Authors of this Issue

Dr. Aarti Kale  Dr. Archana Kutkarni  Dr. Jayshree Katole  Dr. Pankaj Dixit  Dr. S. V. Gopal

Dr. Suvarna Biddya  Dr. Swati Chobe  Dr. V. R. Sonambikar  Dr. Vikaramsing Chavan  Dr. Vrushali Gaikwad

Dr. Aditi Namdeo  Dr. Anupama Bhande  Dr. Ashish Keche  Dr. Katyani Vibhandik  Dr. P. M. Chaugule

Dr. R. Harinkhede  Dr. Ranibala Nomade  Dr. Santosh Pathak  Dr. Shweta Holge  Dr. Shweta More

Dr. Shweta Mulik  Dr. Snehal Tandale  Dr. Sulakshana Varpe  Dr. Vaibhav Junghare

Price Rs. 300
Marathi Vagbhat Samhita Publication

Right to Left - Sameer Unhale (Commissioner, Nanded Municipal Corporation)
V. H. Kulkarni, B. D. Unhale (Retired), Central Exercise Dy Commissioner
R. H. Kulkarni, P. H. Kulkarni

Felicitation of Prof. Manricio (Chile)
L to R Mauricio, Rakshe, P. H. Kulkarni
J. K. Barde

Felicitation Dr. Rakshe

Delegate for International Conference from Chile, USA, Columbia & Brazil

P. H. Kulkarni addressing the Conference

Visit of Dr. Rani Samant, Melbourne, Australia to the office of Deerghayu International.
Pandurang Kulkami feeling relaxed with Kavita Indapurkar and 6 others at Kothrud Ayurveda Clinic, Opposite Mhate Temple.

The new scientific book titled "MASTISHKA - Neurology in Ayurveda" released last week. In photo from left to right - Prof. P.H. Kulkarni, Mr. Deotam Santokhkar (Ex Cultural Advisor to Prime minister of Govt. of Mauritius ) & Mrs Veerdhavarna Santokhkar. Kudos to Puri Dr Pushpapala Kamble, co author of book.

Published by -
< deerguyinternational@gmail.com >
## Index

<table>
<thead>
<tr>
<th>Review</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Role of Shadrasas in Agni Karma</td>
<td>87</td>
</tr>
<tr>
<td>Suvarna Bidye</td>
<td></td>
</tr>
<tr>
<td>2) A Review of The Physiological and Pathological Aspect of Oja</td>
<td>92</td>
</tr>
<tr>
<td>Archana Kulkarni/Ranibala Nemade</td>
<td></td>
</tr>
<tr>
<td>Clinical</td>
<td></td>
</tr>
<tr>
<td>3) A Clinico Comparative study on the efficacy of Chandraprabha Vati Anjana &amp; Bhadramusta and Vaari Anjana in the Management of Kaphaja Timira with Special Reference to immature Senile Cataract</td>
<td>103</td>
</tr>
<tr>
<td>Priyanka Chaugule/S. V. Gopal</td>
<td></td>
</tr>
<tr>
<td>Review</td>
<td></td>
</tr>
<tr>
<td>4) Cosmetic Approach to Hair in Ayurveda</td>
<td>115</td>
</tr>
<tr>
<td>Sulakshana Varpe/Aditi Namdeo</td>
<td></td>
</tr>
<tr>
<td>5) Muscular Dystrophy and Ayurveda - An Overview</td>
<td>122</td>
</tr>
<tr>
<td>Rajkumar Harinkhede</td>
<td></td>
</tr>
<tr>
<td>6) Ayurvedic Review of Functional Mechanism of Prana Vayu with Respect to Stroke</td>
<td>127</td>
</tr>
<tr>
<td>Kalyani Vibhandik/Swati Chobhe</td>
<td></td>
</tr>
<tr>
<td>7) Review of Corelation of Uchshwasana (Expiration) and Vakpravrutti Physiology of Speech) Functions of Udan Vayu</td>
<td>133</td>
</tr>
<tr>
<td>Shweta Mulik/Swati Chobhe</td>
<td></td>
</tr>
<tr>
<td>Case Study</td>
<td></td>
</tr>
<tr>
<td>8) A case Discussion on Bahupitta Kamala (Hepatocellular Jaundice) Treated with Vasadi Kwath and Madhu Internally</td>
<td>140</td>
</tr>
<tr>
<td>Anupama Bhange/Vikramsing Chauhan/Jayashree Katole/Aashish Keche</td>
<td></td>
</tr>
<tr>
<td>Review</td>
<td></td>
</tr>
<tr>
<td>9) Study of Uses of Chandraprabhavati in Gynaecological Disorders</td>
<td>145</td>
</tr>
<tr>
<td>Arati Kale/Sulakshana Varpe/Shweta Helge</td>
<td></td>
</tr>
<tr>
<td>10) Conceptual Understanding of Trivid Nyayas</td>
<td>154</td>
</tr>
<tr>
<td>Snehal Tandale/Vrushali Gayakwad/Shweta More</td>
<td></td>
</tr>
<tr>
<td>11) Review of Menstruation in Ayurveda</td>
<td>159</td>
</tr>
<tr>
<td>Dhananjay Hage</td>
<td></td>
</tr>
<tr>
<td>Case Study</td>
<td></td>
</tr>
<tr>
<td>12) Post Operative Pain Management After Haemorrhoidectomy with Ayurvedic Treatment</td>
<td>170</td>
</tr>
<tr>
<td>V. R. Sonambekar/Vaibhav Junghare/Pankaj Dixit</td>
<td></td>
</tr>
</tbody>
</table>
ABSTRACT:
Agni is one of the most important factors for maintenance of health. If agni is functioning properly, one lives long free from disorders and gets ill if it is deranged. Hence Agni is the root cause of all diseases. The vitiation of Doshas i.e. Prakopa and Prashama are dependent on Agni. Hence one should always protect Agni.

