONCLUSION

The clinical study shows that Indulgence in Nidanas like intake of curd at night, intake of cold water after hot drinks, Pishtanna, oily foods, curd, chappatti, consumption of excess Lavana, intake of excess Amla, Navanna, Masha, Sarshapa, dal, peanut has a role in the causation of Sheetapitta with special reference to Cold Urticaria. Indulgence in Nidanas like intake of Pishtanna, chapatti, banana, Masha, Navanna and indulgence in exposure to cold weather has a role in causation of Sheetapitta with special reference to Pressure Urticaria. Indulgence in Nidanas like peanut and Vidahi Ahara has a role in causation of Sheetapitta with special reference to Solar urticaria. Hence it is clear that Nidanas mentioned in Ayurveda like Sheeta Maruta Samsparsha, Sheeta Paneeya Samsparsha has a role in manifestation of Sheetapitta, Udarda and Koth. Incidence of Koth is uncommon. Sheetapitta and Udarda can manifest as Cold urticaria, as Pressure urticaria and as solar urticaria.

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EFFICACY OF KARANJ BEEJADI LEP IN VICHARCHIKA

W.R.T.ECZEMA

¹*Dr. Prakash Mane, ²Dr. Dahake S. J., ³Dr. Jyotsna Gulhane, ⁴Dr. P. B. Jondhale,
⁵Dr. Surekha Atram, ⁶Dr. Mangesh Udmale, ⁷Dr. Sachin Rohani and ⁸Dr. Sanjay Babar

¹Associate Professor Rognidan Dept., Dr. D.Y. Patil Ayu. College and Hosp. Pune (MS).

²Professor and HOD Rasshashtra Bhaishajya Kalpana Dept., CSMSS Ayurved College,
Kanchanwadi, Aurangabad (MS).

³Professor and HOD Rasshashtra Bhaishajya Kalpana Dept., S.R.C. Ayurved College,
Chikhali, Buldhna (MS).

⁴Professor Kaychikitsa Dept., Dr. D.Y. Patil Ayu. College and Hosp. Pune (MS).

⁵Assistant Professor Kaychikitsa Dept., Dr. D.Y. Patil Ayu. College and Hosp. Pune (MS).

^{6,7}Assistant Professor Rognidan Dept., Dr. D.Y. Patil Ayu. College and Hosp. Pune (MS).

⁸Associate Professor, Shalytantra Dept., Dr. D.Y. Patil Ayu. College and Hosp. Pune (MS).

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*Corresponding Author

Dr. Prakash Mane

Associate Professor

Rognidan Dept., Dr D.Y.

Patil Ayu. College and Hosp.

Pune (MS).

INTRODUCTION

Most of the skin disorders are developed from abnormal functioning of the agni, defective dietary habits like unsuited foods, irregular meals pattern and habits like smoking, alcohol, psychological stress & causing life style related skin diseases. Vicharchika is one of the disease mentioned in ancient science among the Kushtha. Vicharchika is categorized in different ways i.e. Kshudra kushtha and Kshudra roga. All Kushthas are having Tridoshaja origin, hence Vicharchika can be explained in similar manner i.e. Kapha is responsible for Kandu, Pitta is responsible for Srava and Shyava indicates the presence of Vata. even with its Tridosha origin, various Acharyas have

mentioned different dominances in Vicharchika i.e. Kapha, Pitta, Vata -pitta pradhana, which also suggest specific symptom complexes. As per the symptoms and pathogenesis, Vicharchika has been directly associated with eczema (dermatitis) in modern science, with symptoms kandu (excessive itching), Pidaka (papules, vesicles, pustules), Shyava (erythema with discolouration), Bahusrava (profuse discharge, oozing), Raji (thickening of skin), Arti (pain), Ruksha (dry lesion), etc. Dermatitis is being used as a synonyms of eczema by most of

the dermatologists. in recent days; modern science has reached the top by great advances, particularly when dermatology topic is concerned and also in regards to availability of powerful antibiotics, antifungal, antihistaminic, steroids, etc. But better management could not be searched out till today. Few drugs are available for symptomatic relief only. Skin diseases like eczema get a suitable atmosphere especially in developing countries, because of fast life style, industrial and occupational hazards, repeated use of chemical additives etc nowadays, whole world is gradually turning towards Ayurveda for safe and complete cure of diseases. Especially in the field of skin problems ayurveda can contribute remarkably. Topical application of Karanj Beejadi Lep is said to be very effective in the treatment of Vicharchika. But previously no study was carried out to evaluate the effect of this lepa. Hence this study was planned to evaluate the effect of Karanj Beejadi Lep. Topical use of Karanj Beejadi Lep with Gomutra were subjected to clinical trial in this study.

AIMS AND OBJECTIVES

1. To evaluate the effect of Karanj Beejadi Lep with Gomutra in management of Vicharchika and associated symptoms of Vicharchika like pruritus, papules and hyperpigmentation etc.
2. To make a follow up for any relapse of symptoms of Vicharchika or recurrence of Vicharchika etc.

MATERIAL AND METHOD

Source of Data

Total 30 Cases of Vicharchika were selected randomly from OPD of Kayachikitsa in Dr. D.Y. Patil Ayurved College, Pune (Maharashtra).

Diagnostic Criteria

Study Design: Single Blind Observational Clinical study

1. Subjective Criteria: Patients will be diagnosed on the basis of sign and symptoms of Vicharchika as per Ayurvedic symptomatology. The patients having following signs and symptoms were diagnosed as suffering with Vicharchika (Eczema).

- Kandu (Pruritus)
- Pidika (Pappules)
- Shyava (Hyperpigmentation)
- Bahusrava (Discharge)

- Ruja (Pain)
- Rukshata (Dryness)
- Shotha (Thickness of skin)

2. Objective criteria

- Routine hematological investigations like Hb %, TLC, DLC, ESR.
- Routine urine examination.

Inclusion Criteria

1. Patients suffering from vicharchika in between the age group of 15-70 years were selected.
2. Patients possessing signs and symptoms on the basis of diagnostic criteria were selected.

Collection, Tabulation and Statistical Tests: Around 30 patients were examined in which 24 Patient fulfilling diagnostic criteria and inclusion criteria were selected.

Exclusion Criteria

1. Patients above 70 years and below 15 year were excluded.
2. Patients suffering from AIDS, Cancer, TB, DM and severe systemic disorders were excluded.
3. Patients of Vicharchika having secondary infections were excluded.

Method for the Preparation of Drugs

1. Karanj beej Churna (Pongamia Pinnata) 3gm
2. Chakramard Churna (Cassia Tora) 3gm
3. Kustha Churna (Saussurea Lappa) 3gm
4. Gomutra 10 ml

All Churnas are mixed well which will be ready for one time lepan.

Dosage: To be applied topically/Q.S.

Duration: 30 days.

Follow-up: After 7th and 15th day of initiation of trial.

Method of Research

Assessment criteria

Each patient is overall assessed weekly after the onset of treatment and twice during follow up with one month gap in between. Relevant data is collected and documented on the detailed case proforma. Assessment of the condition is done adapting standard methods of scoring. Subjective parameters are analyzed statistically with Paired- t test.

Standard Visual analogue scale

The assessment of signs and symptoms are done using the standard visual analogue scale as; Cured- 0; Mild- 1.

OBSERVATIONS AND RESULTS

- 1. Kandu (Itching- Pruritus)**) The Mean score observed before the treatment was 3.50 After the treatment value of 7th day was reduced to 2.34, with effect of treatment showed 25% improvement, on 14th day reduced to 1.25, with effect of treatment showed 45.66% improvement, on 21st day reduced to 1.12, with effect of treatment showed 58.33% improvement, on 30th day reduced to 0.42, with effect of treatment showed 86% improvement, in '**kandu**' with statistically significant ($P < 0.0001$).
- 2. Pidika (Papules):** The Mean score observed before the treatment was 2.80 After the treatment value of 7th day was reduced to 1.90, with effect of treatment showed 28.62% improvement, on 14th day reduced to 1.36, with effect of treatment showed 49.51% improvement, on 21st day reduced to 0.81, with effect of treatment showed 67.25% improvement, on 30th day reduced to 0.33, with effect of treatment showed 86.40% improvement, in '**Pidika (Papules)**' with statistically significant ($P < 0.0001$).
- 3. Shyava (Hyper pigmentation):** Mean score observed before the treatment was 2.56 After the treatment value of 7th day was reduced to 2.44, with effect of treatment showed 5.10% improvement, with statistically significant (0.0351) on 14th day reduced to 1.53, with effect of treatment showed 40.63% improvement, on 21st day reduced to 1.22, with effect of treatment showed 54.51% improvement, on 30th day reduced to 0.85, with effect of treatment showed 63.91% improvement, in '**Shyava**' with statistically significant ($P < 0.0001$).
- 4. Srava (Oozing):** Mean score observed before the treatment was 2.53 After the treatment value of 7th day was reduced to 1.84, with effect of treatment showed 12.10% improvement, with statistically significant (0.041) on 14th day reduced to 1.43, with

effect of treatment showed 42.63% improvement, on 21st day reduced to 1.20, with effect of treatment showed 51.45% improvement, on 30th day reduced to 0.75, with effect of treatment showed 68.30% improvement, in **Srava (Oozing)**: with statistically significant ($P < 0.0001$).

5. **Ruja (Pain)**: Mean score observed before the treatment was 3.45 After the treatment value of 7th day was reduced to 2.44, with effect of treatment showed 15.10% improvement, with statistically significant (0.045) on 14th day reduced to 1.45, with effect of treatment showed 45.60% improvement, on 21st day reduced to 1.12, with effect of treatment showed 52.51% improvement, on 30th day reduced to 0.68, with effect of treatment showed 61.91% improvement, in '**Ruja**' with statistically significant ($P < 0.0001$).
6. **Rukshta (Dryness)**: The Mean score observed before the treatment was 3.50 After the treatment value of 7th day was reduced to 2.34, with effect of treatment showed 25% improvement, on 14th day reduced to 1.25, with effect of treatment showed 45.66% improvement, on 21st day reduced to 1.12, with effect of treatment showed 58.33% improvement, on 30th day reduced to 0.42, with effect of treatment showed 86% improvement, in '**Rukshata**' with statistically significant ($P < 0.0001$).
7. **Thickness (shotha)**: Mean score observed before the treatment was 3.45 After the treatment value of 7th day was reduced to 2.44, with effect of treatment showed 15.10% improvement, with statistically significant (0.045) on 14th day reduced to 1.45, with effect of treatment showed 45.60% improvement, on 21st day reduced to 1.12, with effect of treatment showed 52.51% improvement, on 30th day reduced to 0.68, with effect of treatment showed 61.91% improvement, in '**Thickness**' with statistically significant ($P < 0.0001$).

Table No 01: Viewing the Effect of Treatment.

S.N.	Symptoms	Mean Score		Difference D	% Relief
		BT	AT		
1	Pruritus	2.80	0.33	2.47	86.40%
2	Pappules	2.56	0.85	1.71	63.91%
3	Hyper pigmentation	3.45	0.68	2.77	61.91%
4	Discharge	3.5	0.42	3.08	86%
5	Pain	2.53	0.75	1.78	68.30%
6	Dryness	2.80	0.33	2.47	86.40%
7	Thickness	2.53	0.75	1.78	68.30%

Table No 02: Statistical Analysis.

S.N.	Symptoms	Paired Test				Significant
		SD	SEM	t Value	P Value	
1	Pruritus	0.67	0.06	36.94	<0.0001	Yes
2	Pappules	0.48	0.07	31.04	<0.0001	Yes
3	Hyper pigmentation	0.45	0.06	59.65	<0.0001	Yes
4	Discharge	0.45	0.07	30.82	<0.0001	Yes
5	Pain	0.37	0.03	29.30	<0.0001	Yes
6	Dryness	0.67	0.06	36.94	<0.0001	Yes
7	Thickness	0.37	0.03	29.30	<0.0001	Yes

DISCUSSION

The present study was completed to evaluate the efficacy of an Ayurvedic formulation on Vicharchika. Topical administration of drug appears to be superior therapy due to its action in reducing super infections and necrotic material via enhanced local defense systems and collagenolytic activity. As per anatomy of skin just below the top layer of skin a thicker dermis is present where nerves, hair follicles, sebaceous glands, sweat glands, blood vessels and lymph vessels are situated. Under the dermis is the subcutaneous fatty layer. Applying ointment to the skin is a quick and efficient way to introduce them into the blood, nerves and lymph. Many ointments are lipophilic, meaning that by their molecular design they want to jump into tissues containing protein, like our skin. In present study, Karanj Beejadi Lep with Gomutra were selected for local application. All drug are having having Tikta, katu, and Ushna Virya shows Vatkaphahara Karma, Krmighna, Kushtaghna Kandughna action. And also due to laghu and Ruksh guna helps to minimize the Srava. Hence all are useful in breaking of etiopathogenesis of Vicharchika. Topical drugs also enhance the skin metabolism, so healthy repairing may also take place. Gomutra which are also helpful media for cutaneous absorption by his Vatkaphaghna properties So all actions are favorable to break the etiopathogenesis of skin. In clinical experience, this lepa was found effective in wet lesion.

CONCLUSION

The present study conclude that the drugs are effective in relieving signs and symptoms of vicharchika. This therapy was found significantly effective in management of vicharchika. No improper effect was noted during treatment and follow up period, however, this is only a beginning study conducted as a part of educational research program with small number of patients, in fixed duration of time. Further multicentre, clinical studies are required with larger sample to establish vicharchikahara effect of these drugs. On the basis of the results of

this dissertation, Karanjbeejadi lepa may be recommended as one of the drugs for the treatment of Vicharchika.

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Role of “Yonidhavana” in Stree roga.

Purwat Chaitanya Anandkumar*¹, Havale Amol ², Deshmukh J. S.³

1. PG Scholar,
2. Guide and Associate Professor
3. H. O. D. and Professor

Stree Roga And Prasutitantra Dept. C. S. M. S. S. Ayurved College,
Kanchanvadi, Aurangabad.

*Corresponding Author: cpurwat@gmail.com ; Mob.No.:7774044073

Abstract:

There are so many *Sthanik Chikitsa* (Local Therapies) explain in *Ayurvedic Stree Rogas* These procedures basically deal with the disorders of *Tryavarta Yoni* (Three coverings of Vagina). Some of these local therapies shows amazing results in the management of *Stree Rogas* like ‘Vandhyatava ‘These extraordinary local therapies should be highlighted and of course used in the management of *Stree Rogas*

In this Study all these Local therapies are reviewed through ancient texts and discussed with respect to their definitions, Sites of application, duration of time, Indications, Procedures. *Yonidhavan* is one of them, which is more useful as *sthanik chikitsa* in *streeroga* and *prasutitantra*.

Different *Taila, Ghrita* are used for *Yonidhavan*.

This study with its simple and appropriate terms will definitely help the Vaidyas to reach to the depth of the concept and will subsequently prove to be helpful to give admirable and satisfactory outcomes to Vaidyas.

Keywords - *Sthanik Chikitsa, Tryavarta Yoni, Vandhyatava, Taila, Ghrita*

Introduction:

Stree roga (Gynecology) deals with the changes that occur during all stages of a woman’s life such as puberty, reproductive age and menopause and

also the diseases that occur during these stages. In general gynecological

disorders are treated first by *SHAMAN* and *SHODHAN* chikitsa i.e. application of five therapies known as *PANCHAKARMA*. These are the procedures in Ayurvedic therapeutics which helps in getting rid of different ailments. Besides these procedures there are some *Sthanik Chikitsa in Ayurvedic Gynecology prescribed by Ancient Acharyas*.

Chikitsa described in two parts –

1. *ABHYANTAR CHIKITSA*
2. *STHANIK CHIKITSA*

In *streerog*, *Yonivyapada* and *Yoniroga* are described. As compared to *yonivyapada*, palpable pathology is more observed in *yoniroga*.

Abhyantar chikitsa breaks *Dosh-dushyasammurchhana* and cures disease. But if *Sthanik Dosh-Dushti* is more then *Sthanik-chikitsa* is more important.

Women always face very common gynecological problems like white discharge, itching at vulva, foul smelling vaginal discharge, burning micturation etc. In such problems *Sthanik Chikitsa* have given excellent results and these local therapies should be practiced for admirable results in the above mentioned gynecological problems.

STHANIK CHIKITSA-

It means specific treatment given locally.

Sthanik Chikista are,

- 1) *Yoni dhavan* (cleaning of vagina)
- 2) *Yoni pichu*
- 3) *Yoni dhupan* (Vaginal fumigation)
- 4) *Yoni lepana*(Vaginal painting)
- 5) *Yoni varti* (Vaginal suppository)
- 6) *Yoni puran*
- 7) *Yoni Parishek*
- 8) *Utterbasti*

Yonidhavan chikitsa described as follow

Yonidhawana (Cleaning of Vagina)

Dhawana karma of *yonis* is termed as *Yonidhawan*. *Acharya sushruta* and *Vagbhat* consider *dhawana* as *prakshalana*. *Dhawana* means cleaning or purification of wound with water and other medicated material. ^{[1] [2]}

Sthana (Site) - *Prathamavarta* (Vagina)
^[3]

Duration – 8 days ^[3]

Timing - *Rutukala* (After 5th day of menses for 8days)

Time - 1 to 1.5 Min. ^[3]

Drugs Used - *Kwatha* (Decoction), *Kshirpaka* (Medicated Milk), *Siddha Jala* (Medicated Water), Oil^[3]

Quantity - 1litre of decoction, 250 ml of oil

Indications -

1. *Yoni Srava*^[4] (Vaginal Discharge)
2. *Yoni Kleda*^[5]
3. *Yoni Arsha*^[6] (Vaginal Polyps)
4. *Artavdushti*^[7]
5. *Yoni Kandū* (Vaginal Itching)
6. *Yoni Paicchilya*^[8]

Material:

1. Enema Pot
2. Sterile Catheter
3. Cotton
4. Maincentosh
5. Hand Glove

Procedure:

1. Proper aseptic precaution should be taken before starting the procedure.
2. Patient is given lithotomy position.
3. The rubber maincentosh is placed underneath patients waist, one end of which lies in the bucket.

Sterile rubber catheter is inserted into vagina.

4. Enema pot filled with decoction is kept at 5 feet distance with luke warm decoction *prathamavarta* (Vagina) is washed out.^[3]
5. After the procedure the vulva is dried with cotton.
6. Then procedure is repeated on the respective days. The drugs used for *Yonidhawana* are antiseptic, and have the benefit of healing the wound.

Yonidhavan used in

- *Pittaja Yonivyapad* – *Panchavalkal kwath*^[9]
- *Kaphaj Yonivyapad* – *Koshna Tuvare jal*
- *Acharana Yonivyapad* – *Dashamoolkwath, Triphala*

CONCLUSION-

In Ayurvedic Gynaecology Yonidhavan have lot of prospective in treating Gynecological disorders. The success of this procedure totally depend upon how well this procedure is adopted by Vaidyas on the patients. In this study Yonidhavan is discussed in details and Standard Procedure is given. Study of Yonidhavan definitely prove to be helpful of Ayurvedic Vaidyas.

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ROLE OF PANCHAKARMA IN MUTRAKRUCCHA (CHRONIC UTI): A CASE STUDY

Dr. Yennawar Sandhya M.^{1*} and Dr. Bawankar Rupali J.²

¹Asso. Prof., Streerog and Prasutitantra Dept. C.S.M.S.S. Ayurved College, Aurangabad.

²Asso. Prof., Rasshastra Dept. C.S.M.S.S. Ayurved College, Aurangabad.

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***Corresponding Author**
Dr. Yennawar Sandhya
M.

Asso. Prof., Streerog and
Prasutitantra Dept.
C.S.M.S.S. Ayurved
College, Aurangabad.

ABSTRACT

Dysuria is a common symptom in gynecology. Dysuria means difficulty in passing urine. According to Ayurveda dysuria is correlated with mutrakruccha. So, difficulty or pain in micturition is called mutrakruccha. There is a pain while passing urine & also obstruction to the passage of urine. This is a chronic disease. This is due to urinary tract infection (UTI) & is associated with urethritis & cystitis. Causes for cystitis due to infection with E-coli, tuberculosis, stone, radiation cystitis, and Papilloma or carcinoma. In this condition painful micturition especially at the end of the act. Avoid all the etiological factors. Abhyanga, snehana, swedana, niruha anuvasan basti, avagaha, parishek uttarbasti is the general line of treatment. Use of mutral

herbes. So we decided to use the abhyantar chikitsa, panchakarma, sthanik chikitsa in dysuria (mutrakruccha) according to 26/45 & presented a case study. By this case study we conclude that the holistic approach of Ayurveda panchakarma and Sthanik chikitsa plays an important role in the management of dysuria (mutrakruccha).

KEYWORDS: Mutra kruchha, Mutradaha, Varnvar mutrapravrutti, Uttar basti, Abhyantar chikitsa.

INTRODUCTION

Dysuria^[1] is a common symptom in gynecology. Dysuria means difficulty in passing urine. According to Ayurveda dysuria is correlated with mutrakruccha.

मूत्रकृच्छ्रे मूत्रं कृच्छ्रेन् वहति । चक्रदत्त

मूत्रस्य कृच्छ्रेण महता दुःखेन प्रवृत्तिः॥^[२]

मा.निदान

So, difficulty or pain in micturition is called mutrakruccha. There is a pain while passing urine & also obstruction to the passage of urine. This is a chronic disease. This is due to urinary tract infection (UTI) & is associated with urethritis & cystitis.

Cystitis= Inflammation of bladder.

Causes for cystitis due to infection with E-coli, tuberculosis, stone, radiation cystitis, and Papilloma or carcinoma. In this condition painful micturition especially at the end of the act.

Urethritis= Inflammation of urethra.

Here the pain is scalding during the act. This is due to specific or non-specific organism, tender carbuncle 'prolapse of urethral mucosa, kraurosis, urethral carcinoma.

Patient of 48 year female having the same complaint i.e.

- | | | |
|---|---|----------------|
| *Burning micturation (Mutradaha) | } | since 14 years |
| *Frequency of micturition (Varanvar Mutrapravrutti) | | |
| *Burning & itching of vulva vaginal region. | } | since 10 years |
| *White discharge | | |
| *Insomnia (Nidranasha) | | |
| *Irritability (Manovaichitya) | | |

Visited to our OPD of Stree rog department on 14/12/2017

We observed and clinically diagnosed patient by Ayurvedic approach as a Mutrakrucha.

According to Acharya Charaka cha.chi.26/33 & cha.chi.26/43 Samanya chikitsa sutra for mutrakrucha was adopted.

ApréÉÍÉ xLÉWÏLÉÂWoÉÍxiÉ xLÉWÉmÉLÉEWÉ·ÉU oÉÍxiÉ xÉMúLÉ]
 ÍxjÉUÉIS ÍpáúÉÍÉ WUÉÉ ÍxÉkSÉLÉ S±ÉS'xÉÉÉÉÍLÉsÉ qÉ\$ÉMúCNIÉ ||^[3] cÉ.ÍcÉ.26/45

To avoid all the etiological factors. Abhyanga, Snehana, Swedana, Niruha Anuvasan basti, Avagaha, Parishek Uttarbasti is the general line of treatment, use of mutral herbes was adopted & presented a case study.

CASE STUDY

Patient name:--XXX

Age:--48 years

Address:--Plot no.36, Dashmesh nagar, Aurangabad.

O.P.D.NO.----- 38849

DIAGNOSIS

Chronic UTI with PID C/O *burning micturition (Mutradaha)

*Frequency of micturition (Varanvar mutrapravrutti) } since 14 years
 *Burning & itching of vulva vaginal region. }
 *White discharge } Since 14years
 *Insomnia (N idranasha) }
 *Irritability (Manovaichitya) O/H: ---G2 P2L2A0 }

G1== ♀ --22years } L.S.C.S.
 G2= = ♂--15 years }

Sterilization done before 10 years

K/C/O: -- Hypertension

Having antihypertensive treatment since 15 years.

Ashtavidha parikshan^[4]

- 1) Nadi 82/min (regular)
- 2) Mala –Grathil
- 3) Mutrasadaha (burning)
- 4) Jinhva -----sam
- 5) Shabda—sakashta
- 6) Sparsha ----- feeling feverish every time
- 7) Drukaksheena (due to pain)
- 8) Akrti -----sthula

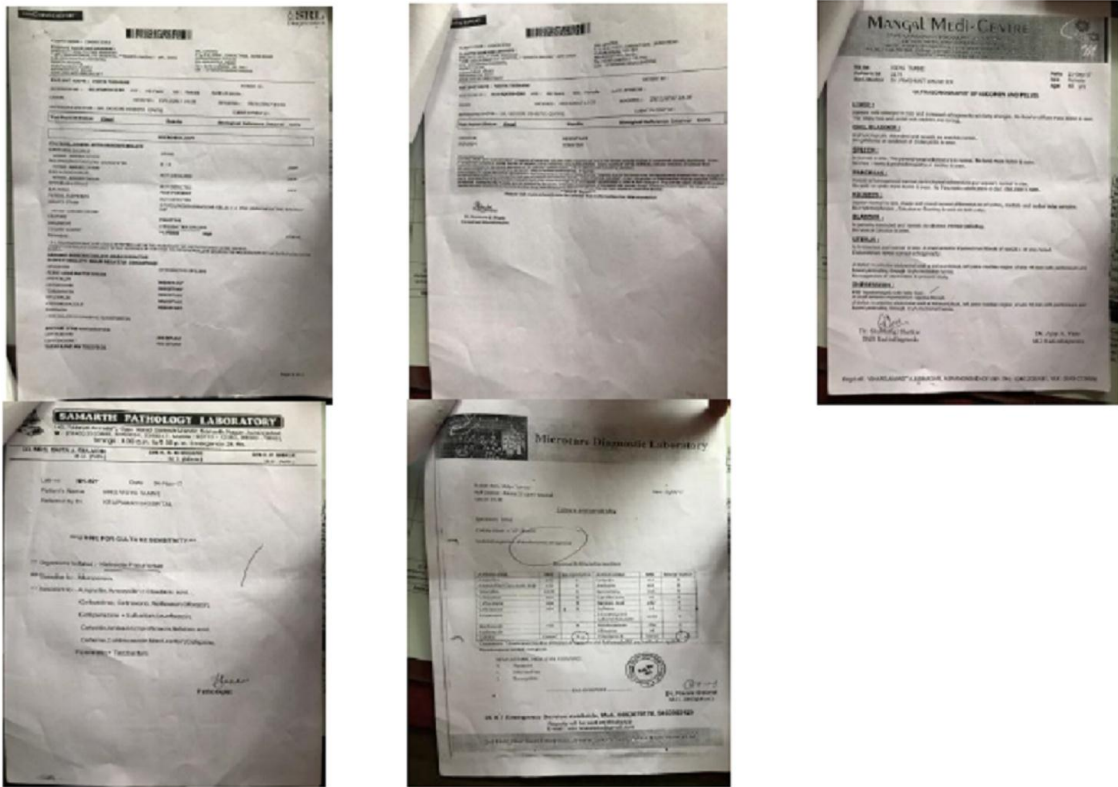
Prakruti:--Kaphapitta P/A:-- All over tenderness

Abdominal laxity Incisional herniation +

LIVER } NAD
 SPLEEN }

CHEST < NAD

INVESTIGATION



MATERIAL AND METHODS

We decided to use abhyantar chikitsa, panchakarma, and sthanik chikitsa as follows—

A) Abhyantar chikitsa:--14/12/2017

1. Hingvasthak churna^[5]- 500mg b.d.
2. Aampachak vati^[6] -500 mg b.d.
3. Chandraprabha vati^[7] -500 mg b.d.
4. Punarnava mandur^[8] –250 mg b.d.
5. Avipattikar churna^[9]-2 gm * Hs with luke warm water
6. Chandanasava^[10]–20 ml b.d. after meal

B) Panchakara & sthanik chikitsa

1. Sarvanga snehan^[11]
2. Swedan^[12]
3. Yoga basti^[13]
4. Utterbasti^[14]
5. Shirodhara^[15]
6. Nasya^[16]
7. Panchavalkal kwath yoni dhavan^[17]

8. Chandanbala lakshadi taila uttarbasti^[18] (mutramarga)
9. Tankan & honey yonipratisaran
10. Chandanbala lakshadi taila & jatyadi taila yoni pichu^[19] under all aseptic Precautions' in minor OT

20/12/2017

burning micturition (Mutradaha) ↓
 Frequency of micturition (Varanvar mutrapavrutti) ↓
 Burning & itching of vulva vaginal region. ↓
 White discharge ↓
 Insomnia (N idranasha) ↓
 Irritability (Manovaichitya) ↓

28/12/2017— 15th day

burning micturition (Mutradaha) ↓↓
 Frequency of micturition (Varanvar mutrapavrutti) ↓↓
 Burning & itching of vulva vaginal region. ↓↓
 White discharge ↓↓
 Insomnia (Nidranasha) ↓↓
 Irritability (Manovaichitya) ↓↓

Repeat cycle (2nd cycle) - **13/1/2018-** up to **19/1/2018**

burning micturition (Mutradaha) ↓↓↓
 Frequency of micturition (Varanvar mutrapavrutti) ↓↓↓
 Burning & itching of vulva vaginal region. ↓↓↓
 White discharge ↓↓↓
 Insomnia (N idranasha) ↓↓↓
 Irritability (Manovaichitya) ↓↓↓

3rd cycle - **10/3/2018** to **16/3/2018**

burning micturition (Mutradaha) ↓↓↓↓
 Frequency of micturition (Varanvar mutrapavrutti) ↓↓↓↓
 Burning & itching of vulva vaginal region. ↓↓↓↓
 White discharge ↓↓↓↓
 Insomnia (N idranasha) ↓↓↓↓

Irritability (Manovaichitya) ↓↓↓↓

Chandanbalalakshadi taila^[19]

Drug name	Latin Name	Rasa	Guna	Virya	Vipaka	Karma
Devdaru	Cedrus deodara	Tikta katu kashay	Laghu Ruksha	Usha	Katu	Krumighana, dushtavranaghana, shothaghana, kaphavatahar
Ashwaganda	Withnia somnifera	Katu tikta kashay	Laghu Snigdha	Usha	Katu	Vatakaphahar, Shothahar, balya
Haridra	Curcuma longa linn.	Katu	Laghu tikshna	Usha	Katu	Kaphapittahara, Shothahar
Daruharidra	Berberis aristata	Katu	Laghu Ruksha tikshna	Shita	Katu	Shulaghana, krumighana, vatakaphahar
Bala	Sida cardifolia	Madhur	Laghu Snigdha	Shita	Katu	Vatapittahar, balya, bruhan
Raktachandn	Santlum album	Tikta Madhur	Laghu Ruksha	Shita	Katu	Varnya, dahaprashaman kandughana
Ushir	Vetiveria zizanoiodes	Tikta Madhur	Ruksha Laghu	Shita	Katu	Kaphapittahar pachan stambhan
Laksha	Coccus lacca	Kashay	Laghu	Shita	Katu	Stambhan shonitsthapan
Rasna	Aipinia officinarum	Tikta	Guru	Ushna	Katu	Antifungal, antibacterial
Kachura					Katu	
Sariva	Hemidesmus indicus	Madhur Tikta	Guru Snigdha	Shita	Madhur	Tridoshar, grahi, jwaraghana kandughana, pramehahara
Vidnamak	Sodium chloride	Lavan	Picchil	Ushna	Katu	Pachan Dipan Vatanuloman
Saindhav namak	Sodium chloride	Lavan	Picchil	Ushna	Madhur	Dipan pachan, anuloman.

Panchavalkal^[17]

Drug name	Latin Name	Rasa	Guna	Virya	Vipaka	Karma
Nyrodha	Ficus benghalensis	Kashay	Guru Ruksha	Shita	Katu	Pittakaphahara Vranaropan – shodhana
Udumbar	Ficus glomerata	Kashay	Guru Ruksha	Shita	Katu	Kaphapittahara mutrasangrahaniya stambhak, varnya
Ashwatha	Ficus religiosa linn.	Kashay Madhur	Guru Ruksha	Shita	Katu	Kaphapitahar, vranashodhan
Parish	Thevetia populnea	Kashay	Laghu Snigdha	Shita	Katu	Kaphapittahara mutrasangrahaniya
Pluksha	Ficus lacor	Kashay	Ruksha Guru	Shita	Katu	Kaphapittahara mutrasangrahaniya

Jatyadi taila^[20]

Drug name	Latin Name	Rasa	Guna	Virya	Vipaka	Karma
Chameli patra	Jasminum grandiflorum	Tikta Kashay	Laghu snighdha, mrudu	Ushna	Katu	Tridoshahara Vranaropan – Vranashodhana
Nimba patra	Azadirachta indica	Tikta	Laghu Tikshna	Ushna	Katu	Vatakaphahar, vishaghana, vranashodhan vranaropan
Patol patra	Tricosanthes dioka Roxb	Katu Tikta	Laghu ruksha tikshna	Ushna	Katu	Varnya, dahashaman, kaphavatahar
Karanj patra	Pongamia Pinnata	Tikta katu kashay	Laghu tikshna	Ushna	Katu	Shothahar, Bhedan
Kutki	Pichreohiza kurroa royle	Katu Kashay	Laghu, Ruksha Tikshna	Ushna	Katu	Vishaghana, Krumighana jwaraghana dahaprashmana
Padmak	Prunus puddum roxb	Kashay tikta	Laghu snighdha	Sheet	Katu	Kaphapittahar, vedanasthpan varnya

Laghu panchamula

Drug name	Latin Name	Rasa	Guna	Virya	Vipaka	Karma
Bruhuti	Solanum indicum Linn	Katu tikta	Laghu Ruksha	Ushna	Katu	Kaphavatahara Krimighana kandughana
Erandamula	Ricinus Communis Linn	Madhur Katu Kashay	Snigdha sukshama	Ushna	Madhur	Kaphavatahara shulaghana
Kantakari	Solanum surattense	Katu Tikshna	Laghu Ruksha	Ushna	Katu	Kaphavatahar, shothahar, mutral, Mutrakruchahar
Prushnaparni	Uraria pictadesv	Madhur Tikta	Laghu Snigdha	Ushna	Madhur	Tridoshahar, dahaghana, jvaraghana
Shaliparni	Desmodium Gangeticum	Madhur Tikta	Guru Snigdha	Ushna	Madhur	Tridoshahar, Balya, Krumighana, Jvaraghana
Gokshur	Tribulus terrestris	Madhur	Guru Snigdha	Shita	Madhur	Vatapittahar, mutral vrushya Rasayan.

Bruhat panchamula

Drug name	Latin Name	Rasa	Guna	Virya	Vipaka	Karma
Bilva	Aegle marmelos	Kashay tikta	Laghu Ruksha	Ushna	Katu	Vatakaphahara, Dipan, Pachan, Grahi.
Gambhari	Gmelina arboreal inn.	Tikta Kashay Madhur	Guru	Ushna	Katu	Vatapittahar, shothhar Dipan, Pachan, Medhya
Patla	Stereospermum sauveolens	Tikta Kashay	Laghu Ruksha	Anushna	Katu	Tridoshahar, Hridya, Kanthya
Agnimantha	Clerodendrum phlomidis	Tikta Katu Kashay Madhur	Ruksha Laghu	Ushna	Katu	Kaphavatahar shothahar, Dipan
Shonak	Oroxylum indicum	Madhur Tikta Kashay	Laghu Ruksha	Ushna	Katu	Kaphavatahar Dipan, Grahi.

RESULT

Complete relief in Mutrakruchata i.e. all sign & symptoms which was suffering since 14 years.

Morning : 8 to Evening : 8 Phone : 2335381		BHIDE LABORATORY DR. R. B. BHIDE M.D.	
<small>KASLIWAL BUILDING, KIRANA CHAVDI, SHAHAGUNJ, AURANGABAD - 431001. BRANCHES : TILAK NAGAR, NEAR ROPLEKAR HOSPITAL, AURANGABAD. TEL : 2340398</small>			
Name : Mrs. Tamne Vidya	BSLT/32492	Age :	Sex : Female
Ref. by :	No : 57895	Date :	20-Feb-2011
<u>EXAMINATION OF URINE</u>			
GENERAL EXAMINATION			
Volume examined	: 30 ml	Colour	: Yellowish
Appearance	: Clear	Deposit	: Nil
Reaction	: Acidic	Sp. Gravity	: qns
CHEMICAL EXAMINATION			
Albumin	: Traces	Sugar (red Subst)	: Nil
Bile Pigments	:	Acetone	:
Bile Salts	:	Aceto Acitic Acid	:
Urobilinogen	:	Occut Blood	:
MICROSCOPIC EXAMINATION (Centrifuged deposits)			
Pus cells	: 0 to 1 / hpf	Casts	: Nil
R.B.Cs.	: Nil / hpf	Crystals	: Nil
Ep. cells	: 2 to 3 / hpf	Bacteria	: Nil
Macrophages	: Nil	Yeast	: Nil
Trichomonas	: Nil	Amorphous Deposits	: Nil
Haemoglobin	:		

R. B. Bhide

DISCUSSION

मूत्रकृच्छ्रात् खलुः मूत्रमैत्रं नैत्रैः खलुजैर्मुत्रमैत्रं नैत्रैः
कृच्छ्रात् कृच्छ्रात् मूत्रमैत्रं नैत्रैः नैत्रैः कृच्छ्रात् मूत्रमैत्रं नैत्रैः [21] च. ई. 26/33

According to Aacharya Charak, aggregated tridoshas specially apan vayu gets lodged in basti (urinary bladder) region, causes constriction & irritation in mutramarga (urethra) causes mutrakruchha. According to modern science, infection of urinary tract by bacteria can also cause dysuria (mutrakruccha). These bacteria causes bladder irritation by inflammation results into cystitis & urethritis with complaints of burning micturition, frequency of urination, urgency & sensation of incomplete passage etc.

Inshort,

Samprapti factors

Dosha - Vata dominant - tridosha

Dushya – Mutra, Udak

Adhishtan - Basti, Mutramarga, Pakvashaya.

Srotas - Mutravaha.

Having same complaints patient was visited to our hospital. In this case study the treatment was followed by Acharya Charaka as follows-

Abhyantar chikitsa



Dipan, pachan, Anuloman

Gokshur based formulations

Shilajit preparation.

Panchakarma



Snehana (bahya parimarjan)

Swedan

Yog basti

Uttar basti (Mutramarya)

Shirodhara

Nasya

Dipan: It was done by Hingvashtak churna. (2 gm---2gm before meals with anupan Goghrita).

The contains in this drug are agneya mahabhutatmak, katu amala lavan rasa pradhan, laghu ushna tikshna viryatmak which stimulate & strengthen jatharagni.

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

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

Chandraprabha vati: Acts as follows with its main ingredients.

Dose—500mg b.d. with anupan chandanasava

- Suvarnamakshik and loha helps in pitta shaman, raktavardhak.
- Shilajatu—Rasayan, normalize the dhatu pariposhan karma.
- Guggulu—relaxes the sympathetic & parasympathetic nerve stimulation anti-inflammatory balya rasayan.
- Khadisakhar—Hrudya, prasadan.
- Karpur ---Vishaghana, krumighana.
- Kachura, ela, vekhand, --Pachak, shamak, mutral, krumighana result into reduce the bladder infection.

Chandanasava--- Acts as agnivardhak, balakarak, dahaghana, shulaghana.

The disease of other parts of the body caused by vitiated vata can be relieved by treating it at the level of its root i.e. pakwashaya. With help of basti. According to Ayurveda mutra nirmiti takes place in pakwashaya.

मूत्रनिर्मितौ मूत्रवहनाद्याः ।

मूत्रवहनाद्याः मूत्रवहनाद्याः ॥^[22]

ख.इ. 3/21.211

Vessels arising from large intestine called ‘Mutravaha nadya’ fill the urinary bladder like the rivers feed water to ocean on earth. They are so minute that they are not perceived. These vessels arise from Amasaya & convey fluid to bladder day and night. Thousands of this vessels provide water which excludes from vessels to inside bladder posterior urine is filled is “Upasnehana” meaning by exudation.

मूत्रवहनाद्याः मूत्रवहनाद्याः । (QsWhé)

In large intestine, kitta gives origin of two mala of food. Separation of these mala is done in large intestine.

So, Among the measures adopted in the management of vatavyadhi Anuvasan, aasthapan, and uttarbasti are considered to be supreme devices. They act locally as well as systematically. It is regarded as a half of the treatment.e.is ardhachikitsa in vata vyadhi. It is also effective in pitta, kapha, & raktaj disorder.

Panchakarma

- 1) **Snehan (Bahya parimarjan):** Vata is located mainly in the tactile sensory organ lodged in the skin, hence sarvanga snehan (bahya parimarjan) was beneficial to skin &

vaadosha. Snehan (oleation) loosens the morbid doshas to certain extent.