The treatment of diseases i.e. Shodhana and Shamana chikitsa are also based on rasas. So the consideration of rasas is inevitable as far as the Agnichikitsa is concerned. Katu, amla, lavan, & tikta rasas are agnideepak & amapachak.

Though these rasas have same deepan pachan karm, each consists of different gunas & gradation of gunas is also different. So these rasas are used according to root cause, and pathogenesis of agnimandya.

Causes of agnimandya are elaborated in grahani chapter of Charakachikitsasthan in detail. The application of rasas in different pathogenesis of agnimandya with special reference to Deepaneey gana is presented in this article.

(Total reference no. 6)

Key Words: Agni – agnimandya – shadras – deepaneeya gana – awastha of agnimandya.

Introduction - Agni is one of the most important factors for maintenance of health. If agni is functioning properly, one lives long free from disorders and gets ill if it is deranged. Hence Agni is the root cause of all diseases. The vitiation of Doshas i.e. Prakopa and Prashama are dependent on Agni. Hence one should always protect Agni.

Shamaprapok doshanaam sarvesamagnisanshirou...(Cha.chi. 5/136)

The regimen of diet prescribed in Swasthavrutta is constituted on the basis of rasas. Also the treatment of diseases i.e. Shodhana and Shamana chikitsa are also based on rasas. So the consideration of deepaneeya karm is inevitable as far as the Agnichikitsa is concerned. Deepaneey gana is one of the important group mentioned by Charakacharya. Katu, amla, lavan, & tikta rasas are agnideepak & amapachak.
Though these rasas have same deepan pachan karm, each consists of different gunas & gradation of gunas is also different. So these rasas are used according to root cause, and pathogenesis of agnimandya. The application of rasas & Deepaneey gana in different pathogenesis of agnimandya is presented in this article.

Methodology – Causes of agnimandya are elaborated in grahani chapter of Charakachikitsasthan in detail. Charakacharya explained the treatment of mandagni according to different causes.

Roukshanmande pibet sarpi..............(Cha.chi.15/205-211)

The main cause of aagnimandya is ama. So to reduce ama katu, amla, lavana and tikta rasas are useful as they are agrnideepaka and amapachaka. To treat agniddushti kledana, rukshana, vatanulomana karmas are required. As per the cause and avastha of agnimandya combination of these rasas are to be applied. While using these rasas, gunas and gradation of gunas of 6 rasa are to be considered.

Actions of Shadrasa-

Katu rasa – It is having laghu, ruksha, ushna guna. Its karmas are deepana, pachana, kledashoshana. It is used in samkaphajanya agnimandya.

Amlaras - It is having laghu, snigdha, ushna guna. Its karmas are Deepana pachana due to laghu, ushna guna and kledana, vatanulomana due to snigdha guna. Amla rasa is useful in samvatjanya agnimandya.

Lavanaras - It is having guru, snigdha, ushna guna. Its karmas are Deepana pachana, kledana due to ushna, snigdha guna. It is useful in samavataj agnimandya.

Tiktaras - It is having laghu, ruksha, sheeta guna. Tikta rasa performs deepana pachana due to laghu, ruksha guna. It is useful in predominance of pitta and kapha. Tikta rasa dravyas having ushna veerya are more useful in vata, pitta and kaphajanya agnimandya. e.g. Guduchi, Patol, Patha.

Madhur, kashay rasa having ushna veerya are also agnideepak & amapachak. Due to ushna guna & perform kledan, bruhan karma due to madhur rasa, snigdha guna.

Charakacharya has mentioned deepaneeyyana gana in sutrasthan 4th chapter. It consists of ten drugs. The properties of ten drugs are as follows:-

Pippali Pippalimool, Chavya Chitrak Shunthi Amlavetas Marich Ajmoda Bhallatakasthi Hinguniryasa iti dashemani deepaneeyani bhavanti (Ch. Su. 4/47)

Deepan karm means it stimulates agni and digests aam. The root cause of all disease is mandagni. Hence it is very important gana as chikitsa is concerned.

Katu, amla, lavan, & tikta rasas are agnideepak & amapachak. Kledan, bruhan karm also required in some state of agnimandya. Therefore madhur, kashay rasa having ushna veerya are essential in some condition of agnimandya. Though Deepaneeyy gana have same deepan pachan
karm, each consists of different gunas & gradation of gunas is also different. So these drugs used according to root cause, and pathogenesis of agnimandya.

The properties of ten drugs in deepaniya gana:

<table>
<thead>
<tr>
<th>Dravya name</th>
<th>Rasa</th>
<th>Vipak</th>
<th>veerya</th>
<th>Gunas</th>
<th>Karm</th>
<th>Doshagnata</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pippali</td>
<td>Katu</td>
<td>madhur</td>
<td>anushna</td>
<td>laghu, snidh</td>
<td>Deepan, pachan, kledan, bruhan, anuloman</td>
<td>Kaphavataghna</td>
</tr>
<tr>
<td>Pippalimool</td>
<td>Katu</td>
<td>Katu</td>
<td>Ushna</td>
<td>Laghu, ruksha</td>
<td>Deepan, pachan, rukshan</td>
<td>kaphavataghna</td>
</tr>
<tr>
<td>Chavya</td>
<td>Katu</td>
<td>Katu</td>
<td>Ushna</td>
<td>Laghu, ruksha</td>
<td>Deepan, pachan, rukshan</td>
<td>kaphavataghna</td>
</tr>
<tr>
<td>Chitrak</td>
<td>Katu, tikta</td>
<td>Katu</td>
<td>Ushna</td>
<td>Laghu, ruksha</td>
<td>Deepan, pachan, rukshan</td>
<td>kaphavataghna</td>
</tr>
<tr>
<td>Shunthi</td>
<td>Katu</td>
<td>madhur</td>
<td>Ushna</td>
<td>Laghu, snidh</td>
<td>Deepan, pachan, kledan, bruhan, anuloman</td>
<td>kaphavataghna</td>
</tr>
<tr>
<td>Amlavetas</td>
<td>Amla</td>
<td>Amla</td>
<td>Ushna</td>
<td>Laghu, ruksha</td>
<td>Deepan, pachan, rukshan</td>
<td>kaphavataghna</td>
</tr>
<tr>
<td>Marich</td>
<td>Katu</td>
<td>Ushna</td>
<td>Laghu, ruksha</td>
<td>Deepan, pachan, rukshan</td>
<td>kaphavataghna</td>
<td></td>
</tr>
<tr>
<td>Ajmoda</td>
<td>Katu, tikta</td>
<td>Katu</td>
<td>Ushna</td>
<td>Laghu, ruksha</td>
<td>Deepan, pachan, rukshan</td>
<td>kaphavataghna</td>
</tr>
<tr>
<td>Bhallatakasthi</td>
<td>Madhur</td>
<td>Madhur</td>
<td>Ushna</td>
<td>Laghu, snidh</td>
<td>Deepan, pachan, kledan, bruhan</td>
<td>Vatpitaghna</td>
</tr>
<tr>
<td>Hinguniryas</td>
<td>Katu</td>
<td>Katu</td>
<td>Ushna</td>
<td>Laghu, snidh</td>
<td>Deepan, pachan, kledan, bruhan, anuloman</td>
<td>kaphavataghna</td>
</tr>
</tbody>
</table>

Chavya, Chitrak, marich, pippalimoola, ajamoda, are having katu rasa and ruksha, ushna guna. So they perform deepana, pachana karma and are used in ama pradoshaja agnimandya. Amlavetas - It has Amla rasa, ushna veerya, agnideepak, pachak, anulomak & used in vatprakopjanya agnimandya.

Shunti, pippali dravyas are having snigdhaguna and madhura vipaka. Along with deepana, pachana they perform kledana and bruhan karma. Therefore in predominance of vata dosha where kledana and bruhana is necessary these dravyas are useful.

Hingu is having katu rasa and has snidhga, tikshna guna. It is useful in vataprapokajanya agnimandya where due to snigdha and ushna guna it pacifies vata and perform vatanulomana. Bhallatakasthi is useful in bruhana along with deepana, pachana because of its madhura rasa, madhura vipaka and snidhga, ushna guna.
These ten drugs are used in all types of agnimandya according to its rasa, veerya, vipaka, guna with different combination.

The drugs of Deepaneeya gana consist of shadrasas. The combination of these drugs should be used depending on the minute details of pathogenesis of agnimandya.

The application of Deepneeya gana according to cause of agnimandya –

1. **Atiraukshyat** – In this state Agnimandya is due to ruksha guna of vaat. Therefore kledana karma along with deepana pachana is necessary. Hence pippali, shunthi are useful because of snigha guna & madhur vipak.

2. **Atisnehat** – In this avastha rukshana treatment is required along with deepana pachana. Hence tikta katu ras is more beneficial. e.g- Ajamoda, Chitrak, marich, hingu. So churna asavarishta of these drugs are to be utilized.

3. **Gudopalepat** – Here agnimandya is due to amapradoshavastha and apanavrutta samanavayu. So anulomana is important along with deepana, pachana. Hingu, shunti, pippali having snigdha, ushna guna madhr vipaka reduce blockage of srotas & clear the passage of vayu. Amlavetas is also useful as amla rasa is also the best vatanulomak, agnideepak & aamapachak. Asavari ishta prepared from these drugs are used.

4. **Udavartat** – Agnimandya is due to apanavrutta saman. Here Hingu, shunti, pippali having snigdha, ushna guna & vataaghna are applicable. Also Amlavetas is useful as it is vatanulomak, agnideepak & aamapachak. Anuvasan basti & Niruha basti of these drugs are to be used.

5. **Doshapravruthha** – In this agnimandya according to concerned doshas, rasas are used. In predominance of kapha, katu, tikta rasa having ushnaveerya should be applied. Chavya, Chitrak, marich, pippalimoola, ajamoda, are having katu rasa and ruksha, ushna guna. They are aamapachak, agnideepak kaphaghna & clear the block of srotas due to their rukshan karm. In predominance of pitta shunti, pippali are useful due to their madhur ipak & snigdha guna.