- 2) **Swedan (sudation):** The qualities of swedan like ushna, tikshna, sara, drava, snighdha, helps in flushing out the wastage & toxins from the body through perspiration.
- 3) **Yogabasti:** Act locally as well as systematically help to normalize the vitiated apan vayu & mutranirmiti.
- 4) **Uttar basti:** By jatyadi taila and chandanbalalakshadi taila in bladder. These oils reducing the inflammation of the bladder & urethra by tikta katu kashaya rasa, laghu, ruksha guna, ushna virya, pachan, tridosahar, krumighana, shotaghana, dahaprashamana, kandughna, vishaghana, vedanasthapan, shodhan & ropan properties & get relief from burning micturition, frequency of micturition & repeated UTI.
- 5) **Shirodhara:** Help to reduce vitiated doshas, the irritability & provides the sound sleep to the patient.
- 6) **Nasya:** (Panchavardhendriya taila) stimulate the function of sensory & motor organs & refresh the patient.
- 7) **Yonidhavan:** (With Panchavalkal kwath) Kashaya rasa, sheeta veerya, Ruksha guna, shothahar, pittakaphahar, medohar, reduces the inflammation of yoni results in relief the patient from white discharge, itching of vagina.

CONCLUSION

Thus we conclude that the holistic approach abhyantar chikitsa, panchakarma, sthanik chikitsa gives complete relief to the patient from all signs & symptoms of mutrakrucha.

Medicines used in the above case are cheap, effective & easily available.

Treatment was cost effective.

Patient was happy from bottom of heart.

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**Role of virechana karma in the symptoms of Udavarta yonivyapad****Bhavana Lachhiram Rathod*¹, Sonwane R.D.²**

1. P.G. Scholar,
2. **Guide and** Associate professor,

Dept. of Panchakarma, C.S.M.S.S. Ayurved Mahavidyalaya,

Kanchanwadi, Aurangabad, Maharashtra.

*Corresponding author: rahthod.drbhavi00@gmail.com**ABSTRACT-**

Apathya Sevana & Vegadharana causes vitiation of *Vata* & its *Pratiloma Gati* results into cramping type of lower abdominal pain which gets relieved with expulsion of *Raja* (menstrual flow).^[1] Along with the *Katishula* is also the symptom by which many women are suffering. Patients of *Udavarta Yonivyapad* widely uses analgesics, antispasmodic, prostaglandin inhibitors any many more medicines which later on arises lot of adverse effects. Our treatise has mentioned *Shamana & Shodhana Chikitsa* to treat this. *Panchakarma* have ray of hope to this to treat & that *Shamana & Shodhana Chikitsa* in it so *Virechana* treatment was given^[2]. *Ayurveda* has lot of treatments for this which are easy to take & also cost effective. *Shodhana Chikitsa* is always better than *Shamana* because it works on the root cause of the disease.

KEY WORDS- *Udavarta Yonivyapad, Ayurveda, Erand Taila Virechana*

INTRODUCTION-

Since time immortal *Ayurveda* is the science of life & *Panchakarma* is the soul of *Ayurveda*. It shows the ideal way

of living, which promises the disease free, long, healthier & ultimately a happy life.

Among various menstruations is the prime physiological function of women's life in her reproductive age. As per described in *Ayurveda* normal & healthy menstruation (*Artava Pravrutti*) is the mirror of healthy & normal functioning of one's reproductive system.

Vegadharana & Apathya Sevana vitiates aggravated *Vata* & its *Gati* changes which becomes *Pratiloma* & it initiates *Adhodar Shula* which gets relieved with the expulsion of *Raja*.

Due to Madhur, Tikta rasa, Madhur Vipaka & Ushna Virya Erand acts on Vataprakopa & Acharya Sharangdhara included Erand Taila in the group of Virechana drugs^[3]. Acharya Sushruta included it in the Gana of Adhobhagahar & Sthana of Vata is Adhobhaga of the Sharir. Acharya Sushruta mentioned Virechana treatment for Yoniroga in Chikitsasthana of Sushruta Samhita^[4]. Henceforth considering all those facts this treatment was chosen.



So we can assume that females of our society are dealing with this issue in large number so they must treat well. Henceforth this was an attempt to cure this disease and to protect them from getting ill with further issues and to contribute into the achievement in the motto of *Ayurveda* to keep the individuals disease free with sound body as well as mind.

AIM & OBJECTIVES-

AIM-

To study the effect of *Virechana Karma* in *Udavarta Yonivyapad*.

OBJECTIVES-

- Detail study of *Udavarta Yonivyapad* according to *Ayurveda* & modern science.
- Detail study of *Virechana Karma*.

MATERIALS & METHODS-

- Diagnosed 60 patients of *Udavarta Yonivyapad* from the O.P.D. of college's hospital.
- Erand Taila for *Virechana Karma*.
- Single clinical open trial.
- **Drug & dose-Erand Taila-40ml** ^[5] (calculated & given as per the *Agni &Koshtha* of the patients).

Sr. No	Drug name	Latin name	Family	Rasa	Virya	Vipaka	Prayojyanga
1.	Erand	Ricinus communis	Euphorbiaceae	Madhur, Tikta	Ushna	Madhur	Mool Beeja taila
2.	Gou Ghrita	Butyram puratu	-	Madhur	Shita	Madhur	-
3.	Til Taila	Sesamum indicum Linn.	Pedaliaceae	Madhur, Tikta, Kashaya . Katu	Ushna	Madhur	Beeja taila

SELECTION CRITERIA-

INCLUSION CRITERIA-

1. Females of age group between 12-35 years.
2. Both married & unmarried women were been included in this study.
3. Patients having regular menstrual cycles at least from last six consecutive cycles & having complained of *Udavarta Yonivyapad*.

4. Patients fulfilled the criteria for *Virechana Karma*.

EXCLUSION CRITERIA-

1. Patients using IUCD.
2. Patients having pelvic pathology.
3. Patients suffering from systemic lesion (benign & malignant growth of any system).

4. Patients which did not fulfilled the criteria for *Virechana Karma*.

ASSESSMENT CRITERIA-

1. *Adhoudar Shula* by VAS-

A.	No pain	0
B.	Mild	1, 2, 3
C.	Moderate	4, 5, 6
D.	Severe	7, 8, 9, 10

2. *Katishula* by VAS-

A.	No pain	0
B.	Mild	1, 2, 3
C.	Moderate	4, 5, 6
D.	Severe	7, 8, 9, 10

.PLAN OF WORK-

POORVAKARMA-

- According to the symptoms diagnosis was done. *Snehapana* with *Gou Ghrita* was given to the patients from the 6th day of menstrual cycle at morning hours between 6-8am & duration of *Snehapana* was been adjusted till the *Samyak Snehan Lakshana* been achieved. The dose of *Gou Ghrita* was started with 30ml ie *Rhasiyasi Matra* (2.5 Tole) & was then adjusted according of the *Agni & Koshtha* of the patient^[6].
- ***Bahya Snehan Dravya- Til Taila***
- ***Aahara during Snehapana-***
 - Patients were been instructed to drink only *Sukhoshna jala* whenever needed.
 - *Laghu & Ashita Aahara*



- ***Vihar during Snehapana-***
 - Patients were instructed not to suppress the natural urges.
 - They also instructed not to get in direct contact with extreme cold or hot things.
- ***VISHRAM KALA-*** It means there was no *Abhyantar Snehapana* was given but *Sarvanga Snehan & Sarvanga Swedan* was done for three days^[7].

PRADHAN KARMA-

- ***Virechana Vidhee:-***
- ***Aatur Sidhhata:*** - After administration of *Snehana & Swedana* successfully finding the patient to be cheerful, who had taken complete & sound sleep, which had digested the previous food well, had also passed motion & who were with empty stomach.
- ***Manasopchara:*** - Patients were counselled in sound manner & prepared mentally because disturbance in mental state can cause *Mithya Yoga*. Patients were also performed *Swastika Vachan* on the day of *Virechana* to maintain the sound state of their mind.
- ***Time of administration of the drug:*** - *Virechana Yoga* was administered after *Shleshma kala* has passed not in morning like *Vamana* ie in *Pitta Kala*.
- *Shuddhi* was observed as per the *Lakshana & Vega* of *Virechana* to the patients.

PASCHATKARMA:-It starts from the cessation of the *Virechana Vega & lasts up*

to the patient reaches to their normal diet. Patients were been advised to take complete physical & psychological rest. Some restrictions in diet & in behaviour (Pariharya Vishay) were advised to the patient to follow it strictly [8]. *Samsarjan Krama* was designed by according to the type of *Shuddhi Lakshana*.

Follow up-

- 0th (Baseline) follow up
- 1st follow up- After 1st menstrual cycle
- 2nd follow up- After 2nd menstrual cycle
- 3rd follow up- After 3rd menstrual cycle

All these follow up has been taken after the cessation of bleeding phase of menstrual cycle.

STATISTICAL ANALYSIS-

All the values in following tables are calculated by using Wilcoxon sign rank test for subjective criteria is been used.. Statistical analysis of both the symptom is described separately in the following tables.

Symptom	<i>Adhoudarshula</i>
Mean Score, B.T.	2.117
Mean Score, A.T.	1.017
S.D (±), B.T.	0.761
S.D (±), A.T.	0.503
S.E. (±), B.T.	0.098
S.E. (±), A.T.	0.065
W	1128
Z	-5.96
P	P<0.05
Result	Significant

As the p value is lower than the significance level alpha = 0.05, we should reject the null hypothesis H₀ and accept the alternate hypothesis H_a for *Adhoudarshula*.

Symptom	<i>Katishula</i>
Mean Score, B.T.	2.05
Mean Score, A.T.	0.983
S.D (±), B.T.	0.69
S.D (±), A.T.	0.536
S.E. (±), B.T.	0.09
S.E. (±), A.T.	0.069
W	1081
Z	-5.90
P	P<0.05
Result	Significant

As the p value is lower than the significance level alpha = 0.05, we should reject the null hypothesis H₀ and accept the alternate hypothesis H_a for *Katishula*.

DISCUSSION-

Erand Taila Virechana treatment has shown improvement in the symptoms. *Erand Taila* has *Madhur & Tikta Rasa, Ushna Virya, Madhur Vipaka* due to these properties & *Aacharya Sushruta* also included it in *Adhobhagahar Gana* so considering all these things & the results we got with this treatment we can say that it is effective in *Udavarta Yonivyapad*. It

can be assume all the results from the observation to rule out the effect of the therapy. Here the discussion is given under these headings-

EFFECT IN THE SYMPTOMS-

• **EFFECT IN ADHOUDAR SHULA-**

It is found that maximum women had more relief in *Adhoudar Shula* after this treatment.

• **EFFECT IN KATISHULA-**

By comparing both the mean scores B.T. & A.T. that was 2.05 was decreased up to 0.983. So the patients got significant results in *Katishula*.

CONCLUSION-

Symptoms	Percentage Relief
<i>Adhoudar Shula</i>	51.96%
<i>Katishula</i>	52.03%



From the above table & the patients got the results it can be conclude that *Erand Taila Virechana* treatment is significant in *Udavarta Yonivyapad*.

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Abbreviations-

- Ie- that is
- A.T.- after treatment
- B.T.- before treatment
- S.D.- standard deviation
- S.E.- standard equation

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SCIENTIFIC REVIEW OF MONTHLY DIETIC REGIMEN IN GARBHINI (PREGNANCY) ACCORDING TO AYURVEDA

Dr. Yennawar S.M.*

Associate Professor, Department of Prasuti Tantra and Streerog, CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad *Corresponding Author

Dr. Thote A.S.

Assistant Professor, Department of Kayachikitsa, CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad

Dr. Sangode N.P.

Assistant Professor, Department of Rachana Sharir, CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad

ABSTRACT Pregnancy is a physiological condition in a woman's life. It is a natural phenomenon hence does not require any treatment. Treatment is done only if there is any pathological condition or disease. Paricharya means the Ahara – Vihara which are followed by pregnant woman in order to keep all the body functions normal and healthy. Garbha (fetus) is completely dependent on mother for nutrition and growth. So whatever diet the pregnant woman consumes performs three functions – Nourishment of the woman's body itself, Formation of milk, and Nourishment to the fetus. After following the dietetic regimen from 1st to 9th month, the woman remains healthy and delivers the child possessing good health, energy, strength, voice, compactness, much superior to other progeny. If garbhini paricharya is not followed by garbhini then the chances of Garbhavyapadas and Garbhopadravas are increased. So to reduce the above complications, dietetic regimen plays an important role which was explained by different Acharyas in Ayurveda.

KEYWORDS : Garbhini, Paricharya, Pregnancy, Dietic regimen, Ayurveda.

INTRODUCTION

Pregnancy is a physiological condition in a woman's life. It is a natural phenomenon hence does not require any treatment. Treatment is done only if there is any pathological condition or disease.

Paricharya means the Ahara – Vihara which are followed by pregnant woman in order to keep all the body functions normal and healthy.

The main aim of Paricharya is

- Anupaghata – to avoid abortion
- Paripurntwaya – for appropriate growth and nourishment of fetus and up to full term pregnancy.
- Sukhaprasavaya – for normal labour without any complication from the point of view of both mother and baby.

In an initial stage when its specific body parts though present are not explicit, it obtains its substances by attracting moisture and osmosis. After wards when the body parts are conspicuous, a part of nourishment is obtained by upasneha (moisture) permeating through pores of skin situated in hair roots of the body and a part through the passage of umbilical cord – placenta – to the mother's heart. The mother's heart immerses the placenta with blood through running and oozing vessels. Mother's diet contains all the shadarasa, thus the rasa derived from this diet gives strength and complexion to the fetus and the fetus deriving its substances from this rasa remains alive and develops in the uterus.

According to Acharya Sushruta,
रसजं पुरुषं विद्यात् रसं रक्षेत् प्रयत्नतः ।
अन्नपानाच्च मतिमान् आचाराच्चाप्यतर्दितः ॥

सु. सू. १४ / १२

Ahara rasa is mainly responsible for the creation of purusha. The diet plan and daily habits of the pregnant woman should not disturb the normal ahara rasa and it must be the main concern during pregnancy.

For the production of Nirama ahara rasa, the most important thing is normal 'Jatharagni' and 'Dhatvagni', leading to stronger dhatu consequently.

Garbha (fetus) is completely dependent on mother for nutrition and growth. So whatever diet the pregnant woman consumes performs three functions

- 1) Nourishment of the woman's body itself
- 2) Formation of milk
- 3) Nourishment to the fetus

स्त्रिया ह्यापन्नगर्भयास्त्रिधा रसः प्रतिपद्यते ।
स्वशरीरपुष्टये, स्तनाय, गर्भवृद्धये च ॥
स तेनाहारेणोपष्टब्धः परतन्त्रवृत्तिर्मातरमाश्रित्य वर्तयत्यन्तर्गतः ॥

च. शा. ६ / २३

यदन्नपानं प्रायेण गर्भिणी स्त्री निषेवते ।
रसो निवर्तते तादृक त्रिधा चास्याः प्रवर्तते ॥
मातृपुष्ट्यर्थमेकांशो द्वितीयो गर्भवृद्धये ।
तृतीयः स्तनपुष्ट्यर्थ, नार्या गर्भवृद्धये ।
का. सं. सू. लेपाध्याय

गर्भिन्यास्तु त्रिधा कार्ये रसोऽभिनिवर्तते ।
गर्भात्या (भ्रत्वा) य स्तन्यत्वाय रसत्वाय चेति ॥

भे. शा. ४ / ३३

We cannot change the Atmaja, Matruja, and Pitruja bhava of Garbha by diet but the Rasaja and Satvaja bhava can be improved by Garbhini Paricharya explained in Ayurveda.

According to modern view, during pregnancy increase the calorie requirement due to increased growth of maternal tissues, fetus, and placenta and increased basal metabolic rate. The requirement extent of 300 over the non-pregnancy state.

So here Ayurveda plays an important role by dietetic regimen for healthy child and mother.

MATERIALS AND METHOD

TABLE NO. 1 – Month wise drug regimen during pregnancy

Month	Charaka	Sushruta	Ashtanga Sangraha	Harita	Bhela
1	<ul style="list-style-type: none"> Non medicated Milk according to Agni and Shareer Bala. Congenial Diet in Morning and Evening 	<ul style="list-style-type: none"> Sweet Cold Liquid Diet 	<ul style="list-style-type: none"> Medicated milk. Ghruta medicated with Shalparni. Ghruta medicated with Palash – for first 12 days. Anupan – Gold and Silver boiled water. 	<ul style="list-style-type: none"> Yashtimadhu, Parushak, Madhuk Pushpa, all along with Navneet (Butter) and Honey. Milk medicated with Madhura Dravya (Sweetened milk) 	

			<ul style="list-style-type: none"> Sweet, cold, liquid diet. Massage and Rubbing should be avoided. 		
2	Milk medicated with Madhura dravya	Milk medicated with Madhura dravya	Milk medicated with Madhura Dravya	Sweetened milk treated with Kakoli	
3	Milk medicated with Honey and Ghruta	Shashti rice with milk	Milk medicated with Honey and Ghruta	Krushara	
4	Milk with Butter (Quantity – 1 Aksha)	<ul style="list-style-type: none"> Shashti rice cooked with curd. Milk with Butter. Meat of wild animals. 	Milk with 1 Aksha Butter	Medicated cooked rice	Milk with Butter
5	Ghruta prepared with butter extracted from milk	<ul style="list-style-type: none"> Medicated cooked rice. Meat of wild animals. Hrudya food with milk or ghruta. 	Ghruta	Rice cooked with milk and Sweetened	Milk Yavagu
6	Milk or Ghruta medicated with Madhura dravya	Ghruta medicated with Shwadanshra and Yavagu	Milk and Ghruta medicated with Madhura Dravya	Sweet curd	Milk, Ghruta
7	As above	Ghruta medicated with Pruthakparni. Dalhan – Vidarigandhadi	Milk and Ghruta medicated with Madhura Dravya	Ghruta khanda (A sweet dish)	
8	Rice Gruel prepared with milk mixed with ghruta	<ul style="list-style-type: none"> Asthapan Basti with Badaradi Kwatha. Milk medicated with Madhura Dravya siddha tail – Anuvasan Basti. Yavagu, Meat of wild animals till delivery 	<ul style="list-style-type: none"> Yavagu mixed with milk. Asthapan Basti of Badaradi Decoction. Anuvasan basti with oil medicated with milk and Madhura Dravya. Snigdha Yavagu and meat of wild animals till delivery. 	Ghevar Ghrutapurak (A kind of sweet preparation)	
9	<ul style="list-style-type: none"> Anuvasan Basti with oil medicated by Madhura Dravya Yonipichu of medicated oil (Vaginal tampon) 	<ul style="list-style-type: none"> Asthapan Basti with Badaradi Kwatha. Milk medicated with Madhura Dravya siddha tail – Anuvasan Basti. Yavagu, Meat of wild animals till delivery 	Vaginal Tampon of oil medicated with Madhura dravya.	Varieties of Cereals	Anuvasan Basti of oil medicate with Kadamba and Mash. Followed by Yavagu.

TABLE NO. 2 – Scientific view of drugs

Dravya	Latin Name	Rasa	Virya	Vipaka	Guna	Karma
Palash	Butea monosperma	Katu, Tikta, Kashaya	Ushna	Katu	Laghu, Snigdha	<ol style="list-style-type: none"> Palash Seed + Takra – Acts mainly on threadworm, Round worm, killing them. Hence Iron and food is digested properly. Takra being Amla – Rasaprinan and Raktavadhaka hence increases Lactobacillus and increases absorption of Iron and nutrients. It is Krimighna and Grahi, hence reduces the risk of abortion. Palash – Helps for good digestion hence to produce Nirama Ahara Rasa and Nirama and healthy garbha. Kinhuk (Palash Flower) – Kapha pittaghna, hence reduces risk of abortion. Palash patra paste – Kapha pittaghna, pramehanashaka, helpful in gestational diabetes (DM in pregnancy), due to Grahi quality useful in Polyhydrominos. Palash patra + Milk – Punsavanartha.
Shaliparni	Desmodium gangeticum	Madhura, Tikta	Sheeta	Madhura	Guru, Snigdha	Acts on all tridoshas, regulates them, Vishghna, Rasayana, Balya, Brumhana, Dhatupushtikarak.
Yashtimadhu	Glycyrrhiza glabra Linn	Madhura	Sheeta	Madhura	Guru, Snigdha	It contains glyceretic acid which has Anti-inflammatory activity. Diacetate – this has action similar to that of hydrocortisone.
Gokshur	Tribulus terrestris	Madhura	Sheeta	Madhura	Guru, Snigdha	Decreases albuminurea, useful in oedema, prevents pre eclamptic condition. Medhya, Balya, Rasayana, Hrudya, Garbhasthapaka, reduces burning micturition, UTI in pregnancy.
Aparajita	Citoria ternate	Katu, Tikta, Kashaya	Sheeta	Katu	Laghu, Ruksha	Medhya, Anti-inflammatory, good for eyes, regulates all three doshas. It is a well-known nervine tonic.
Brihi Shali Shashti			Sheeta	Madhura	Snigdha, Laghu	Sheeta, Sthira, easy to digest, Grahi.
Gold	Aurum	Madhura, Kashaya, Tikta	Sheeta	Madhura		Vatapittaghna, slightly Kaphakara, kills infection, Rasayana, Medhya, Balya, Vishahara, Hrudya, Netrya, Kshayanashaka, Ojovardhaka.

Silver	Argentum	Amla, Madhura, Kashaya	Sheeta	Madhura		Regulates Vata-Pitta, Medhya, Balya, due to its Amla Rasa it acts as a Raktavardhaka, healthy for majja dhatu, helpful in anemia.
Tin	Stannum	Tikta Sushruta – Lavana	Ushna Ruksha	Katu		It is Kapha-Vata shamaka as of its Tikta Rasa, Ojovardhaka, decreases oedema, has action on urinary system.
Lead	Plumbum	Tikta, anurasa - Madhura	Ushna Snigdha	Madhura		Reduces Vata-Kapha, useful in Dhatukshayajanya Vataprakopa, works on Urinary system, Reproductive system and muscles, useful in constipation.
Zinc	Zincum	Kashaya, Tikta	Sheeta	Katu		Ork mainly on Rasa Dhatu, reduces Kapha-Pitta.
Hingul	Cinnebar	Tikta	Ushna	Madhura		Works on Tri-doshas, Rasayana action, Agnideepaka. Medicines – uvarnamalini Vasant, Madhumalini Vasant – Balya and Garbhaposha.
Iron	Ferrum	Tikta, Madhura, Kashaya	Sheeta	Katu		Raktavardhaka, Kapha-pitta shamaka, Trushnashamaka. Due to its Tikta, Kashaya rasa and Ruksha guna, it decrease Kapha. Due to its Tikta, Madhura, Kashaya rasa and Sheeta virya it decreases Pitta dosha. Because of Katu vipaka, it creates mild constipation.
Milk (Cow)		Madhura	Sheeta	Madhura		Jeevaneeya, Rasayana, Medhya, Balya, Stanyakara, Cures Jeerna Jwara, Mutrakrucchra, Raktapittaghna, reduces thrust and hunger, also Daridryanashaka.
Curd		Amla		Amla	Guru, Ushna	Vataghna, Ruchivardhaka, Agnivardhaka, Raktavardhaka, Abhihyandi quality i.e. reaches sukshma strotasa.
Navneet (Butter)		Madhura, alpa Kashya, Amla	Sheeta		Sheeta	Grahi, Deepaka, Raktapittanashaka.
Ghruta (Cow)		Madhura	Sheeta	Madhura	Sheeta	Smruti, Grahanshakti, Dnyanshakti, Agnibala, Ayushya, Shukra vardhaka. Healthy for eyes, Swara Madhuryadayaka, helpful in Vihinmada, Viryavardhaka, Vayathapana.
Honey		Kashya Madhura			Guru, Ruksha, Sheet	Yogavahi, Vatakara, Vranahodhana, Ropana, Sandhana.

DISCUSSION

1st to 3rd Month

During 1st three months (1st trimester) of pregnancy, pregnant woman prominently experiences Nausea, and Vomiting. In this condition she cannot take her normal diet. Due to vomiting, Rasa kshaya is seen. Hence drava ahara (liquid diet) helps to increase the rasa dhatu, results in prevention of dehydration and further produces Nirama ahara rasa.

प्रथमे मासि कललं जायते ।

सु. शा. ३ / १४

अव्यक्तः प्रथमे मासि सप्ताहात्कलली भवेत् ।

अ. ह. शा. १ / ३६

According to Acharya Sushruta and Vagbhata, in the first month embryo is in the shape of kalala (liquid state) so according to Acharya Charaka,

सर्वदा सर्वभावानां सामान्यं वृद्धिकारणम् ।

च. सू. १

The similar properties enhance the respective qualities inside the body.

समान गुणाभ्यासो हि धातूनां वृद्धिकारणम् इति ।

च. सू. १२

Hence prescribes the liquid diet.

MADHURASA

तत्र मधुरोऽसः शरीरसान्याद्रसरुधिर मांसमेदोस्थ मज्जोजः शुक्रभिवर्धन आयुष्यः षडिन्द्रियप्रसादनो बलवर्णकरः पित्तविषमारुतघ्न तृष्णादाहप्रशमनस्त्वच्यः केश्यः कण्ठो बल्यः प्रीणनो जीवनस्तपर्णो बृंहणः स्थैर्यकरः क्षीणक्षतसन्धानकरो घ्राणमुखकण्ठौष्ठ जिह्वाप्रल्हादनो दाहमूर्च्छाप्रशमनः षट्पदपिपीलि-कनिमिष्टतमः स्निग्धः शीतो गुरुश्च ॥

च. सू. २६/४३-१

Madhur rasa has snigdha, sheeta, guru, kaphavardhaka, vata-pitta shamaka properties. Madhur rasa will be entire oral cavity with its sweet taste, a feeling of generalized well beingness, pleasure and strength to body organs. These properties help to maintain the proper condition of Garbhini and Garbha. As fetus is dominated by kapha, naturally it would need more unctuous substances to replenish the kapha. Madhura rasa did this.

According to modern science it is claimed that Madhur rasa (sweet) will nourish all the tissues because glucose is stored in the muscles as glycogen and circulating all over the body as glucose in the blood. The cerebral cortex contains maximum quantity of glucose and its depletion results in death during hypoglycemic attack. As well as it has anabolic property help to keep the mother and baby healthy.

Amla rasa

अम्लो रसो भक्तं रोचयति, अग्निं दीपयति, देहं बृंहयति, ऊर्जयति, मनो बोधयति, वातमनुलोमयति, हृदयं तर्पयति, आस्यमास्त्रावयति, भुक्तमपकर्षयति, क्लेदेयति जरयति, प्रीणयति, लघुरुष्णः स्निग्धश्च ।

च. सू. २६/४३-२

Amla rasa (sourness) is claimed to be hridya (good for heart and mana) (हृदयाय मनसो हितम् हृद्यम् ।). It is rich in vitamin C.

तत्रं लघु कषायाम्लं दीपनं कफवाताचित् ।

The deepan property strengthens Jatharagni and help to maintain nirama ahara rasa that is why Acharya Harita prescribes Takra pan in 1st month of pregnancy.

Sheeta ahara reduces the pitta prakopa hence it reduces the risk of Garbhavyapada i.e. Garbhastra (abortion or miscarriage).

According to Ashtang Sangraha, Palash siddha ghruta is to be prescribed in 1st month.

Actually various parts of palash are useful in pregnancy a follows:

1. Palash Seed + Takra –Palash seed has krimighna and grahi property. It mainly act on thereadworm and round worm by killing them. Takra being alma rasatmak help in rasapreenana and raktavardhaka and hrudya. It is having Lactobacillus. So combinely both the drugs will increases the absorption of iron and nutrients which help to prevent the garbhavyapada and garbhopadravas like garbhini pandu (anemia in pregnancy).
2. Kanhuk (Palash Flower) – having Kapha pittaghna property it reduces reduces risk of abortion.
3. Palash patra pask – according to Acharya Sushruta it is kapha pitta prashamana, pramehanashaka, so useful to prevent the gestational diabetes as well as due to its grahi guna it works in plihodara so it also prevents the polyhydromnios condition in pregnancy.
4. Palash ghruta for 1st 12 days along with gold and silver boiled in

water – Gold and silver having properties of reducing vata-pitta, krimighna, rasayana, medhya, smrutiprada, balya, viharaha, ojovardhaka property.

According to Acharya Kaphyapa, in 1st 3 months the means (indriyas) have subtle manifestation and the mind has more manifestation. The fetus quivers, achieves consciousness and feels pain. So the above dietic regimen is very useful to mother and fetus become healthy.

Yashtimadhu

Due to its madhura rasa and vipaka, sheeta virya, brumhana, pittashamaka property it helps to prevent nausea and vomiting and nourishes the fetus. It contains gluceretic acid which is having anti-inflammatory activity and diacetrate having action to that of hydrocortisone.

Honey

It is madhur and kashya in rasa, kaphahara, yogavahi (catalyst in action – a drug which accelerates the action of other drug with which it recites without giving out its originality).

Sukshma marga anusaritan (A.S. Su. 6/92) Sukshma enables to penetrate into minute capillaries of the body, strotasas by increasing osmotic permeability. As it contains sugar which are rapidly absorbed by the digestive system and converted into energy, so it is an instant energizer.

It speeds up healing, growth of healing tissues, so useful in implanted bleeding and APH cases. It has anti-bacterial properties so prevent various infections like TORCH during 1st trimester which are responsible for abortion (constant use of honey strengthen WBC to fight bacteria, virus, etc.) Honey is a good antioxidant which restores the damaged skin and gives soft and young look. Antioxidants have the ability to inhibit oxidative damage which prevent inflammatory condition and also prevents neurodegenerative conditions.

ब्रणशोधनं संधानरोपणं वातलं मधु ।
रुक्षं कषायमधुरं तत्तुल्या मधुशर्करा ॥
नाद्रव्यात्मकत्वाच्च योगवाहि परं मधु ।
वृष्ययौगैरतो युक्तं वृषतामनुवर्तते ॥

Sarpi (Ghruta)

गव्ये क्षीर घृते श्रेष्ठे ॥

शस्तं धीस्मृतिमेधाग्नि बलायुः शुक्रचक्षुषाम् ॥
बालवृद्धप्रजाकान्ति सौकुमार्यस्वार्थिनाम् ।
क्षतक्षीण परीसर्पशस्त्रान्नि पितात्मनाम् ॥
वातपित्त विषोन्माद शोषालक्ष्मी जरा पहम् ॥

अ.सं. सू. ६

Sarpi has unique quality to transform itself so as to imbibe the qualities of the substances to which it is added without losing its own qualities. This is known as samskara anuvartana. This property is not so prominent in other sneha dravya like – Taila, vasa, majja.

Madhuryat – sweet in taste.

Avidahitvat – does not cause burning sensation.

Janama dyeva cha shilanaat – it is used since birth.

Pharmacodynamics:

Rasa	-	Madhur
Guna	-	Snigdha, Mrudu, Guru, Manda
Virya	-	Shita
Vipaka	-	Madhur
Prabhav	-	Agnideepana
Karma	-	Pitta vatahara, Svara,- lavanya, teja-balakara, chakshushya, medhya, increases rasa, oja, dahashamaka, vrushya, vayasthapana.

Among the ghee form different sources, cow's ghee is found to be the best according to Ayurveda. Sarpi is effective in all three doshas. It alleviate vata dosha by virtue of its snigdha (unctuous) quality. It pacifies pitta dosha due to its madhur and shita quality attributes. It also treats kapha dosha by virtue of samskara anuvartana, when it is combined with kaphahara drugs. Moreover, sarpi has been proved as a good bio-enhancer of accompanying drug, as well as a good ojokara

(immunity enhance). That's why each and every Acharya prescribe the use ghruta throughout pregnancy period.

Ghee is a rich source of vitamin A, Vitamin E and carotenoids. It acts as a catalyst for absorption of various macro and micronutrients from placenta. Is also lowers the prostaglandin level in serum. It has hypocholesterolemic effect.

Prostaglandins decrease uterine blood flow and increase the level of oxytocin which results in abortion, premature labour as well as pre eclamptic condition and PIH.

अत्रं गव्यं तु जीवनीयं रसायनम् ।
क्षतक्षीणहितं मेध्यं बल्यं स्तन्यकरं सरम् ॥

A. र. सू. ५/२१

4th Month

चतुर्थे मासि स्थिरत्वमापद्यते गर्भः ।

च. शा. ४ / २०

चतुर्थे सर्वाङ्ग प्रत्यङ्ग विभागः प्रव्यक्तो भवति ।

गर्भ प्रत्यक्त्तिभावाच्चेतना धातुशाभिव्यक्तो भवति कस्मात् ॥

सु. शा. ३ / १४

Various body parts become more conspicuous and stability to the fetus comes in the 4th month. Manifestation of heart and consciousness associated with heart takes place. Due to stability in fetus the woman feels more heaviness in the body. So shalishashti, curd and navnet plays an important role as follows:

स्निग्धो ग्राही लघु स्वादुस्त्रिदोषघ्नः स्थिरो हिमः ।

षष्टिको व्रीहिषु श्रेष्ठो गौरश्वासितगौरतः ॥

अ. ह. सू. ७ / ७

Snigdha, grahi, laghu, sthira guna helps in stabilization of fetus and create laghuta in pregnant woman.

लाजास्तुट् छर्षतीसारमेहमेदः कफाच्छेदः ।

कासपित्तोपशमनां दीपना लघवो हिताः ॥

Due to the above property plays an important role in garbhini aruchi and chhardi.

नवनीत

शीतं स्वादु कषायाम्लं नवनीतं नवोद् घृतम्

कषायो रसः संशमनः, संग्राही, सन्धानकर, पीडनो, रोपणः, शोषणः, स्तम्भनः, श्लेष्मरक्तपित्तप्रशमनः, शरीरकलेदस्योपयोक्ता रूक्षः शीतोत्लघुश्च ।

Due to above properties it helps to stabilize the foetus in uterus.

Curd

Curd contains lactic acid. Lactate is essential for brain development and it also prevents fetal acidosis.

Mamsarasa

It is a good nutritive, vatapittahara, Ruchikara, help in relieving tiredness and dhatukshaya. It is rich source of vitamins, organic iron, calcium and other minerals.

Due to manifestation of fetus heart in 4th month it possesses two hearts so the mother is called “dauhridini”. Hence the fetus indicates its desire in sense of objects. If these desires are ignored, the lady would delivers the fetus with various garbhavikruti (congenital anomalies) i.e. Kubja, Kuni (deformed hands), Khanja (deformed legs) Jada, (mentally retarded), Vamana, abnormality in eyes. So one can take the douhruda as an indicator of nutritional deficiency or psychological need of mother.

तस्मादिति सुख दुःख संबन्धात् सुखोत्पादनार्थं दुःखपरिहारार्थं च स्पन्दते चलति ॥

च. शा. ४ / १५ चक्रपाणी टीका

According to Acharya Kashyapa, after 4th month chances of abortion declines and basic organogenesis is also advanced to certain extent, minimizes the chances of congenital anomalies. Hence, whatever she desires should be provided to her afterward she delivers powerful and

long lived progeny.

5th Month

पञ्चमे मासि गर्भस्य मांसशोणितोपचयो भवत्यधिकमन्येभ्यो मासभ्यः ।
तस्माद् गर्भिणी काश्यमापद्यते विशेषेण ॥

च. शा. ४ / २१

पञ्चमे मनः प्रतिबुद्धतरं भवति ॥

सु. शा. ३ / १६

According to Ayurvedic philosophy the knowledge of perception is the result of interaction between mana and indriya. Since by 5th month auditory reflexes and peripheral sensory reflexes develops to certain extent.

The woman becomes emaciated due to lack of nourishment of maternal dhatus as the rasa is driven to nourish more and more the flesh and blood of the fetus.

That's why Acharya has prescribed ghruta, milk and meat of wild animals in this month. From 4th month onwards muscular tissues of fetus grow sufficiently required more proteins which are supplied by use of meat soup.

6th month

षष्ठे मासि गर्भस्य बलवर्णोपचयो भवत्याधिकमन्येभ्यो मासेभ्यः ॥
तस्माद् गर्भिणी बलवर्णं हानिमापद्यते विशेषेण ॥

च. शा. ४ / २२

षष्ठे बुद्धि ॥

सु. शा. ३ / १६

षष्ठे केशरोमनखास्थिस्नाखादीन्याभिव्यक्तानी बलवर्णोपचयश्च ॥

अ. सं. शा. २ / २८

बलवर्णो जसां वृद्धि षष्ठे ॥

का. सं. शा. असमानगोत्रीय

षष्ठे मातु श्रमोऽधिकम् ॥

का. सं. शा. असमानगोत्रीय

As by 24th to 25th weeks, sensory and motor organs attain some maturity and skin becomes pink so the description of buddhi and complexion is given. Deposition of calcium also starts in this month, so the classics have described formation of hairs and bone. As during this month the fetus derives relatively more strength and complexion hence the pregnant woman suffers loss of strength and complexion, she feels more tiredness. That's why use of godugdha and godhruta is indicated.

In this month kleda nirmiti takes place, so pedal edema is seen prominently in pregnant woman that is why ghruta medicated with gokshura is given to pregnant woman, as it has kledaghna, mutral, shothaghna property. According to modern science steroidal Saponin has good diuretic property and is proved to have the best nephroprotective activity as that of gentamycin. It also prevents the retention of water, reduces albuminuria. As it is having vasodilator property it preventing PIH, IUGR, pre mature labour, DM and infection. Gokshura is also having buddhi vardhaka, nrumbhana, pitta-kapha nashaka property. So it helps to increase the intellect.

7th month

सप्तमे मासि गर्भः सर्वे भवैश्याप्यते ॥

च. शा. ४ / २३

सप्तमे सर्वाङ्ग प्रत्यङ्ग विभागः प्रव्यक्ततरः ॥

सु. शा. ३ / १६

तस्मात्तदा गर्भिणी सर्वाकारैः क्लान्ततमा भवति ॥

च. शा. ४ / २३

All the features (muscle, blood, bone, etc.) get proper nourishment. All the major and minor body parts are more conspicuous (are fully developed). Whole body gets completely associated with vata, pitta,

and kapha. As the fetus attains overall maturity in this month, the pregnant woman feels excessively exhausted. That's why Acharya prescribes milk and ghruta with medicated with madhura aushadhi.

Navneet medicated with madhur aushadhi, Ghruta khanda (a sweet dish) is a specially prescribed by Acharya Harita. Madhura and amla rasa play an important role a prescribed earlier.

Ghruta medicated with pruthakpami and vidarigandhadi gana are prescribed by Acharya Sushruta. The drugs of vidarigandhadi gana are diuretic, anabolic, relative emaciation and suppress pitta-kapha and maintain the health of mother and fetus.

8th month

In this month, according to Acharya Charaka, rice gruel (yavagu) prepared with milk should be given to garbhini.

यवागू

यवागू त्रिविधा प्रोक्ता मण्डः पेया विलेपी ।

सिक्थकौ रहितो मण्डः पेया सिक्थ समाचिता ।

विलेपी बहु सिक्था स्याद् यवागू विरलद्रवा ॥

सु. सू. ४६ / ३४४

Yavagu – preparation of cereals like rice, wheat, barley. It is easily and completely absorbed by human body. It is easily and completely absorbed by the human body.

कृशरा

कृशरा शुकला बल्या गुरुः पित्तकफप्रदा ।

दुर्जरा बुद्धि विष्टम्भि मलमूत्रकरी स्मृता ॥

भा. प्र. कृतात्रे

Kaphapittakara, vatahara, balya, buddhiprada, malamutravardhaka.

In 8th month most of the time constipation takes place due to pressure of gravid uterus over the bowels and effect of progesterone. Use of Asthapana basti of badaradi dravyas and anuvasana basti of milk and madhur dravya siddha tail relieves the constipation and helps in anulomana of vata (apana) and vishodhana of puran mala. This may also affect the autonomous nervous system governing myometrium and help in regulating their function during labour. So it prevents the malpresentation and increases the chances of normal labour.

9th month

Anuvasana basti of Madhura aushadhi siddha tail should be given. Yonipichu of Til Tail medicated with madhur dravya should be kept in vagina for softening of the birth canal.

Qualities of Til Tail – Rassa – madhur, Anurasa – Tikta, Kashaya. Virya – Ushna.

Guna – Tikshna, Gurur, Snigdha, Vikasi, Sara Karma

मारुतघ्नं न च श्लेष्मवर्धनं बलवर्धनम् ।

त्वच्यमुष्णं स्थिरकरं तैलं योनि विशेषणम् ॥

च. सू. १३ / १५

- Til tail is good source of zinc and has powerful antioxidant property.
- Taila alleviates Vata dosha but does not aggravate kapha.
- Promotes Bala (strength) to apatyapatha (vagina).
- Controls the morbidity of female genital tract.
- Antibacterial and anti-fungal activity.