6. **Vyadhiyuktasya** – In this agnimandyafatigue due to chronic illness is there. So deepana, kledana, bruhan is required. Therefore Bhallatakasthi, shunti, pippali with ghruta is beneficial i.e. deepaniya sneha should be given.

7. **Upavasat** – Here agnimandya is due to upawas, ksdhaveg dharan. Mandagni due to ruksh, laghu guna of vaatprakop. Hence kledan, bruhan is necessary in this state. Bhallatakasthi due to snigdha guna, madhur rasa, madhur vipak and shunti, pippali due to snigdha guna, madhur vipak are useful in this state. So ghee or yavagu prepared from these drugs should be given.

8. **Deergahakalaprasangat** – In this avastha because of unavoidable reason proper care of agni is not taken for longer duration of time. Hence mandagni, vaatprakop & weakness is there. Along with deepana also bruhan is required. Madhur rasa having ushnaveerya drug should be applied e.g. Bhallatakasthi.. siddha maansrasa.
Conclusion:

♦ Katu amla, lavan, tikta rasas are amapachak, agnideepak, hence used in agnimandya.
♦ Kledan, bruhan karm also required in some state of agnimandya. Therefore madhur, kashay rasa having ushna veerya are essential in agnimandya.
♦ The six rasas are used according to their gunas in different pathogenesis of agnimandya.
♦ Considering the status of dosh, dushya, avastha etc. & guna, karm of drugs combination of drugs of should be used.
♦ Ete doshadushyadyapekshya kalkakwathsnehalahaadiyukt….(A.Hru.su.15/47)

References:

♦ Ashtanga Samgraha: Vagbhatt, Edited by Atri Dev Gupt, Chaukhamba Sanskrit, Series, Varanasi.
♦ Dravyagund Vigyan, Volume 1 to V: Prof. P.V. Sharma Chaukhamba Bharati Academy, Varanasi.
Review:

A Review of The Physiological & Pathological Aspect of Oja

Email:archana.arukulkarni@gmail.com; Mobile no. 9422164367

Vd. Ranibal M. Nemade, Associate Professor, Dept. of Sanskrit Samhita, Wagholi Ayurved College, Pune, Maharashtra.
Email:dr.pushpanemade@gmail.com; Mobile no. 9766607380

ABSTRACT:

Ayurved is the science which deals with health and disease aspect. Health is also known as ‘swastha’, which is a state of equilibrium between dosha, agni, functioning of dhatu and mala along with the proper functioning of dynanendriya, mana and atma. Disturbance among any of the above mentioned factors may cause disease.

Along with dosha, dhatu etc., oja is also a significant and unique entity responsible for physical and mental strength of the body. Oja is very closely related with dosha and dhatu. This is because of the fact that kapha in prakrut state is considered as oja. Oja is the ‘sara’ (supreme essence) of Saptadhatus, from Rasa to Shukra. Oja, in its prakrut state strengthens the body. Sushruta has designated oja as Bala. Vitiation of oja along with dosha, dhatu can be observed in pathogenesis of various diseases. Deterioration in quality or quantity or displacement of oja may lead to ‘Ojavikruti’ or ‘kshaya’. This article focuses on the concept of Oja and evaluation of its vikruti in various pathological conditions or diseases.

Keywords: Bala, Oja, Ojavikruti, Saptadhatusara, [36]

INTRODUCTION:

Ayurved is the science of life. The two most vital aspects with which it deals are health and disease. To keep one’s bodyfit and healthy, ayurveda has described dinacharya, rutucharya, sadvrutta. Health in Ayurveda implies a perfect harmony of body, soul and mind. Health is also known as ‘swastha’, which is a state of equilibrium between dosha, agni, functioning of dhatu and mala along with the proper functioning of dynanendriya, mana and atma. An imbalance or disturbance among any of the above mentioned factors may cause disease.

Along with dosha, dhatu etc., oja is also a significant and unique entity responsible for physical and mental strength of the body. Ojas an entity which provides the site to harbour the Prana. It is known to be one of the Pranayatana. Oja is very closely related with dosha and dhatu. This is because of the fact that kaphain prakrut state is considered as oja. Oja is the ‘sara’ (supreme essence) of Saptadhatus, from Rasa to Shukra. Sushruta has designated oja as Bala. It is of two types: para and aparaoja. Paraaoja is situated in the heart and measures eight drops. On the other hand, aparaoja which has qualities similar to sleshma is circulated through
Oja, in its prakrut state strengthens the body. It performs the function of tuning up body, soul, mind and all sense organs. It also provides person with pleasant voice and colour.

Oja gets nourished, once the food is digested. Ultimately, perpetuation of oja depends upon the food consumed and whether or not it has been digested properly. Vitiation in the oja can occur, even if the food is of good nourishing qualities but lacks in digestive energy. Deterioration in quality or quantity or displacement of oja may lead to 'Ojavikruti' or 'kshaya'. This article focuses on the concept of oja and evaluation of its vikruti in various pathological conditions or diseases.

AIM AND OBJECTIVE:
1. To study the fundamental concept of Oja.
2. To evaluate Ojavikruti in various pathological conditions or diseases.