Oil tampon soften the birth canal, influence autonomic fibers governing myometrium and help in regulating their functions. As having anti-microbial (krimighna) property, it kills the microbes in birth canal and help to prevent sutika roga (puerperal sepsis).

CONCLUSION

Benefits of monthly regimen

परम इति निर्विकार माष्यस्यमानस्य गर्भस्य मासे मासे कर्मोपदेश्यामः ।

एवं कुर्वती हृद्गोणाऽऽग्य बल वर्णं स्वर संहनन संपदुपेतं ज्ञातीनाम् श्रेष्ठमपत्यं

जनयति ॥

यदिदं कर्म प्रथमं मासं समुपादायोपदिष्टमानवमान्मासात्तेन गर्भिण्या गर्भसमये गर्भधारिणीकुक्षिकटीपाश्र्वपृष्ठं मृदुभवति वातश्चागुलोमः संपद्यते मूत्रपुरीषे च प्रकृतिभूते सुखेन मार्गमनुपद्येते चर्मनखानि च मार्दवमुपयान्ति बलवर्णो चोपचीयेते पुत्रं चेष्टं संपदुयेतं सखिनं सुखेनैषा काले प्रजायत इति ॥

च. शा. ८ / ३२

After following the dietetic regimen from 1st to 9th month, the woman remains healthy and delivers the child possessing good health, energy or strength, voice, compactness, much superior to other progeny.

Women's kukshi (abdomen), sacral region, flanks and back become soft, apana vayu moves into its right path, feces, urine and placenta are excreted easily by their respective passage. Skin and nail become soft. Woman gains strength and complexion. She delivers easily at proper time. A desired, excellent, healthy child possessing all the qualities of long life.

Abbreviations

च. – Charaka Samhita

सु. – Sushrut Samhita

अ. ह. – Ashtang Hridaya

अ. सं. – Ashtang Sangraha

का. सं. – Kashyapa Samhita

भे. – Bhela Samhita

भा. प्र. – Bhavapraksha Samhita

सू. – Sutrasthana

शा. – Sharirsthana

A CLINICAL STUDY OF TIKTA KSHEERAVASTHI (KALAVASTHI) IN
OSTEOPOROSIS W. R. T. ASTHIGATAVATA

*Dr. Megha R. Survase

Assistant Professor, Department of Panchakarma, CSMSS Ayurveda Mahavidyalaya, Aurangabad.

*Corresponding Author: Dr. Megha R. Survase

Assistant Professor, Department of Panchakarma, CSMSS Ayurveda Mahavidyalaya, Aurangabad.

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ABSTRACT

The present study was aimed to evaluate the efficacy of *Tikta ksheeravasthi* in Osteoporosis w.r.t. *asthigata vata*. Osteoporosis can be correlated with *asthigata vata* in *Ayurveda*. In the treatment principle of *asthigata vata*, snehan, swedan and *mrudu shodhana* has been mentioned. 10 patients fulfilling the criteria for the osteoporosis were taken for the present study according to inclusion criteria. Initially *Deepana*, *Pachana*, *Rookshana* was done. Then *Jambeera pinda sweda* for 7 days was done. Then administration of *Tikta ksheeravasthi* in *kalavasthi* pattern for 16 days was done. Follow up was done after 32 days in which *guggultiktakam ghritam* was given as *shaman aushadhi*. Assessment was done before treatment and after follow up at clinical level and investigation level. After statistical analysis it can be concluded that *Tikta ksheeravasthi* was effective in reducing signs and symptoms of osteoporosis.

KEYWORDS: *Tikta ksheeravasthi*, *Asthigata vata*, Osteoporosis, *Guggultiktakam ghritam*,

INTRODUCTION

Osteoporosis, is burning health problem of this era. Osteoporosis is defined as a reduction in the strength of bone leading to an increased risk of fractures. WHO operationally defines osteoporosis as a bone density that falls 2.5 standard deviations (S.D) below the mean for young healthy adults of the same gender – also referred to as T – score of - 2.5. The word ‘Osteoporosis’ is a combination of two words – ‘Osteon’ meaning bone and ‘porosis’ meaning cavity formation. The symptoms includes restriction of joint movement, severe pain, fracture, abnormalities of nail and teeth etc. The etiological factors are right from metabolic to idiopathic and it usually generates along with senile and post menopausal changes in the body. India is one of the largest affected countries of the world with osteoporosis and the prevalence rate is 1 in 3 women and 1 in 12 men over the age of 50. Current WHO estimate that over 270 million people are likely to suffer from osteoporosis by 2020 in India and China alone.

Asthigata vata is one among the *dhatugata vata vyadhis* described in all *Ayurveda* classics. It comes under the category of *Gata vata* explained in *vatavyadhi prakarana*,^[1] of *charaka samhitha*. Instead of the word ‘Gata’ in *gata vata*, *acharyas* have mentioned various terminologies like *gate*, *sthite*, *avasthite*, *prapte* etc depending upon the gati of vitiated *vata* and *sthanasamsraya* on a particular site. In *Ayurveda* osteoporosis comes under the spectrum of *Asthigata vata*

in *Asthigata vata*, *vata* and *asthi* are predominantly affected due to *vata prakopa*. The causative factors are *vatala aahar vihar*,^[2] which produces *asthi kshaya lakshanas* and nowadays another causative factor is *virrudhha aahar* causing *dhatwa agni mandya*. The *vata dosha* and *asthi dhatu* are related to each other by *Asrayasrayibhava*,^[3] i.e they are reciprocally related. In the *Asthigata vata*, there will be *vata prakopa lakshanas* and *Asthi kshaya lakshanas*. The general line of treatment for *vata dosha* is *Snehana*, *swedana* and *mrudu shodhana*.^[4] In *Ayurveda* classics for *Asthi kshaya*, *acharya charaka* mentions treatment principle for *asthi ashrit vyadhi*,^[5] He mentions to use medicated *ksheera* and *ghrit* with *tikta rasa* for *panchakarma*. So based on this principle it is assumed that *tikta ksheera vasthi* are having pivoting role in osteoporosis. The present study was under taken to prove the efficacy of *tikta ksheera vasthi* in treating osteoporosis.

AIMS AND OBJECTIVES

1. To assess the efficacy of *Tikta ksheera vasthi* in reducing the signs and symptoms in patients with osteoporosis.
2. To evaluate the efficacy of *Tikta ksheera vasthi* in bone mineral density studies.

MATERIALS AND METHODS

Source of Data and Method of Collection

Patients were selected from the OPD and IPD of department of *Panchakarma*, CSMSS Ayurveda Hospital, Auranagabad. Patients were screened for Osteoporosis and were selected for study as per inclusion and exclusion criteria. Necessary investigations were carried out. Their details were recorded in a special proforma.

Inclusion Criteria

- Patients with Osteoporosis and patients at the risk of Osteoporosis.
- Age group 35 – 60 years
- Sex: Female and Male
- Patient fit for *Vasti*
- Patient with written informed consent.

Exclusion Criteria

- Patient below Age group 35 and above 60 yrs.
- Heritable diseases of connective tissue like Osteogenesis imperfecta.
- Metabolic disorders like Hyperthyroidism and Hyperparathyroidism, Diabetes mellitus and other systemic illnesses like Chronic Rheumatoid Arthritis, complicated hypertension
- Other gross metabolic Bone disorders.
- Patients who are on long term treatment with corticosteroids.
- Contraindications for *vasti*.

Research Design

10 patients were selected for study as per inclusion and exclusion criteria after screening for osteoporosis by BMD test. The BMD Test and required haematological investigations were done before and after the study and trial was conducted on selected patients. An informed written consent of patient was taken prior to study. Concerned datas were recorded and periodic evaluations were done accordingly. Results were statistically analysed at the end of study.

Intervention

Maharasnadi Kashayam 90ml bd morning and evening - 3 days

Shaddharana churnam 5gm bd with lukewarm water before food -3 days

Jambeera pinda sweda - 7days

Ksheeravasthi done as *Kalavasthi* - 16 days.

MATERIALS AND METHODS

Jambeera pinda Sweda

Lemon, garlic, saindhav, rasna choorna, deodar choorna, haridra choorna, methika choorna All fried in eranda tailam and tila tailam. And the pottali was prepared and used.

Vasthi

Shuddha Bala taila (for abhyanga) - Q. S.

Drugs for *Ksheeravasthi*

- *Panchtiktasheerapaka* - 200ml.
- *Guggulutiktaka gritha* - 100ml.
- *Lakshadi taila* - 100ml.
- *Madhu* - 100ml.
- *Yavanyadikalka* - 30g.
- *Saindhava* - 5g.

Drugs for *Anuvasana Vasthi*

Lakshadi taila - 120ml.

Saindhava - 1g.

ShatapushpaChurna - 1g.

Preparation of trial drugs

Maharasnadi Kashaya and *Shaddharana Choorna*, *Lakshadi Taila*, *Guggulutiktaka Ghrita*, *Shuddha Bala Taila*, *Madhu* were used of the GMP Certified *Arya Vaidya Shala Kottakal Pharmacy*, Kerala. Materials required for *Jambeera Pinda sweda*, *Panchatikta Bharad Kalka Dravya* were collected from Market.

Preparation of *Ksheeravasthi*

Initially *madhu* and *Saindhava* were added and mixed properly. *Lakshadi taila* was added followed by liquefied *guggulutiktaka gritha* in thin stream with continued grinding. Then *Yavanyadi Kalka* was added little by little and mixed together until the uniform mixture is obtained. Finally *panchatikta ksheerapaka* was added in thin streams while continuing the grinding. Then all the contents were mixed to form a uniform mixture, it was filtered through a clean cloth and made lukewarm over boiling water vapour. Then this mixture is churned with the help of a churner for few minutes. The mixture obtained was slightly thick, uniformly mixed and lukewarm. This was put into a clean and sterile, thick plastic cover (*Vasthi putaka*) and *vasthinetra* made of plastic was tied to it, and was plugged with cotton.

Preparation of *Anuvasana vasthi*

Lakshadi Taila was added with fine powder of *Shatapushpa choorna* and *saindhava* 1g each, and stirred properly. It was filtered and filled in *Vasthiputaka*. *Vastinetra* was tied properly and plugged with cotton.

Procedures

Jambeera Pinda sweda: For 7 days, this was done for whole body by using *shuddha bala taila* for 30 minutes in 7 different position. Patient was asked to take rest for 1 hour Then bath with luke warm water.

Kalavasthi: The 16 *vastis* were done. First two *anuvasana* then 6 *ksheeravasthi* and *anuvasana* alternately followed by last three *anuvasana*.

A	A	K	A	K	A	K	A	K	A	K	A	K	A	A	A
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Administration of Anuvasana Vasthi

Poorvakarma - *Abhyanga* with *Shuddha Bala taila* in the morning and *bashpasweda*.

Blood pressure and pulse rate were recorded.

Pradhana Karma - Administration of *anuvasana vasthi* in 120 ml quantity.

Paschat Karma - Patient was asked to lie down in supine position with all the limbs relaxed, counting up to 100. Then was asked to take rest and advised to evacuate the bowel as soon as the urge comes. At night was asked to take light food.

Administration of Ksheera vasthi

Poorva Karma - Patients was given *abhyanga* with *Shuddha bala taila* and *baspasweda* at 10.30 am. Their blood pressure and pulse rate were recorded.

Pradhana Karma - Administration of *Ksheera vasthi* in left lateral position.

Paschat Karma - Patient was asked to lie in supine position till the urge of defecation occurs. Then was asked to clear the bowels and take bath with hot water. Then light food like rice was given with *mudga yusha* was asked to take rest and light food was given at night.

Post Vasthi Regime - After *Kalavasthi* patient was advised to follow *parihara kala* for a period of 32 days. During follow up patient was advised to take the *Guggulutiktakam Ghritam* as *shamana* drug at bedtime after food for 6 months.

Duration of the study

The study includes 26 days of intervention and 180 days of follow-up.

Assessment Criteria

Assessment was done at two levels

Clinical level

A) Pain: It was assessed by visual analogue scale and graded as follows.

Table 1: Pain assessment.

Grade 0	Grade 1	Grade 2	Grade 3	Grade 4
No pain	Mild pain	Moderate pain	Severe pain	Impossible to tolerate

B) Stiffness

Table 2: Stiffness assessment.

Grade 0	Grade 1	Grade 2
Absent	< 15 minutes	> 15 minutes

C) Tenderness

Table 3: Tenderness assessment.

Grade 0	Grade 1	Grade 2	Grade 3	Grade 4
No tenderness	Patient say joint is tender	Patient winces	Patient winces and withdraws the affected part.	Patient won't allow touching the affected part.

D) Crepitus

Table 4: Crepitus assessment.

Grade 0	Grade 1	Grade 2
Absent	Palpable	Audible

E) Walking Difficulties

Table 5: Walking difficulties are assessed by inspection and assessed as follows.

Ability to Climb up a standard flight of 10 stairs	Easily with mild difficulty with moderate difficulty marked difficulty Impossible	Grade 0 Grade 1 Grade 2 Grade 3 Grade 4
Ability to climb down a standard flight of 10 stairs	Easily with mild difficulty with moderate difficulty with marked difficulty Impossible	Grade 0 Grade 1 Grade 2 Grade 3 Grade 4
Ability to bend or squat the knee	Easily with mild difficulty	Grade 0 Grade 1

	with moderate difficulty	Grade 2
	with marked difficulty	Grade 3
	Impossible	Grade 4

F) Investigation level

BMD test done before and after study was the prime investigative tool. Routine blood tests, TFT, Serum Alkaline Phosphatase and serum calcium were assessed before and after treatment.

Interpretation of Bone Density Values

WHO has established diagnostic guidelines of T-score as follows

- Normal Bone : T-score at or above -1SD
 Osteopenia : T-score between -1.0 and -2.5 SD
 Osteoporosis : T-score at or below -2.5 SD

Statistical analysis

The efficacy of treatment was analyzed by calculating the mean, standard deviation of the parameters; t and p values were found using Paired 't' test.

OBSERVATION AND ANALYSIS**Data related to response to treatment**

The response to the treatment was assessed by statistical methods during admission of the patient and after follow up of 6 months.

Table 6: Response of treatment on joint movements.

Parameters	Stage	Mean	SD	N	Mean Difference	Paired t	P
Neck movements	BT	2.60	0.70	10	2.1	11.7	p<0.001
	AT	0.50	0.53	10			
Shoulder mobility (left and right)	BT	2.80	0.63	10	2.2	16.5	p<0.001
	AT	0.60	0.70	10			
Elbow mobility (right)	BT	2.44	0.73	9	2.0	12.0	p<0.001
	AT	0.44	0.53	9			
Elbow mobility (left)	BT	2.22	0.67	9	2.0	12.0	p<0.001
	AT	0.22	0.44	9			
Arm mobility (right)	BT	1.80	0.79	10	1.7	8.0	p<0.001
	AT	0.10	0.32	10			
Arm mobility (left)	BT	1.44	0.53	9	1.3	8.0	p<0.001
	AT	0.11	0.33	9			
Wrist mobility (right and left)	BT	1.56	0.53	9	1.4	8.2	p<0.001
	AT	0.11	0.33	9			
Hip mobility (right and left)	BT	2.70	0.48	10	2.3	15.1	p<0.001
	AT	0.40	0.52	10			
Knee mobility (right)	BT	2.80	0.42	10	2.4	14.7	p<0.001
	AT	0.40	0.52	10			
Knee mobility (left)	BT	2.60	0.52	10	2.3	15.1	p<0.001
	AT	0.30	0.48	10			
Ankle mobility (right)	BT	1.90	0.99	10	1.5	9.0	p<0.001
	AT	0.40	0.52	10			
Ankle mobility (left)	BT	1.70	0.82	10	1.5	9.0	p<0.001
	AT	0.20	0.42	10			
Foot mobility (right)	BT	1.88	0.64	8	1.6	8.9	p<0.001
	AT	0.25	0.46	8			
Foot mobility (left)	BT	1.75	0.71	8	1.5	7.9	p<0.001
	AT	0.25	0.46	8			
Difficulty to climb up a standard flight of 10 stairs (right)	BT	2.80	0.42	10	2.4	14.7	p<0.001
	AT	0.40	0.52	10			
Difficulty to climb up a standard flight of 10 stairs (left)	BT	2.70	0.48	10	2.4	14.7	p<0.001
	AT	0.30	0.48	10			
Difficulty to climb down a standard flight of 10 stairs based on group (right)	BT	2.80	0.42	10	2.4	14.7	p<0.001
	AT	0.40	0.52	10			
Difficulty to climb down a standard flight of 10 stairs (left)	BT	2.60	0.52	10	2.3	15.1	p<0.001
	AT	0.30	0.48	10			
Difficulty to bend or squat at the knee (right)	BT	2.80	0.42	10	2.4	14.7	p<0.001
	AT	0.40	0.52	10			
Difficulty to bend or squat at the knee	BT	2.60	0.52	10	2.3	15.1	p<0.001

(left)	AT	0.30	0.48	10			
Tenderness (right)	BT	2.70	0.48	10	2.3	15.1	p<0.001
	AT	0.40	0.52	10			
Tenderness (left)	BT	2.60	0.52	10	2.2	16.5	p<0.001
	AT	0.40	0.52	10			
Crepitus (right)	BT	1.50	0.53	10	1.3	8.5	p<0.001
	AT	0.20	0.42	10			
Crepitus (left)	BT	1.40	0.52	10	1.3	8.5	p<0.001
	AT	0.10	0.32	10			
Morning stiffness (right)	BT	1.83	0.41	6	1.8	11.0	p<0.001
	AT	0.00	0.00	6			
Morning stiffness (left)	BT	1.83	0.41	6	1.8	11.0	p<0.001
	AT	0.00	0.00	6			
BMD test score	BT	-2.3	0.5	10	2.0	8.2	p<0.001
	AT	-0.3	1.2	10			
ESR	BT	31.9	12.2	10	15.0	4.8	p<0.01
	AT	16.9	7.3	10			
Serum alkaline phosphatase	BT	106.4	7.9	10	8.0	5.2	p<0.001
	AT	114.3	7.4	10			
Serum calcium	BT	8.0	0.9	10	0.7	6.2	p<0.001
	AT	8.7	0.7	10			
Serum haemoglobin	BT	10.7	1.4	10	1.3	5.5	p<0.001
	AT	12.0	0.8	10			

DISCUSSION

Osteoporosis can be correlated with *Asthigata vata* which is included under the spectrum of *vatavyadhi*. *Vatavyadhi* is included under *Mahagadas* due to *uttarothara dhatu avaghatwam* (progressive affection of deep dhatus) and *deerkhakalanubandhatwam* (prolonged disease duration). *Asthigata vata* is caused by *vata prakopa* which in turn leads to *Asthi kshaya*.

The present study was under taken to prove the efficacy of *Tikta ksheera vasthi* in treating osteoporosis and to evaluate the efficacy of *Tikta ksheera vasthi* in bone mineral density studies. 10 patients were undertaken for this study and the observations were systematically recorded.

The treatment principle was based on *vatavyadhi chikitsa* viz *snehan*, *swedan* and *mrudu shodhana*.^[6] Initially *deepana*, *pachana* and *rookshana* were done for attaining *agnibala*.^[7] For this purpose *maharasnadi kashaya* and *shaddharana churna* was used. *Jambeera pinda sweda* using *Shuddha Bala taila* was done. *Snehana* and *swedana* is against the *seetha* and *rooksha guna* of *vayu* so pacify the *vata*. Then patients were given *ksheeravasthi* in form of *kalavasthi* which included *6 niroohas* and *10 anuvasanas*. *Ksheeravasthi* consisted of *panchatikta ksheerapaka*, *lakshadi taila* and *guggulu tiktaka gritha* which was according to *chikitsa sootra* of *asthivaha srotodushti*. *Yavanyadi kalka* was added as per the directions of *Arundatta*. *Ksheera vasthi* is *mrudu nirooha* mentioned particularly for the, *vatashamana bala vardhan*, and it is *snigdha* in property.^[8] It expels the *doshas* from the *pakwasaya*,^[9] thus removes the *roga karana* from the root. Patients were discharged after *vasthi Karma*. They were advised to follow *vasthi*

parihara kala of 32 days viz *dwipariharakala*¹⁰. *Parihara kala* is necessary to increase *bala* of patient after *shodhana karma*. The remaining *doshas* in body are been treated with *shaman aushadhis*. *Guggulutiktakam ghritam* was used as *shaman aushadhis* with is very effective in *asthisandhi gata vyadhis* for a period of six months. Patients were advised to be in contact with respect to treatment just to notice the changes that occurred.