MATERIAL AND METHOD:
Since this article is literary and concept-based, the Ayurvedic texts used in this study are: Charak Samhita, Sushrut Samhita, AshtangHrudaya, Bhel Samhita and their available Commentaries. Also various dictionaries like Amarkosha, Shabdakalpadruma etc. have been referred for understanding the meaning.

REVIEW OF LITERATURE:

Meaning of Oja:
Oja means bala, kanti, prabha, prakash, jeevanshakti, jananshakti, tej. Oja also means bodily strength, vigour, energy, ability, power, vitality. It is the principle of vital warmth and action throughout the body.

Origin of oja: Once the process of fertilization is completed, prakrut doshas are produced as direct descendants of panchmahabhuta. The entity that gets generated following the panchamahabhuta is the para oja. It brings excellence to every dhatu generated.

Types of oja: Two kinds of oja have been described in the Ayurvedic classics.

1. Para oja, which is the principle type, originated in intrauterine life, resides in heart and measures eight drops.
2. Aparaoja which is generated by the excellence of seven dhatus, is nourished by ahara. It is circulated through vessels in the whole body, arising from heart. It measures half an anjali.

Every entity alive is nourished by ahara or food. Similarly, aparaoja is also nourished by food. Charak has made a comparison between inception of oja and honey gathered by bees from various flowers and fruits. Oja is procured from all the dhatus, making it an excellent and servile part of every dhatu.
Site of oja: Acharya Bhela has named twelve sites of oja. Rasa(shukla), shonit, mamsa, medo, asthi, majja, shukra, sweda, pitta, sleshma, mutra and pureesha. Oja is not a single entity since it has different functions at different sites, but ultimate outcome of oja is to protect the body and provide strength.

Properties of oja: oja residing in heart is white, slightly red and slightly yellow in colour. It is sarvivarna, sweet in taste and resembles parched cereal (Lajagandhi) in odor.

Charak has also proposed ten qualities of oja which are similar to milk and ghee, while opposite to madya. These qualities are guru, shita, mrudu, snigdha, bahala, madhura, sthira, prasanna, picchila and slakshna.

Synonym of oja: Bala and prakrusleshma, sharirasneha

Functions of oja:
1. The most vital function of oja is to keep body alive and sustain it.
2. It also executes the function of tuning up body, soul, mind and all sense organs with each other.
3. Since it strengthens the body, it is also known as ‘bala’.
4. An individual possesses a well-nourished, durable body due to the above cited qualities. Dalhana states that ‘mamsadhatu’ is the representative of all seven dhatus. Remaining dhatus should also be considered in a similar manner.
5. Due to bala, all types of movements in a living body are smooth and obstruction-free.
6. It provides a person with a pleasant voice and colour.
7. It helps the sense organs to function satisfactorily.
8. In intrauterine life, it performs the proper union of ovum and sperm by means of its excellence.
9. It contributes in primary stages of fetal development.
10. It helps in differentiation of various organs and systems.

These above mentioned functions of oja are mentioned in ayurvedic classics.

Uniqueness of oja: Oja cannot be encompassed in dosha, dhatu and mala. Oja is not a dosha as it is not responsible factor for prakriti of an individual (Prakritiarambahka). It is not a dhatu because dhatu has a very specific character of nourishing and producing next dhatu. Oja is known to sustain the body and give strength to the same, but it does not nourish a dhatu. Hence it is not considered as a dhatu. Due to its high purity it cannot be contemplated as mala. Oja is considered to be an esteem excellent part of shukradhatu. It can be considered as upadhatu which provides strength to the body and helps in the perpetuation of the same.

CONCEPT OF OJOVIKRUTI: Oja is which physical component of the body, is not yet known. It is strenuous to pinpoint certain body part as oja, but it is mandatory for the survival
of human beings. A human body will continue to be in a healthy condition as long as oja is in a physiological state. *Ojavruddhi* does not cause any disease; instead it provides satisfaction, strength, nutrition.\(^{[19]}\)

Three stages of *ojakshaya* may prevail in various conditions and diseases. Etiological factors responsible for *ojakshaya* are injury, excess of catabolism (decreased body tissue), anger, grief, state of trance, hunger. All these factors are liable for displacement of excellent and unctuous part of *dhatu* from its site. *Vata* initiates the action of *pitta* which leads to expulsion of *oja*.\(^{[20]}\) *Ojakshaya hetu* can be categorized as aahariya, manas and agantujhetu.

<table>
<thead>
<tr>
<th>Aahariya</th>
<th>Manas</th>
<th>Agantuj</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunger, excess of catabolism</td>
<td>Anger, grief, state of trance</td>
<td>Trauma, injury</td>
</tr>
</tbody>
</table>

The stages mentioned in *ojakshaya* are *ojavisramsa*, *ojavyapat* and *ojakshaya*.\(^{[21]}\)

**Visramsa of oja:**

*Visramsasthanachutirbhighatadibhirev* | S.S 15/24 Dalhan

**Meaning:** It is displacement of *oja*, which takes place due to injury.

Manifestations of this condition are displacement of joints of body, or *dosha* from the location, loss of normal functions of body, speech and mind.

**Vyapat of oja:**

*Sadushtadoshasansargat* |

**Meaning:** Spread of abnormal *oja* due to vitiated *dosha, dushya*.

Manifestations of this condition are stiffness and heaviness of the body, oedema due to *vatadosha*, change in complexion or discoloration, exhaustion, drowsiness and hypersomnia.

**Kshaya of oja:**

*Kshaya:swapramanatshokdhanyakshayadibhi* |

**Meaning:** *Ojakshaya* is loss of *oja* in its physiological measure due to grief and state of trance.

Manifestations of this condition according to *Sushruta* are, loss of functions of sense organs, excess of catabolism of body, being unwell, irrelevant speech and death.

It has been cited in *Charak Samhita* that an individual gets scared, becomes weak, malfunctioning of sense organs, loss of skin lustre, remains unhappy, dryness of skin and broken voice.\(^{[22]}\)

In *Sushruta Samhita*, a sequence of events is explained for *ojakshaya*. The process initiates with *ojavisramsa*, followed by *ojavyapat* turning ultimately to *ojakshaya*.

References related to *ojovikruti* or *ojadushti* observed in pathogenesis of *sannipatajwara*, *rajyakshama*, *kshta-kshin*, *pandu*, *prameha* and in *madatya*.

(95)
Sannipatajjwara:
In Sannipatajjwara, displacement of oja takes place along with aggravated Pitta and vata, therefore it is also termed as hataujasa. Symptoms involved are stiffness of limbs, loss of consciousness (short lived), drowsiness, delirium, drooping limbs.[23]

Rajayakshma:
In the Ayurvedic classics, there are four major causes of rajayakshma. These are sahasa, vegasandharana, kshaya and vishamashana. Out of these, in kshayaj rajayakshma, shukra and oja get diminished because of excessive emaciation as a result of jealousy, anxiety, fear, apprehension, anger, grief, fasting, starvation and excessive indulgence in sex. All these factors lead to the diminution of the unctuousness of the body and aggravation of Vata. This vata aggravates pitta and kapha, which produces 11 signs and symptoms of kshayaj rajayakshma.[24]

The pathogenesis of rajayakshma can be illustrated in two ways:
The dhatu’s of the body get nourished by their respective ushmas or dhatuagnis which is within their respective srotas. If there is obstruction to their channels of circulation or diminution of stable tissue elements, dhatuagnis then rajayakshma is manifested.

It is also stated that the food fails to nourish all the tissues and gets converted to stools. All the nourishment and Oja gets wasted in the form of Pureesa (stool). Hence, in the patient suffering from rajayakshma, patient’s stool should be protected.[25] (Measures should be taken to channelize nutrition from the stools containing the nutritious part). Here oja implies rasa or dehasara.

In another type of pathogenesis, due to excessive indulgence in sex, shukra is diminished leading to attenuation of the previous dhatu and aggravation of vata.

Pandu:
In panduvyadhi, Pitta dosha is predominantly aggravated along with other doshas due to which the dhatu get afflicted. This results in shaithilya(weakening) and gaurava (heaviness) of dhatu. Thereafter, the complexion, strength, unctuousness, and the properties of oja get reduced. Here oja implies sharirasneha or dhatusara (supreme essence).

The patient becomes alparakta (blood deficient), alpamedaska (reduced fat tissue), nissara (lack of vitality), shithilendriya (sense organs become weak) and discoloration of skin leading to manifestation of Pandu roga.[26]

Prameha:
In Charak Samhita, pathogenesis of madhumeha is explained at three places.
1. AvaranajanyaMadhumeha:
Excessive intake of guru (heavy), snigdhaahara (unctuous food), amla and lavanahara (articles having acidic and salty taste), indulgence in excessive sleep and sedentary habits etc. lead to excessive increase of kapha, pitta, meda and mamsa which causes srotorodha (obstruction)
leading to avarana (covering) of vata. This vitiated vata carries the oja (vital essence) to basti (bladder) resulting in obstinate type of Madhumeha. [27]

2. Shuddha Vataj Madhumeha:
The pathogenesis of Madhumeha mentioned in Charakanidansthana may be considered to be caused by Shuddhavata. Vatadosha gets provoked by vatakaranidana. Vitiated vata converts sweet natured oja’s properties into dry and astringent taste. This highly provoked vata carries oja towards basti and thus leading to Madhumeha. [28]

3. Dhatuksayajanya Madhumeha:
In an individual whose body is already affected with conditions of kaphaja and pittaja pramehas , kshaya of vital dhatu and if still indulges in vatakaraahara and vihara, results into aggravation of vata which very quickly spreads all over the body and while doing so it drags down the vasa, majja, lasika and oja to the basti and eliminates it from the body thus leading to the manifestation of vatajaprameha. [29]

Kshatkshina: Straining in excess with a bow, lifting heavy weight, falling from high altitudes, fighting with stronger persons, restraining a running bull or other strong animal, throwing heavy stones, articles, walking too fast and long distance, running along with horses, crossing a big river etc. are the causes mentioned for injury to the chest. Gradually, the potency, strength, complexion, appetite, agni and oja of patient is reduced which leads to excessive emaciation. [30] In kshatkshina the term kshin means diminution of tissue elements due to dwindling of semen and oja.

Madatya :
Madatya is caused by excessive consumption of alcohol. Properties of alcohol are exactly opposite to that of the oja.