Interpretation of response to the treatment

The clinical assessment were done on parameters like pain on joint mobility, difficulty in walking, tenderness, crepitus, morning stiffness, BMD test and haematological investigations After treatment highly significant changes were obtained in all parameters.

BMD: Highly significant changes were seen in BMD which suggest that treatment is very effective in increasing bone mineral density.

ESR: Highly significant changes were seen in ESR which can be known by enhanced joint mobility with reduced pain and stiffness.

Serum Alkaline Phosphatase: Highly significant changes were seen in Serum Alkaline Phosphatase levels. It indicates the increased osteoblastic activity and increased bone formation.

Serum Calcium level: Highly significant changes were seen in Serum calcium level which is suggestive of enhanced osteoblastic activity and strengthening of bone.

These highly significant improvements were because of the treatment done in this study *Ksheeravasthi* in form of *kalavasthi* has proved to be effective in reducing signs and symptoms of *asthigata vata* and also proved effective in enhancing bone mineral density.

Probable action of Tikta ksheera vasthi in osteoporosis
Ksheera vasthi is such a *vataghna yoga* that induces *bala*, *snehana* and when used with *tikta ksheera* and *gritha*, it acts specifically on *asthidhatu*. According to *Arundatta* commentary – Any *dravya* having *snigdha* and *shoshan* property and the *dravya* which produces *kharatva* in body is beneficial for *asthikshaya* as the *asthi dhatu* has *khara* property. In the universe there is not a single drug having these combined property. *Tikta* is the *rasa* which produces *kharatva* because of most *shoshana swabhava*, and *kharatva* is *pradhana guna* of *Asthidhatu*. *Tikta rasa* when combined with *ksheera* or *gritha* will improve the *dridatha* of *asthidhatu*, resulting in *asthiposhana* and *asthivardhana*. *Tikta rasa* aggravates *vata*, but when its processed with *ksheera*, and *grithas* it promotes osteogenesis. Hence because of such combination this *vasthi* though *vatahara* by nature, produces *kharatva* in the *shareera*, but does not cause *vataprakopa* because of *snighatva* of *ksheera* and *gritha*. *Ksheera* and *gritha* are very useful and effective *dravyas* in degenerative conditions. *Sushruta* says that *vasthi* stays in *pakwasaya*, where *pureesha dhara kala* exists and does its action.^[11] *Dalhana* in his commentary mentions that *pureeshadhara* and *Asthidhara kalas* are one and the same,^[12] so when *vasthi* is given, it acts on *asthidhara kala* It means *kharatva* produced in *pakwashaya* by *Tikta ksheera vasthi* helps in normal formation of *asthidhatu* in *shareera*, and hence improves the condition.

CONCLUSION

1. Osteoporosis can be well treated with *tikta ksheera vasthi* (*Kalavasthi*) without any complications.
2. *Tikta ksheera vasthi* is very effective in reducing signs and symptoms of osteoporosis.
3. The *vasthi* improves the general health status of patients and thereby brings well-being.
4. *Tikta ksheera vasthi* also helpful in increasing bone mineral density in patient.

LIMITATIONS

- Sample size was very small.
- The period of study was limited in this study.
- Still longer follow up can be done.

RECOMMENDATION FOR FURTHER RESEARCH

- Larger sample size can be taken
- Longer follow up should be done.
- Effect on other immunological parameters can be done.

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**TO STUDY THE EFFECT OF ASHTMANGAL GHRUTAM IN THE
MANAGEMENT OF MANDABUDDHITWA W.S.R TO MODERATELY
MENTAL RETARDED CHILDREN**

*¹Dr. Gayatri Khadde, ²Dr. Karuna Ratnaparakhi, ³Dr. Prakash Mane, ⁴Dr. Prashant Khade, and ⁵Dr. Mangesh Udmale and ⁶Dr. Santosh Kamble

¹M.D. Scholar Dept. of Balrog, CSMSS Ayurved College, Kanchanwadi, Aurangabad (MS).

²Professor, Dept. of Balrog, CSMSS Ayurved College, Kanchanwadi, Aurangabad (MS).

³Associate Professor Rognidan Dept., Dr D.Y. Patil Ayu. College & Hosp. Pune (MS).

⁴Asst. Professor Sanskrit Samhita Dept., Dr. D.Y. Patil Ayu. College & Hosp. Pune (MS).

⁵Assitant Professor Rognidan Dept., Dr D.Y. Patil Ayu. College & Hosp. Pune (MS).

⁶Department of Swasthritta., D.Y. Patil Ayu. College & Hosp. Pune (MS).

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*Corresponding Author

Dr. Gayatri Khadde

M.D. Scholar Dept. of
Balrog, CSMSS Ayurved
College, Kanchanwadi,
Aurangabad (MS).

INTRODUCTION

Ayurved, the complete health care system, is the outcome of the great power of observation, generalization and analysis of hundreds of investigators over thousands of years. Ayurved is based on Vedas. But its main aim is

स्वस्थस्यस्वास्थ्यरक्षणमातुरस्यविकारप्रशमनम्च।- च.सु.३०/२६

Kaumarabhritya, the Indian Pediatrics is one among the eight branches of Ayurved that deals with all the aspects of child health care. The branch of medicine emphasizes the importance of child care that has to be started even before the conception. It covers all aspects from genetics to dietetics in children. The traditional way of baby and child

care was the backbone of the healthy generation of the past.

Mental retardation is a disorder consisting of below average intellectual functioning and impairment in adaptive skill, which is present upto 18 years of age. This is the period when the brain along with the entire nervous system is in a state of development in order to reach maturity. The growth and development indicates the physical and mental factors. The mental factors have utmost importance in child's personality development.

Mental retardation is a multi dimensional problem including psychological, medical, educational and social aspects with the social aspect being the most important. It is a social problem of great magnitude. Childhood disabilities form a substantial part of pediatric problems especially in India.

Mental retardation is a distressive clinical condition characterized by non-progressive impaired cognitive function. In India the prevalence of mental retardation is 6.9%. And it was found higher in Females comparatively. Hence I selected this topic for study.

AIMS AND OBJECTIVES

Aim- To study the effect of Ashtmangal Ghrutam in the management of Mandabuddhitwa w.s.r to moderately mental retarded children.

Objectives

1. To Study the details of Mental retardation according to Ayurved and Modern science.
2. To evaluate the effect of Ashtmangal Ghrutam on moderately mental retarded children.
3. To evaluate the effect of Goghriatm on moderately mental retarded children.

MATERIALS AND METHODS

Research Place: - Research done in our Ayurved Mahavidyalaya and in the school for mentally retarded children.

Study Design

Open randomized controlled trial design will be studied.

Trial Drug

Ashtmangal Ghrutam mentioned in Yogaratnakar in the context of Balrog chikitsa pg-448 is used as the study drug for internal administration.

Control Drug:- GoGhrutam.[Ch. Su. 25 & 27]

Method of Preparation of Drugs

Ashtmangal Ghrutam

Ashtmangal Ghrutam is prepared as per standard procedure mentioned for preparation of Snehapaka according to Sharangdhar Samhita.

Raw material purchased from local market.

Drug Standardization:- Standardization of the drug was done in the Laboratory of Dr. D. Y. Patil Ayurved College, Pune.

Inclusion Criteria: Randomly selected 70 diagnosed patients of moderately Mentally retarded Children were participated in research work, consent of parents was taken and they were registered into group A and Group B.

Group A – Ashtmangal Ghrutam given to 34 children.

Group B – GoGhrutam given to 36 children.

- 1) 2 to 5 gm dose of Ghrutam was given orally in early morning for two months.
- 2) Case Record Form prepared and Clinical history, examination and follow up documented on it.

Exclusion Criteria

1. Children below 5 years and above 15 years were not taken into study.
2. Children with major systemic disease like HIV, MR with epilepsy, MR with cerebral palsy were excluded.

Subjective criteria

The diagnostic criteria for MR is used for the subjective scoring of the symptoms of the disease.

Objective criteria

Effect of therapy is assessed on the basis of manasa bhava score and WISC score taken before and after the treatment. Eight of the manasa pariksa bhavas [Ch.Vi.8] and scoring pattern according to Wechsler Intelligence Scale for children were followed and considered for the assessment. The data obtained is used for statistical analysis.

Assessment by WISC

Wechsler Intelligence Scale for Children covering the age range of 5 to 15 years.

The WISC comprises of twelve tests, six verbal and six performances.

Verbal Performance

1. General Information 7. Picture completion.
2. General comprehension 8. Picture arrangement.

3. Arithmetic 9. Block design.
4. Similarities. 10. Object assembly.
5. Vocabulary 11. Coding.
6. Digit span. 12. Mazes.

The tests were selected so as to represent various mental functions.

Management of Patients

	Group A Study group	Group B Control group
Age group	5 – 15	5 – 15
Drug name	Ashtamangal ghrita	GoGhrutam
Time of administration	Rasayan kala	Rasayan kala
Route of administration	Oral	Oral
Duration	2 months	2 months
Follow up	15 days	15 days
Number of patient	34	36

Overall Assessment of the Results

The total effect of the therapy is assessed considering the overall improvement in signs and symptoms and clinical tests after the treatment. The total effect is assessed according to following classification.

Completely Cured	Improvement above 80%.
Markedly Improved	Patients showing 60% to 79% improvement was taken as markedly improved.
Moderately Improved	Improvement between 40% and 59% in the patients was taken as moderate improvement
Improved	Improvement in the range of 20% to 39% was taken as improved
Unchanged	Relief less than 20% was taken – unchanged

OBSERVATIONS

1. Distribution of total patients distributed in 2 groups.

Groups	Patients registered	Patients completed the treatment
Goghruta	36	30
Ashtamangal Ghrut	34	30

In the present study a total of 70 patients of Mental Retardation were registered. 36 patients in group 'Goghruta' and 34 patients in group 'Ashtamangal G' were registered. Out of these 30 patients in group 'Goghruta' and 30 patients in group 'Ashtamangal G' completed the treatment. Thus 60 patients in all completed the treatment.

Observations and effect of therapy observed on 60 patients who completed the therapy are being presented here.

2. Effect of Therapies on Manasa Bhavas on Ashtamangal Ghruta Group.

Manasa Bhavas	Mean		%	S.D	S.E	T	P
	B.T	A.T					
				+/-	+/-		
Medha	2.3	0.5	78.0	0.31	0.10	19	<0.001
Smrti	2.0	0.3	85.0	0.41	0.15	11.13	<0.001
Dhrti	2.4	0.6	75.0	0.42	0.13	13.50	<0.001
Vijnana	1.9	0.30	84.2	0.52	0.16	9.79	<0.001
Krodha	2.30	0.60	73.90	0.48	0.15	11.12	<0.001
Moha	2.10	0.60	71.42	0.52	0.16	9.0	<0.001
Bhaya	2.4	0.5	76	0.56	0.17	10.58	<0.001

3. Effect of Therapies On Manasa Bhavas on Go-Ghruta Group.

Manasa Bhavas	Mean		%	S.D	S.E	T	P
	B.T	A.T					
				+/-	+/-		
Medha	1.125	0.5	55.55	0.51	0.18	3.41	<0.05
Smrti	1.0	0.25	75.0	0.46	0.16	4.58	<0.01
Dhrti	1.5	0.38	74.66	0.64	0.22	4.96	<0.01
Vijnana	1.25	0.13	89.60	0.64	0.22	4.96	<0.01
Krodha	1.12	0.50	55.35	0.53	0.18	2.64	<0.05
Moha	0.88	0.12	86.30	0.70	0.25	3.0	<0.05
Bhaya	2.0	0.5	75	0.52	0.18	8.88	<0.001

4. Table Analysis of WISC scale.

Groups	Mean		%	S.D	S.E	T	P
	B.T	A.T					
Group Ashtamangal Ghruta	53.0	60.6	14.33	3.89	1.23	6.17	<0.001
Group Go-Ghruta	54.10	63.30	17.0	2.85	0.90	10.17	<0.001

The maximum increase in mean Wisc scale (14.33%) was found in group Ashtamangal ghrut which is statistically highly significant ($P < 0.001$). In Group Goghruta the increase was by 17.0% and statistically the result was significant ($P < 0.01$).

5. Overall effect of Therapies on 60 patients.

Effect	Group Ashtamangal Ghruta		Group GoGhruta		Total	
	No. of Patients	%	No. of Patients	%	No. of Patients	%
Cured	0	0	0	0	0	0
Markedly Improved	0	0	0	0	0	0
Moderately Improved	27	90	0	0	27	34.6
Improved	03	10	15	50	18	26.9
Unchanged	0	0	15	50	15	38.4
Total	30	-	30	-	60	-

DISCUSSION

In group Group Ashtamangal ghruta 90% patients (9) were reported moderately improved and 10% (1 patient) were reported improved. There were no patients reported as totally cured, markedly cured or unchanged.

In Group Goghruta 50% (4patients) were reported to be improved while 50% as unchanged. There were no cases reported to be cured, markedly or moderately improved.

[Ka.Sa.] i.e. children who were not able of walk even after one year of age and were found to be mentally retarded were recorded as mentally retarded as a complication of Phakka roga. Their percentage was 29.21.

Role of alcohol intake, excessive sleep, dauhrda avimanana - in a pregnant lady as a cause of mental retardation is almost negligible as per this survey. Thus this data shows that the factors described by our Acharyas involved in causing mental retardation still exists. Although none of them is found as an absolute cause of jadata, but their role can not be completely ruled out. The United Nations declaration of the 'Rights of the Child (1959)', to which India is a signatory, gives the child pride of place, as also makes the people aware of his needs and rights and duties towards him. One of the ten basic rights of children as per U.N.O. of 1959 is that - "The physically, mentally or socially handicapped child shall be entitled for special treatment, education and appropriate care." Also according to India's National Health Policy (1983), there should be special treatment, education, rehabilitation and care of physically handicapped; emotionally disturbed or mentally retarded children. But as is clear from the clinical survey around 5% children were found to be mentally retarded. These children did not show the progress expected at their age, and had decreased social

company and behavioural maturity. In order to lead a normal healthy life they require quick and immense attention and adequate intervention.

Thus crux of all endeavors should aim at -

1. Critical evaluation of mental retardation.
2. Immediate intervention.
3. Prevention of mental retardation.

In the present dissertation work a total of 60 patients, amongst 70 patients registered completed the treatment, 30 in group Ashtamangal ghruta, 30 in Group Goghruta completed the therapy. The treatment was given for two months. The general information about the patients like their age, sex, socioeconomic status, chief and associated complaints dasavidha pariksa etc. and their I.Q. and manasa bhavas examined before and after the treatment were observed and recorded separately in tabular form. An attempt has been made to discuss each of these observations separately with special reference to their relation with manda buddhitva (mental retardation).

CONCLUSIONS

Conceptual

- References of the disease manda buddhitva are available in the Brhatrayi and Kasyapa Samhita in form of terms like jada and abuddha. Acharya Sarngadhara was the first to classify mandabuddhitva as one of the kaphaja nanatmaja vikaras.
- Amongst the causes of mandabuddhitva, the purva janma siddhantawhere the ill deeds of previous birth are responsible in causing dukha in form of disease etc. may be considered as etiology in many cases. The modern science says that “quite a proportion of children suffering from mental retardation may not fit into any of the known factors responsible to cause mental retardation” (Short textbook of Pediatrics). Other nidanas mentioned in classics include dauhrda avimanana, asatmya viruddha ahara sevana, akala prvahana etc.
- Birth asphyxia at the time of birth was visualized as an important cause of mental retardation, which was clear from the history of, delayed cry, cyanosis, forceps delivery etc. given by the parents of the patients.
- Person of kapha vata sharirika prakrti and tamasa pradhana manasika prakrti is more vulnerable to mental retardation.

- The garbhaja, janmottara and agantuja nidana through mechanism of causing manovaha strotas sanga by the vitiated dosas causes mandabuddhitva.
- Management of mandabuddhitva according to our classics has two approaches, namely – (i) Preventive and (ii) Specific treatment. The former includes various garbhopaghatakara bhavas, mithyahasavihara and akala pravahana. While the later includes various recipe like medhya rasayana etc. abhyasa and Yoga.
- The modern science has a multidisciplinary approach with spotlight on specialized educational and therapeutic services.

Clinical

- In majority of the mentally retarded children avara satva, sara, samhanana, satmya are seen.
- The mental retardation is also associated with bodily defects proving Charakas words i.e.- “sariram hyapi sattvamanuvudhiyate satvam ca sariram”
- Mental retardation is observed in children from all religion, socioeconomic status and habitat.
- Impaired memory, delayed milestones and abnormal social behavior were observed in majority of the patients.
- Tamasa pradhana manasika prakrti and kaphavataja saririka prakrtimay be more vulnerable to mental illness like mental retardation.
- Ashtamangal Ghrutam was found most effective on all the eight manasa bhavas considered in this study (medha, smrti, dhrti, vijnana, soka, bhaya, krodha and moha) and has a highly significant effect over the I.Q. of the patients. Both verbal and performance I.Q. are improved indicating its role on memory perception, judgement, orientation and technical skills.
- Goghrit is highly efficient in decreasing the bhaya while on other seven manasabhavas the results were significant but not as good as in group ashtamangal ghruta. this is also highly significant on increasing I.Q. but has major effect over the verbal I.Q. which signifies the beneficial effect of this combination on memory and perception.

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Effect of *Panchavalkala Taila* in the management of *Paripluta Yonivyapad*: A Single Case Study

Anjali Pawar*¹, Jayshree Deshmukh²

1. MS Scholar,
2. H.O.D. and Professor

Department of *Prasutitantra* avum *Streerog*, CSMSS Ayurveda Mahavidyalaya

*Corresponding author: anjali pawar307@gmail.com

ABSTRACT:

Twenty types of *yonivyapad* mentioned as the major cause of diseases of the female reproductive tract. *Paripluta* is one of them which can be correlated with pelvic inflammatory diseases. Nowadays pelvic inflammatory disease (PID) is burning problem. If it goes untreated, it causes scarring around inflamed organs, which leads to infertility, pelvic pain, blocked fallopian tubes due to this ectopic pregnancy etc. according to modern medicine antimicrobials, analgesics, NSAIDs are used in the treatment of PID. But there are many side effects such as gastrointestinal disturbances, dizziness, due to analgesics, anti-inflammatory drugs. Hence this attempt is made for the safe and curative remedy in the form of *Panchavalkala Taila* for *Paripluta Yonivyapad*.

KEY WORDS:

Paripluta, Pelvic inflammatory disease, *Panchavalkala taila*.

INTRODUCTION: Creation of good offspring totally depends on woman's health as like seed will grow only in prosperous means satisfactory environment. *Yoni shuddhata* (Purifications) is one among the essentials for a healthy offspring. Charaka says that *Yoni* (vagina) of woman afflicted with doshas does not retain *shukra* (semen) or female becomes infertile. In present period PID is rapidly increasing problem. It is disease of female genital tract. Infection and inflammation of upper genital tract typically involving uterus (endometrium), fallopian tubes, ovaries, pelvic peritoneum and surrounding structures. A weak uterus and adhesions may cause scarring around inflamed organs which leads to infertility, pelvic pain more likely symptoms of various *yonivyapad*s like *vataja*, *pittaja*, *kaphaja* etc. *Paripluta yonivyapad* resembles with pelvic inflammatory disease having main symptoms of pelvic pain and white

discharge. In modern science of medicine antimicrobials, analgesics, NSAIDs, are often prescribed in the treatment of PID. GI upsets which are increased by analgesics and anti-inflammatory drugs. The aim of study is to find out a safe, potent, cost effective management for PID.

DISEASE REVIEW:

According to *Ashtangasangraha*, *pariplutayonivyapad* is caused due to vitiated pitta with vata characterized by inflammation of *Yoni*, tenderness, painful menses, pain in lumbosacral and groin region, backache, fever.