Three stages of intoxication of alcohol are mentioned in charak samhita
First stage- the sthana of oja i.e heart gets stimulated.
Second stage- oja is mildly afflicted.
Third stage- oja is entirely afflicted to produce the intoxicating effects. [31]

Grahani :- In this chronic disease, ojovikruti occurs due to agnidushti.

Table showing the involvement of dosha, dushya and ojodushti in pathogenesis of various diseases

<table>
<thead>
<tr>
<th>Disease</th>
<th>Dosha</th>
<th>Dushya</th>
<th>Ojodushti</th>
</tr>
</thead>
<tbody>
<tr>
<td>annipatayjwara</td>
<td>Pitta and vata</td>
<td>Rasa</td>
<td>ojovisramsa</td>
</tr>
<tr>
<td>'askshayaj</td>
<td>Tridosh</td>
<td>Rasadidhatu</td>
<td>ojokshaya</td>
</tr>
<tr>
<td>hukrakshayaj</td>
<td>Vata</td>
<td>Shukra</td>
<td>ojokshaya</td>
</tr>
<tr>
<td>andu</td>
<td>Pitta pradhan</td>
<td>Rasa, rakta, mansa, meda</td>
<td>decreased properties of oja</td>
</tr>
<tr>
<td>shin</td>
<td>Vata</td>
<td>Shukraandoja</td>
<td>Displacement and loss of oja</td>
</tr>
<tr>
<td>ladhumaha</td>
<td>Vata, Pitta, Kapha</td>
<td>Medo, rakta, shukra, ambu, vasa, lasika, majja, rasa, oja</td>
<td>Quality and site of oja</td>
</tr>
<tr>
<td>ladatya</td>
<td>Pitta</td>
<td>Rakta</td>
<td>Quality and site of oja</td>
</tr>
</tbody>
</table>
Ojovruddhikaraahara and vihara:

Milk of cow and ghee is similar to oja in quality. If consumed, oja increases.[32] Aindrarasayanam is an extremely effective medicine for ojakshaya.[33]

Snehabasti provides strength to those affected by the diseases, physical exercises, evacuative measures, wayfaring, debilitated, devoid of oja and having diminished semen.[34] Mamsarasa, punarnavadyarishta[35] and dashmoolaghruta also boost oja.

Bathing regularly and a well-presented body with proper jewellery promotes oja.[36]

Proper state of agni in body also facilitates oja. Sweet, unctuous, light cool diet which can be easily digested intensifies oja.

DISCUSSION: Oja is unique entity generated in intrauterine life following generation of prakrutdosha. It is chief participating factor in union of sperm and ovum, progress of further stages and in differentiating further fetal development. This entity is neither included in dosha, dhatu nor in mala. It does not have its own agni, srotas or particular channel. Para and aparaoja execute vital functions. Strength present in tissue (dhatu), body and mind is provided by oja. It also provides immunity in the body. Proper diet and agni in body facilitates it. Para oja remains unchanged. With its dislocation, the body also dies. Only aparaoja undergoes variations. Its quality, quantity or the site of residence may change. Ojakshaya can be observed in various diseases due to aahariya, manas and aagantujhetu. Loss of tissue strength, body strength and decrease in the resistance of body are the main features of Ojakshaya. Ojavisramsa, vyapad and kshaya are the three stages depending upon the severity of involvement of oja in diseases condition. It can be boosted with certain regime and food. Its growth brings stability, satisfaction and nourishment of the body. Numerous scholars correlate oja with plasma, whole blood, internal secretions of testis, energy, stamina, and blood glucose, anterior pituitary secretions, cellular proteins, vitamins, heat, serous fluids, prostaglandins, protoplasm etc.

CONCLUSION: Oja can be considered as component responsible for physical and mental strength of body as well as providing resistance against any infection or disease. Any variation in quantity, quality and siteofthe component can be considered as ojovikruti or ojadushti. Ojavisramsapursued by ojavatandojakshayacan be observed in various diseases and conditions. Food, regime that facilitates oja can be considered as ojavruddhikar or balakar.

REFERENCES:


11. Dr. K. H. Krishnamurthy, Samashan Paridhaneeya Adhyaya 11/7-14, Bhela Samhita text with English translation edited by Prof. P. V. Sharma, Chaukhamba Visvabharati, Varanasi, 2008, Pg 51-53
12. **Vd. Yadavaji Trikamji Acharya, Kiyantahashirasíya Adhyaya 17/74-75, Sutra Sthana, Charak Samhita by Agnivesha, elaborated by Charak and Dridhabala with Ayurvedadipika commentary of Chakrapanidatta, Chaukhamba Sūrbhārati Prakashan, Varanasi, 2011, Pg103.**


15. **Vd. Yadavaji Trikamji Acharya, Arthedashmahamuliya Adhyaya 30/11, Sutra Sthana, Charak Samhita by Agnivesha, elaborated by Charak and Dridhabala with Ayurvedadipika commentary of Chakrapanidatta, Chaukhamba Sūrbhārati Prakashan, Varanasi, 2011, Pg185.**


(100)


29. Vd. Yadavji Trikamji Acharya, Parmehachikitsiyan Adhyaya 6/4-6, Chikitsa Sthana, Charak Samhita by Agnivesha, elaborated by Charak and Dridhabala with Ayurvedadipika commentary of Chakrapanidatta, Chaukhamba Sribharati Prakashan, Varanasi, 2011, Pg445

(101)


33. Vd. Yadavaji Trikamji Acharya, Rasayan Adhyaya, Trutiyapad 01/28, Chikitsa Sthana, Charak Samhita by Agnivesha, elaborated by Charak and Dridhabala with Ayurvedadipika commentary of Chakrapanidatta, Chaukhamba Surbharati Prakashan, Varanasi, 2011, Pg385


ABSTRACT:

Eyes are said to be an important Indriya among all the Indriyas. Kaphaja Timira is one among the Drishtigat Netrarogs mentioned by Sushruta and Vagbhtata. If it remains untreated blindness can occur with many complications. Hence there is need of an effective and safe medication.