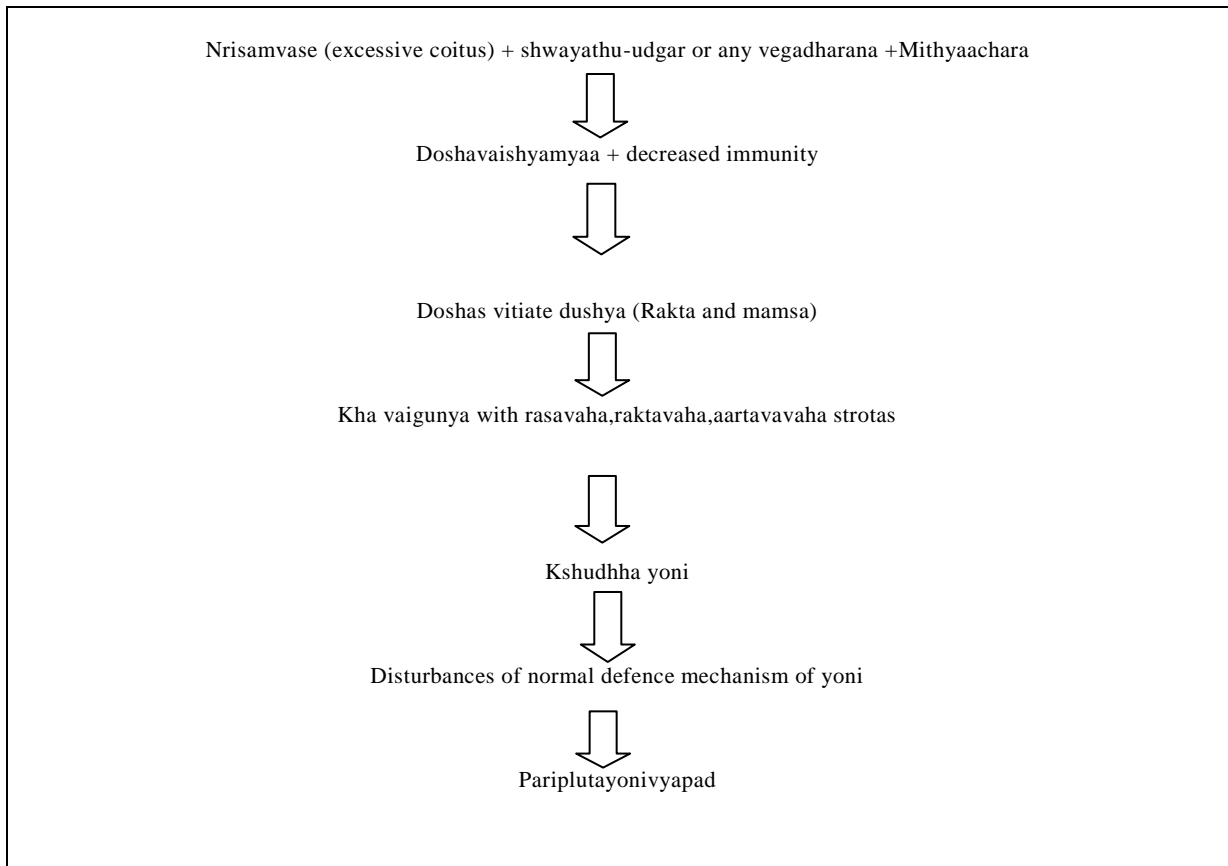
Shushrutaacharya says that the condition is characterized by severe dyspareunia and other pain etc caused due to vitiated *vayu*.

In *Madhukosha*, it is explained that the features of *vata* that is pain etc. are present with extreme severity (*pluta*) and all around (*pari*) that is in entire external and internal reproductive organs. Hence it is termed as *paripluta*, besides pain during coitus. It can be co-related with pelvic inflammatory disease. PID is the disease of upper genital tract typically involving uterus, fallopian tubes, ovaries, pelvic peritoneum.

NIDANA:

1. **SAMANYA HETU:** *Mitthyachara* (including abnormal diet and mode of life), *pradushtaaartava* (including hormonal disorders), *bijadosha* (abnormalities of sperm and ova), excessive coitus, *daivaprakop*, *adravyaupyog*, (use of objects for sexual pleasure)

2. **VISHESHA HETU:** According to *vagbhata* and *Charakait* *isvaata-pittajavyadhi* and according to *Shushrutavataja*. word '*Nrisamvase*' Shows that causation of this disease is coitus (due to excessive coitus, coitus in abnormal position is very imp cause), *shwayathu* means *udgardharana*.

SAMPRAPTI :

Complications: According to Charakaacharya when yoni (reproductive system) of woman afflicted with doshas become infertile, also suffers from disease of vata as gulma,arsha etc.

DRUG REVIEW :

PANCHAVALKALASIDHHA SNEHA : This formulation is described in Ashtangasangraha Uttara Tantra

Serial no.	Drug	Latin name	Part used	proportion
1	Vata	Ficus bengalensis	Valkala	1 part
2	udumbara	Ficus glomerata	Vakala	1 part
3	ashwatha	Ficus religiosa	Valkala	1 part
4	pluksha	Ficus lacor	Valkala	1 part
5	parisha	Thespesia populnea	valkala	1 part

Contents of panchavalkala siddha sneha possess rasa like kashaya rasa mostly and madhura rasa also, Raksha and guru guna as well sheetavirya and katuvipaka also.

Rukshaguna do shoshana of increased jala mahabhuta,

Guru guna cause vata shamana, brimhana,

Sheeta virya causes pitta shamana, stambhana, balya, vishyandan.

CLINICAL STUDY :

30 Years old female patient with complaining of per vaginal white discharge, tenderness at vagina,

low backache, lower abdominal pain, dyspareunia since last 2 months was selected for study. After the selection of diagnosed patient of paripluta yonivyapada, chikitsa was started. A medium sized yonipichu soaked with panchavalkala siddha taila was kept in yoni after sthanik snehana swedana for 7 days. Follow up taken after 7 days, patient get 50% relief in first 7 days. After 7 days, yonipichu soaked with panchavalkala taila was kept again for next 7 days. Treatment was given for total 14 days with two follow ups. After two follow up patient came with 80% relief.

RESULTS: Effect on symptoms such as per vaginal white discharge, tenderness at vagina, low backache, lower

abdominal pain,dyspareunia was observed that got relieved from these symptoms.

Discussion :panchavalkalataila has kashaya rasa that is astringent taste. It has properties due to which it is used in pariplutayonivyapad are ruksha, shothahara, sheetaguna and has wound healing property.

According to charakaacharya, kashaya rasa has properties like,shoshan,samgrahi,stambhana, It has quality of drying kleda. So it stops strava, kashayarasa,is mainly formed by conjugation of vayu(air) and prithvimahabhuta. Vayu is ruksha in quality and dries up the excessive fluids in tissues ,whileprithvi by virtue of katina and sthiraguna which are opposite of drava and saraguna. Tikta rasa has krimighna property which direct inhibits growth of krimi and finally diminishes strava.on the basis of research carried out on ingredients of panchavalkalataila,it has been postulated pharmacological properties, like anti inflammatory ,antimicrobial, antiprotozoal,antibacterial are present which cure pelvic inflammatory disease.

CONCLUSION:

Hence it can be concluded that panchavalkala taila is very useful and effective in the treatment of paripluta yonivyapad.

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Effect of Panchavalkala Taila in the management of Paripluta Yonivyapad: A Single Case Study

Anjali Pawar, Jayshree Deshmukh

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**Chronic renal failure and it is *nephroprotective* treatment in *Ayurveda*: A review****B. N. Gadve¹, Sejal A. Patil *²****1. Associate Professor and Guide,
2. P. G. Scholar**Department of *Shalyatantra*,
C.S.M.S.S. Ayurveda Mahavidyalaya, Kanchanwadi, Aurangabad.***Corresponding Author:** Email: sejalpatil67@gmail.com**ABSTRACT:**

Chronic renal failure (CRF) is a threat to global health in general and for developing countries in particular. Globally CRF is the 12th highest cause of death. CRF is a progressive loss in renal function taking place over a period of months or years. This initially manifests only as a biochemical abnormality. CRF is considered when glomerular filtration rate (GFR) falls below 30ml/min. The conventional approach of management includes dialysis and renal transplantation, which are not affordable. Therefore, exploration of a safe and alternative therapy is needed. In Ayurveda, the disease can be consider as complication arising from various urinary disorders. A hampering of the function of *basti*, i.e. urine formation, results in the accumulation of several noxious products in circulation which need excreted management is aimed at eliminating these toxins, to protect the accessible renal cells rejuvenate the quiet cells. In Ayurveda several drugs are used as nephroprotective and this group of drug acts as good non-specific *cytoprotectives*. In this regard *Ayurveda* provides leads through its holistic line of management by in co-operative dietary and lifestyle invention

Website: <http://www.ayurlog.com> |

and bio-balancing effects of Ayurvedic drugs.

Keywords: *Ayurvedic Nephroprotective* drugs, Chronic renal failure, *Mutraroga***INTRODUCTION:**

Chronic renal failure (CRF) is a global threat to health in general and for developing countries in particular because therapy is expensive and lifelong. CRF refers to an irreversible deterioration period in renal function which classically develops over a period of years. Chronic renal failure is the progressive loss of kidney function. The kidneys attempt to compensate for renal damage by *hyperfiltration* in turn that causes further loss of functions and symptoms may appear at the stage of irreversible damage, which include vomiting, loss of appetite, fatigue and weakness, sleep problems, changes in urine decreased mental sharpness, muscle twitches and cramps, hiccups, swelling of feet and persistent itching, shortness breath, high blood pressure etc⁽¹⁾. Initially, it is manifested only as a biochemical abnormality. Eventually, loss of the excretory, metabolic and endocrine function of the kidney leads to the development of the

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clinical symptoms and signs of renal failure. When death is likely without renal replacement therapy (RRT), it is called end stage renal failure (ESRF)⁽³⁾. It would be interesting to know that the incidence of chronic kidney disease in India, which is a densely populated country with low income, different food, cultural traditions and lifestyle habits is 7.85 million CRF patients of its 1 billion population and the prevalence rate is 0.78%⁽²⁾

Ayurveda treatment for CRF prevention is always the goal with kidney failure. Chronic disease such as hypertension and diabetes are devastating because such as hypertension and diabetes are devastating because of the damage that they can do to kidney and other organs. Lifelong diligence is important in keeping blood sugar and blood pressure within normal limits. Specific treatments are dependent upon the underlying diseases. Once kidney failure is present, the goal is to prevent further deterioration of renal function⁽⁴⁾. If ignored the kidneys will progress to complete failure, but if underlying illnesses are addressed and treated aggressively, kidney function can be preserved, though not always improved. The *Ayurveda* herbs can be taken along with other types of medicines and treatments/procedures including dialysis. In *Ayurveda* several drugs are used as *nephroprotective* and this group of drug acts as good non-specific cytoprotectives.⁽⁵⁾ In this background, it was thought worthwhile to evaluate the drugs which could be useful as adjuvant as *nephroprotectives* which could be administered to decrease the potential nephrotoxicity of drugs like cyclosporine etc.⁽¹⁾

Etiology – A variety of disorders are associated with CKD. Either a primary renal process (glomerulonephritis, pyelonephritis, congenital hypoplasia) or a secondary one (owing to a systemic

process such as diabetes mellitus or lupus erythematosus) may be responsible. Once there is kidney injury, it is now felt that hyperfiltration to undamaged nephron units produces further stress and injury to remnant kidney tissue. The patient will show progression from one stage of CKD severity to the next. Superimposed physiologic alterations secondary to dehydration, infection obstructive uropathy, or hypertension may put a borderline patient into uncompensated chronic uraemia.⁽¹³⁾

Causes of Chronic renal failure-

The cause for can be determined by a detailed medical history, a comprehensive physical examination and laboratory studies but it is difficult if not impossible. There are some identified disease conditions that may lead to CRF that can be categorized in 3 groups^(7,8,9) –

- 1) Pre renal causes – Some medical conditions cause continuous hypoperfusion (low blood flow) of the kidney, leading to kidney atrophy, loss of nephron function and chronic renal failure.
- 2) Post renal causes – The disease conditions that interference with the normal flow of urine can produce backpressure within the kidneys and can damage nephrons.
- 3) Renal causes diabetic nephropathy, hypertension, nephrosclerosis, chronic glomerular nephritis, renal vasculitis, cystic kidney disease, hereditary diseases of the kidney.

Sign and symptoms of CRF –

CRF usually produces symptoms when renal function – which is measured as the glomerular filtration rate (GFR) falls below 30 millilitres per minute (<30ml/min.)⁽¹⁰⁾. This is approximately 30% the normal value. When the

glomerular filtration rate slows to below 30ml/min., signs of Uraemia (high blood level of protein by products, such a urea and creatinine) may become noticeable when GFR falls below 15ml/min. most people become increasingly symptomatic. With milder CKD, there may be no clinical symptoms such as pruritus, generalized malaise, lassitude, forgetfulness, loss of libido, nausea and easy fatigability are frequent and non-focal complaints in moderate to severe CKD. Uremic symptoms can affect every organ system in the body and mainly are - Neurological system: cognitive impairment personality change.

Gastrointestinal system – nausea, vomiting

Blood- forming system – anaemia due to erythropoietin deficiency.

Pulmonary system – fluid in the lungs, with breathing difficulties.

Cardiovascular system – chest pain due to inflammation of the sac surrounding the heart.

The abnormalities may signal CRF –

- 1) Anaemia
- 2) High level of parathyroid hormones

The content is summarized in Table no. 1 (shown end of article):

Discussion & interpretation:

CRF is specific form of renal disease. According to Ayurveda, CRF is a disease of *mootravaha strotas*. Though all the 3 *doshas* as well as all the *dushyas* are involved in the disease, *kapha* is responsible in blocking microvessles and developing microangiopathy. *Vata* is responsible for degeneration of the structure of the kidney. According to Ayurvedic principles of management of the disease, tissue damage can be prevented and repaired. Because they have the capability to improve qualities of

- 3) Hypocalcemia
- 4) Hyperphosphatemia
- 5) Hyperkalemia
- 6) Hyponatremia
- 7) Low plasma PH
- 8) Low blood level of Bicarbonate
- 9) Low serum proteins
- 10) Presence of proteins in urine.

Material and method:

The Nephroprotective drugs used in kidney disorders like chronic renal failure were compiled from various lexicons and *samhitas* like *charaksamihta*⁽²⁾, *Sushrutasamhita*, *Bhavprakashnighantu*, *Dhanvantarinighantu*. The drugs were analysed based on *Rasadi Guna, Karma*, physical & chemical properties, *Doshghnta*, pharmacological properties.

Observation:

The Nephroprotective drugs (*mootravirechaniya gana, mootravirajaniya gana, utpaladi gana, varunadi gana*) used in chronic renal failures are analysed based on *rasadi guna, karma*, and its pharmacological activity.

tissues and hence increase resistance of the tissues. On the other hand, blockage can be removed by *lekhana* drugs having scraping effect on blocked channels.

CONCLUSION:

The present review reveals that apart from classical texts, new recent researchers to provide a multiple treatise for *mutravaha strotas vikriti* (renal disorders), so that extras pharmacopoeial as well as known herbs, easily available drugs may come into main stream of treatment on renal disorders. Secondly the herbs which are

used by tribes in their day practice can be validated scientifically in future study.

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Cite article


Chronic renal failure and its *nephroprotective* treatment in *Ayurveda*: A review

B. N. Gadve, Sejal A. Patil

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Table_01
List of the Nephro protectives drugs mentioned in lexicons & classical texts used in CRF⁽¹¹⁾⁽¹²⁾⁽¹⁴⁾

N o.	Name	Latin name	Ras	Virya	Vipak	Karma & Doshghnta	Prayojyang	Physical & Chemical properties	Pharmacological properties
1	<i>Padmak</i>	<i>Prunus cerasoides</i>	<i>Tikta, Kashay</i>	<i>sheeta</i>	<i>Katu</i>	<i>Kaphapittahara , mutral, edanasthapak</i>	Seeds	Padmakastin, flavonone, Isofalvone prunetin	Antiseptic, Antimicrobial, antibacterial
2	<i>Nalin</i>	<i>Nelumbo nucifera</i>	<i>Kashay, tikta, madhur</i>	<i>sheeta</i>	<i>madhur</i>	<i>Kaphapittashamak, mootravirajaniya</i>	Leaves, flowers, seeds	Alkaloids, nuciferine, quercetin	Flowers-diuretics, astringent, Haemostatic
3	<i>Madhuk</i>	<i>Glycyrrhiza glabra</i>	<i>Madhur</i>	<i>sheet</i>	<i>madhur</i>	<i>mutral</i>	root	Glycyrrhizin acid, sulphuric acid, metallic acid	Anti-inflammatory, anti-oxidant
4	<i>priyangu</i>	<i>Callicarpa macrophylla</i>	<i>Tikta, kashay, madhur</i>	<i>sheet</i>	<i>Katu</i>	<i>mootravirajniya</i>	Flower, fruits	Calliterepenone, beta-sitosterol, monoacetate	Astringent, styptic
5	<i>Dhataki</i>	<i>Woodfordia fruticosa</i>	<i>kashay</i>	<i>shheta</i>	<i>Katu</i>	<i>Kaphapittashamak, mootravirajniya</i>	flower	Tannin, lawsin	Astringent, pungent
6	<i>pashanbheda</i>	<i>Bergenia lingulata</i>	<i>Tikta, kashay</i>	<i>sheeta</i>	<i>Katu</i>	<i>Tridoshshamak,</i>	roots	Afzelechin flavonoid, epiafzelechin, berginine	Antiurolithic, diuretic
7	<i>gokshur</i>	<i>Tribulus terretris</i>	<i>Madhur</i>	<i>shheta</i>	<i>madhur</i>	<i>Vatapittashamak, mutral, shothhara</i>	Root&fruit	Tribulusamides A&B, saponins, terrestrosins A,B,C,D	Anti-inflammatory, diuretic, lithotriptic
8	<i>kush</i>	<i>Desmostachya bipinnata</i>	<i>Madhur, kashay</i>	<i>shheta</i>	<i>madhur</i>	<i>Tridoshhar , mutral</i>	root	Amino acids, kaempferol, quercetin-3-Oglucoside	Antimicrobial, haemostatic, diuretic, lithotriptic property
9	<i>kash</i>	<i>Saccharum spontaneum</i>	<i>Madhur, kashay</i>	<i>sheeta</i>	<i>Madhur</i>	<i>Vatapittahara, mutral</i>	root	Starch, polyphenolic compounds	Diuretic, lithotriptic
10	<i>darbha</i>	<i>Imperata cylindrica</i>	<i>Madur, kashay</i>	<i>sheeta</i>	<i>madhur</i>	<i>Tridoshhar, mootravirechaniya</i>	root	Triterpenoides, cylindrin, isoburenol,	Antihistaminic, diuretic, natriuretic,

								arundoin	astringent
1 1	<i>shar</i>	<i>Saccharum munja</i>	<i>Tikta, madhur</i>	<i>sheeta</i>	<i>Madhur</i>	<i>Tridoshar, mutral</i>	root	Flavonoids, alkaloids, glycosides, tannins,	Antimicrobial, antioxidant, antibacterial
1 2	<i>Ikshu</i>	<i>Saccharum officinarum</i>	<i>Madhur</i>	<i>sheeta</i>	<i>madhur</i>	<i>Vatapittashamak, mutral</i>	root	Aibumin, guanin, anthocyanin, flavonoids	Antioxidants,
1 3	<i>vrikshad</i>	<i>Dendrophthoe falcatus (loranthus)</i>	<i>Tikta, madhur, kashay</i>	<i>sheeta</i>	<i>Katu</i>	<i>Tridoshshamk, mootravirechaniya</i>	Leaves, flower	Flavonoid, beta-sitosterol, quercetin, rutin-II, tannin	Antimicrobial, diuretic
1 4	<i>poonarnava</i>	<i>Boerhavia diffusa</i>	<i>Madhur, tikta, kashay</i>	<i>ushna</i>	<i>Katu</i>	<i>Kaphavatahara, shothahar</i>	root	Beta-sitosterol, oxalic acid, boeravinones A, B, C, punarnavine	Anti-inflammatory, anti-oxidant, haematinic
1 5	<i>Apamarga</i>	<i>Achyranthes aspera linn.</i>	<i>Katu, tikta</i>	<i>ushna</i>	<i>Katu</i>	<i>kaphavatahamak</i>	roots	Potassium salts	Anti-inflammatory, antiseptic, diuretic
1 6	<i>shigru</i>	<i>Moringa oleifera</i>	<i>Katu, tikta</i>	<i>ushna</i>	<i>Katu</i>	<i>Kaphavatahara, dipan</i> 	seeds, leaves	Amino acids, moringine, glutamic acid, sterols, terpenes	Anti-microbial, anti-inflammatory
1 7	<i>varun</i>	<i>Crateva nurvala</i>	<i>Tikta, kashay</i>	<i>ushna</i>	<i>Katu</i>	<i>Kaphvatahara,</i>	Root bark, stem bark, flower	Lupeol-flavonoids, saponin, tannin, quercetin, beta-sitosterol	Diuretic, anti-inflammatory, anti-microbial

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Address

• Vikram Nagar, Boudhi Chouk, Latur.
• Tq. Latur, Dis. Latur 413512 (MS.)
• (+91) 9922455749, (+91) 8999250451

Email

• aiirjpramod@gmail.com
• aayushijournal@gmail.com

Website

• www.aiirjournal.com

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Conceptual Review of *Gurvadi Gunas*

Ujwala Murlidhar Divekar

Associate Professor,
Samhita Siddhant Dept.
C.S.M.S.S. Ayurved Mahavidyalaya,
Kanchanwadi, Aurangabad. (Maharashtra)

Rajesh S. Upadhyay

H.O.D. & Professor,
Agad Tantra Avum Vidhi Vaidyak Dept.
C.S.M.S.S. Ayurved Mahavidyalaya,
Kanchanwadi, Aurangabad. (Maharashtra)

Abstract:

The definition of guna is that the attribute which is associated with the Dravya but not responsible for action. Gurvadi gunas are those which starts with Guru. According to Ayurveda gunas are 41 in number. The classification of these are Sarth gunas are 5, Gurvadi gunas are 20, Atma gunas are 6, and Paradi gunas are 10. Doshvaishmya is responsible for the disease and treated with the help of Dravyas having Gurvadi gunas. Ayurveda's basic principle Samanya vishesh siddhant is useful to treat this doshvaishmya. All the basic constituent of body having Gurvadi gunas.

Aim: - The aim is to describe the Gurvadi gunas according to different Samhita Granthas which are beneficial for practice.

Objective: - To elaborate Gurvadi gunas according to different samhitas.

Key Words :- *Gurvadi, Gunas, Action, Body, vat, pitta, kapha.*

Introduction:

The synonym of *Gurvadi guna* is *Dwanda guna*, *Sharir guna*, *Chikistopyogi guna*. *Gurvadi gunas* are the property of the body constituents which can be numerated such as heaviness-lightness, coldness-hotness, unctuousness-roughness, dullness-sharpness, stability-mobility, softness-hardness, nonsliminess-sliminess, smoothness-courseness, minuteness-grossness, solidity-liquidity.¹

Action of *Gurvadi gunas*:-The constituents having heaviness are increased by the prolonged use of heavy food items while those having lightness are decreased. On the other hand the lightness is increased by the light food items and heaviness is decreased. In this way all properties of the constituents are increased by the use of similar substance and decreased by the that contrary ones.²

Material and method:

Materials: For the present review of *gurvadi gunas* detailed literary study is performed. The detail content of and references are analysed from available principal texts referred are *Charak samhita*, *Sushrut samhita*, *Ashtang sangrah*, *Ashtanghritya*, and some other ayurvedic texts .

Method: Descriptive and conceptual study.

Literary Review: - *Gurvadi gunas* are responsible to increase or decrease body constituents hence flesh is increased more in comparison with other *dhatu*s by flesh ,similarly blood by blood, fat by fat ,muscle fat by muscle fat, bone by cartilage, bone marrow by bone marrow ,semen by semen and foetus by immature foetus.³

According to *Ashtangsangrah* *Gurvadi gunas* are *Guru*, *Manda*, *Him*, *Snigdha*, *Shlaksna*, *Sandra*, *Mrudu*, *Sthira*, *Sukshma*, *Vishad* and its contrary *guna* which are 20 in number.⁴

In *Shashilekha Indu* describe contrary *gunas* like *Guru-Laghu*, *Manda -Tikshna*, *Him-Ushna*, *Snigdha-Ruksha*, *Shlaksna-Parush*, *Sandra -Drava*, *Mrudu -kathin*, *Sthira -Chala*, *Sukshma-Sthula*, *Vishad -Picchila*.⁵

According to *Dalhan* commentator of *Sushrut samhita* gunas are *Sheeta-Ushna, Snigdha-Ruksha, Manda-Tikshna, Guru-Laghu, Picchil-Vishad, Shlakshna-Parush, Kathin-Mrudu, Drava-Sandra, Sthir-Sar, Sthula- Sukshma*, are twenty in number.⁶

The action of *guru* and *laghu guna* elaborated by giving the meaning of *sada-angaglani, upalepo-malvrudhi, balam-shleshma, tarpan –truptijanan, bruhanodehavruddhikar. Laghu* is having opposite action it is *asadanulepadikrut-kaphahara, lekhan-pattalikaran*⁷.

Sheeta is *lhadan*, *stambhan, murcha, truta, swed, dahajit. Ushna* is contrary of *sheeta* and *pachan* is speciality. *Dalhan* describe *lhadan-sukhakari, pachan –vranadinam*.⁸

Snigdha is responsible for *sneha, mardavkrut, balavarnakar. Ruksha* is contrary of *snigdha* specially *stambhan* and *khara. Sneha-snehadikaran, ruksha –roukshaya kathinyakar, stambhan for Atisaradinam, khara-karkash*⁹.

Manda helps sustainance of the body and *tikshna* penetrating into the tissue producing burning sensation, ripening and exudation. *Manda* is *yatrakaro* means *sharir sthayitwadehasya*¹¹.

Picchila is enlivening, strengthening and uniting, increase *Kapha* and difficult for digestion. *Vishad* is the opposite of it, produces absences moistness (evaporation), sucking and healing. *Dalhan* elaborated *jeevan-prandharan, sandhano-bhagnasya. Vishad* is *asandhno-ajeevano asleshi, kledachushan-ardribhav vinashkar*.¹³

Shlakshna should be understood similar to *picchil. Karkash* (coarseness) should be understood as *vishad*.

Mrudu is of opposite to *tikshna* and produces debility, cating, bestous strength¹⁴

Drava produces moistness and *Sandra* produces thickness of body parts and tissues and binding.¹⁵

Dalhan elaborated *prakledan* means *ardrabhavkar, bandhankarak* means *upachaykarak*.¹⁶

Sara causes downward movement of materials such as flatus, faeces, urine and fetus. *Sukshma* is the capacity to move even inside minute channels.

Vyavayi spreads all over body first and then undergoes digestion. *Vikasi* spreads all over the body causing looseness of the bindings in the tissues while spreading. *Ashukari* produces quick action just like oil moving on water. *Sungadha* betows happiness is subtle helps taste and is soft while *Durgandh* produces nausea and bad taste¹⁷

In *Ashtanghritya guru* (heavy), *manda* (slow), *hima* (cold), *snigdha* (unctuous) *sandra* (solid), *mrudu* (soft), *sthira* (stable), *sukshma* (minute) and *vishad* (nonslimy) these ten along with their respective opposites are twenty *guna*¹⁸

Arundutta elaborated opposite ten *gunas* which are *laghu, tikshna, ushna, ruksha, khara, drava, kathin, sara, sthula, picchila* opposite *guna of guru is laghu, manda's* opposite *tikshna, hima's* opposite *ushna, snigdha's* opposite *ruksha, shlakshna's* opposite *khara, sandra's* opposite *drava, mrudu's* opposite *kathin, sthira's* opposite *sara* and *sukshma's* opposite *sthula, vishad's* opposite *picchila*.¹⁹

In Ayurved rasayan vyakhya Hemadri elaborated the definition of Gurvadi gunas.

*Guru-Dravyasya bruhanodehavruddhikar, Langhane Laghu, Shamane Manda, Shodhane Tikshna, Stambhane Hima, Swedane Ushna, Kledane Snigdha, Shoshane Ruksha, Ropane Shlakshna, Lekhane Khara, Prasadane Sandra, Vilodane Drava, Shlathane Mrudu, Drudhane Kathina, Dharane Sthira, Prerane Chala, Vivarane Sukshma, Snvarane Sthula, Kshalane Vishada, Lepane Picchila*²⁰

In *Bhavprakasha* pharmacological properties are described as *Laghu* is considered the best and ideal. The drug having *laghu guna* is capable of removing *kapha* and digests easily. *Guru guna* reduces *vata* and acts as tonik. It increases *kapha* and digests very late. *Snigdha guna* reduces *vata*, increases *kapha*, aphrodisiac and yields physical strength. *Ruksha guna* increases *vata* and reduces

kapha. *Tikshna guna* increase *pitta*, reduces *kapha* and *vata* and act as *lekhana*. *Shlakshna* which is hard and of high density has no oily content inside. *Sthira guna* retains flatus and feces where as *sara guna* causes them to flow out. *Picchila* is sticky, strength giving, tissues binding, heals fractures, increases *kapha* and is heavy. *Vishada* removes *kleda* and heals ulcers and wounds. *Sheeta* is pleasant causes rigidity of muscles and relieves from unconsciousness, thirst, sweat, burning sensation. *Ushna* helps in digestion. *Sthula* causes bulkiness to the body and obstruct the *strotasa*. *Sukshma guna* is that which penetrates into the smallest and minutest tissues and it is known as penetrating property. *Drava* enhances and spreads secretions and *Sandra* or *shuksha* acts opposite to it. *Ashu guna* spreads in the body very quickly like as oil drop in water. *Manda guna* or *alpa guna* are retards all function of body.²¹

Conclusion:-

After the detailed study regarding to *Gurvadi gunas Maharshi Charak* described opposite of *Manda* is *Tikshna* while *Sushrut and Bhavmihra* described opposite of *Manda* is *Ashu*. *Maharshi Sushrut* described *Tikshna guna* in opposite of *Mrudu guna* and *Vyavayi* and *Vikasi* are opposite of *Manda*.

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**Role Of Guduchyadi Yoga And Udvartan With Vachadichurna In Sthaulya
A Clinical Study.****Dr. Pritam J. Rathi**Assistant Professor,
Dept. of Samhita Siddhant,
C.S.M.S.S. Ayurved Mahavidyalaya, Aurangabad**Abstract –**

Homosapiens, the most intelligent creature on earth, is facing newer health challenges in modern civilization. In modern life patterns, industrial development; environmental and Professional hazards etc. have made man the victim of many numbers of diseases including Sthaulya. Sthaulya is one of the diseases which affect ones social, physical and mental features. As per new researches, it is a precursor to coronary heart disease, high blood pressure, and diabetes mellitus etc.; which have been recognized as the leading killer diseases of the millennium. The present study includes 30 patients attending the O.P.D. of the Dr. B.R.K.R. Govt. Ayurvedic Hospital, Hyderabad. Vachadichurna Udvartan in two spells of 8 days and Guduchyadi Yoga internally with honey as Anupan for 60 days was administered and observed statistically significant results.

Introduction – Acharya Charaka included Atisthula in Ashta Nindita Purusha. Here the term Nindita has three meanings such as,

1. Ugly looking
2. Criticized by the public
3. Not easily treatable

Sage Charaka mentioned that Sthaulya is a Bahudoshaja Vyadhi. It is the root cause of many diseases like diabetes, hypertension and heart disease. Acharya Charaka has given special emphasis on treatments relating to Sthaulya and Karshya among the Ashta Nindita Purusha. Sthaulya is one of the Kapha predominant diseases (Shleshma Nimittaj) involving Kapha and Meda as main Dosha and Dushya in the pathogenesis. Alleviation of Vata and Kapha Dosha along with depletion of Medodhatu is the main aim of Sthaulya Chikista¹.

Hence the topic **Role of Guduchyadi yoga and Udvartan with Vachadichurna in Sthaulya** is selected for the present study with the following aim and objective.

Aim and Objective:

To evaluate the role of Guduchyadi Yoga (given internally) and Vachadi Churna Udvartana on Sthaulya.

Materials and Methods:

It is an open clinical trial conducted on 30 patients of O.P.D. of Dr. B.R.K.R. Government Ayurveda Hospital, Erragadda, Hyderabad. Internal administration of Guduchyadi yoga² (Guduchi, Musta, Triphalachurna in equal quantity) in a dose of 3- 5 gm per day (in two divided doses) before half hour of taking food with honey for a period of 60 days. Udvartan was also carried out with Vachadi churna³ (Vacha, Shunti, Musta, Haritaki, Ativisha and Devdaru in equal quantity) in two spells of 8 days each. After the completion of first spell, by giving gap of 21 days second spell was started.

Inclusion criteria:

- Classical signs and symptom of sthaulya.
- Age group between 16 yrs to 55 yrs.
- Patients having BMI >25 Kg / M²

Exclusion criteria:

- Patients suffering from severe hypertension, evidence of Renal, Hepatic and Cardiac diseases.
- Persons having obesity from childhood

Criteria for assessment:

It was assessed on the basis of Weight, BMI, Girth measurement of Chest, Abdomen, hip mid- arm and mid-thigh.

Observation -

Family history: out of registered 30 patients, 26.66% patients have positive family history of sthaulya which indicates that thegenetical predisposition is an important etiological factor for the manifestation of sthaulya. In Charak Samhita Beejswabhav⁴ is given as one of the cause of sthaulya.

Occupation:In this study 43.33% are employees, followed by 26.66% are businessman. Sthalya is seen more in the people associated with sedentary style occupation.

Dietetic nature: during the study 63.33% of the patients are on mixed diet. This indicates that peoples who are habituated in taking mixed diet are more prone to sthaulya. This is clear on the basis of samanyavishesh siddhant⁵, as non – veg diet contains more fat and flesh and leads to increase of similar dravyas in the body and leads to develop sthaulya.

Agni : out of 30 patients , 83.33% have tikshagni and 16.66%have vishamagni. In the initial stage of sthaulya, Agni Dipan occurs due to avrutavata in koshta but when vayu gets more vitiated it createsvishmagni⁶

Adhyashan: during this study, it is observed that 70 % of the patients used to take adhyashanfollowed by 16.67% patients take vishamashan. It is clearly mentioned in the Ayurvedic literature that adhyashan⁷ is one of the cause for obesity. Hence the present study also supports the views of our ancient acharyas.

Addiction: out of 30 patients registered 33.33% are alcoholic. Frequent use of alcohol will cause deposition of adipose as one gram alcohol give 7 kcal of energy⁸. In the Ayurveda also it is mentioned that Varuni (type of Madya) is one of the factors responsible for medovahsrtotodushti⁹. This clearly shows the risk of sthaulya in alcoholics.

Nidra (sleep): majority of the patients (90%) sleeping time is more than 8 hrs. per day this is evident to prove the recordings of acharyaCharak that excessive sleep leads to sthaulya¹⁰.

TABLE NO. 1- EFFECT ON CIRCUMFERENCE

Circumference in CM	MEAN SCORE		RELIEF%	MEAN	S.D.	S.E.	T	P
	BT	AT						
CHEST	100.57	99.53	1.02	1.03	0.96	0.17	5.86	<0.001
ABDOMEN	106.23	103.83	2.25	2.4	1.61	0.29	8.16	<0.001
HIP	109.07	107.3	1.61	1.76	1.40	0.25	6.87	<0.001
MID-ARM	31.73	30.86	2.73	0.86	0.68	0.12	6.96	<0.001
MID-THIGH	57.86	56.9	1.67	0.96	2.07	0.37	2.55	<0.01

EFFECT ON CIRCUMFERENCE

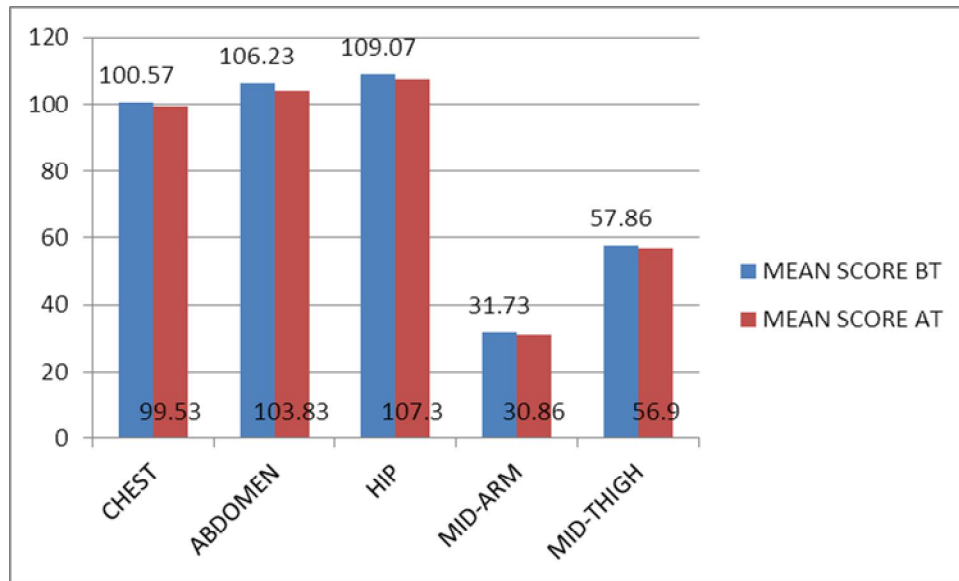


Table no. 1 is about effect of therapy on the circumference measurement of chest, abdomen, hip, mid-arm and mid-thigh. Average relief in circumference measurement of chest is 1.03(1.02%), abdomen is 2.4(2.25%), hip is 1.76(1.61%), Mid-arm is 0.86(2.73%),and that of Mid-thigh is 0.96(1.67%) and P value less than 0.001 which is highly significant except for mid- thigh (P value less than 0.01) which is statistically significant.

TABLE NO. 2 - EFFECT ON WEIGHT AND B.M.I.

Objective parameters	MEAN SCORE		RELIEF%	MEAN	S.D.	S.E.	T	P
	BT	AT						
Weight (Kg)	84.93	81.9	3.57	3.03	1.54	0.28	10.77	<0.001
B.M.I.(Kg/M ²)	32.49	31.31	3.64	1.18	0.60	0.11	10.64	<0.001

EFFECT ON WEIGHT AND B.M.I.

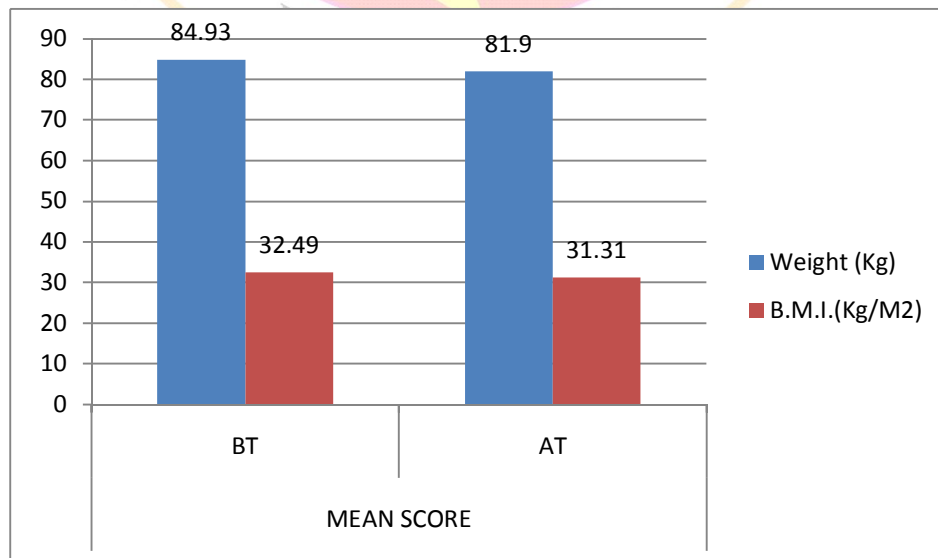


Table no. 2 is about effect of therapy on weight and B.M.I. Average reduction in weight is by 3.57%, in B.M.I. by 3.64% and P value for both is less than 0.001 which is highly significant.
(BT – Before treatment, AT – After treatment)

Discussion:

on keen observation it is identified that the formulation Guduchyadi yoga may be the best sthauhyahar compound as it contains Katu, tikta and kashayaraspredominantly and also possessing tridoshar, medohar and lekhan properties.(byconsidering properties of individual drugs in combination).

In Charak Samhita it is clearly stated that substances possessing Guru Guna along with Aptarpana properties should be administered for the management of sthauhya¹¹. Hence honey is selected as Anupan in this study.

Though direct references regarding the use of Vachadichurna for Udvartan are not available in the ayurvedic literature the same compound is selected for the study because the herbs of Vachadichurnaposseses Ruksha, Tikshna and Kapha-Medohar properties.

Mode of action of Udvartan can be explained as under. Due to Ushna, Tikshnagunas of the drugs as well as the effect of forceful massage in the opposite direction of hair follicles the drug enter into the body by means of its potency and dilate the channels. Also as a result of Udvartanliquefaction of Kapha and Meda also take place and reaches koshta and flushed out, which results in lightness of the body.

Conclusion:

The therapy with Guduchyadi yoga internally and, Vachadi Churna Udvartan used in sthauhyapatients gives statistically significant changes in measurement of circumferences as well as in weight and BMI. However there is need of further study with large sample size to come to a final conclusion regarding the efficacy of present trial drug in the management of sthauhya.

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