Aims and objectives:

1) To evaluate the effect of Chandraprabha Varti Anjana in the management of Kaphaja Timira.
2) To evaluate the effect of Bhadramusta and Vaari Anjana in the management of Kaphaja Timira.
3) To compare the effect of Chandraprabha Varti Anjana and Bhadramusta and Vaari Anjana in the management of Kaphaja Timira.

Method: 40 patients were selected randomly and divided into two groups. Group A treated with Chandraprabha Varti Anjana and group B treated with Bhadramusta and Vaari Anjana. Results were assessed before and after treatment.

KEYWORDS: Abhrasamplavam Anjana, Kaphja Timira, Salilapavitan.

INTRODUCTION:

Kaphaja Timira is a Drishtigata Roga. Acharya Vagbhata has mentioned that in Kaphaja Timira person sees objects as Snigdha and Shweta in colour. Acharya Sushruta has specifically mentioned that he will be able to see only large objects and will not be able to perceive smaller ones. He will fill as if some heavy objects are covered in front of his eyes. He also says that he may perceive objects as if seen through water.

In initial stages of the disease, Kapha is vitiated. It’s Snigdha, Sheeta and Guru Gunas are increased and are confined to Rasa Dhautu. Later Sthira and Guru Gunas are increased. As a result the transparent structure turns to dense white opacity. Amargouravatvam, Shwetabhrapratima, Abhrasamplavam, Salilapavitavatvam are the symptoms seen in patients with Kaphaja Timira.

Senile Cataract affects 12-15 million people worldwide. Its importance in public health cannot
be understand because it is one of the chief causes for the age related visual impairment and blindness. An estimated 3.8 million people in India suffer from this condition each year. Conventional medical system is yet to offer a convincing therapeutic management for this disorder with surgery being the only alternative offered. In this aspect Ayurveda can offer a venue for research for need of drugs which can effectively manage this condition.

There is no direct mentioning of senile cataract in Ayurveda. Considering the signs, symptoms and histological changes in the lens, different stages of senile cataract may be compared to Kaphaj Timira, Kacha and Lingnasha. Various medical measures have been advised in different classical textbooks of Ayurveda to correct Kaphja Timira in the initial stage. Surgery mentioned in the final stage of Kaphaj Lingnasha where there is total loss of vision.

Chandraprabha Varti Anjana is an ophthalmic preparation mentioned in Yogratnakara in Netraroganamchikitsa chapter under Drishtigata Rogchikitsa. If we analyze the content of this formulation we can infer that it is suitable for the management of Kaphja Timira. A similar observation can also be found about Bhadramusta and Vaari Anjana in Yogratnakara in the same chapter. The current study is undertaken to evaluate the efficacy of Chandraprabha Varti Anjana and Bhadramusta and Vaari Anjana in the treatment of Kaphaja Timira w.s.r. to senile immature cataract.

AIMS AND OBJECTIVES:

♦ To evaluate the efficacy of Chandraprabha Varti Anjana in the management of Kaphaja Timira.
♦ To evaluate efficacy of Bhadramusta and Vaari Anjana in the management of Kaphaja Timira.
♦ To compare the efficacy of Chandraprabha Varti Anjana and Bhadramusta Vaari Anjana in the management of Kaphaja Timira.

MATERIALS AND METHODS:

1) Literary source–The literature of Kaphaja Timira and senile immature cataract was incorporated in great detail from Samhitas and other Ayurvedic and Modern Reference books.

2) Clinical source–Patients attending OPD.

3) Drug source–Both Chandraprabha Vartianjana and Bhadramusta Vaari Anjana were prepared as per the guidelines given in Ayurvedic literatures.

Inclusion Criteria

■ Patient’s age group of above 50 years.
■ Patients presenting with clinically established condition of senile immature cataract.
■ Visual acuity 6/12 or less
■ Patient of either gender.
Exclusion criteria
♦ Visual acuity of less than 6/60.
♦ Congenital, developmental, traumatic, complicated and metabolic cataract.
♦ Any other ocular pathology that can cause diminution of vision.
♦ Senila mature cataract and hypermature cataract.

STUDY DESIGN

Place of work - Selection of patients was carried out at Shalakya Department of OPD.

Clinical Study - 1) Total 40 patients of Kaphaja Timira were selected randomly and classified into two groups for application of Anjana. Each group has 20 patients.

2) The treatment were given as follows.

Group A - In this group 20 patients of Kaphaja Timira were treated with Chandraprabha Varti Anjana.

Group B - In this group 20 patients of Kaphaja Timira were treated with Bhadramusta and Vaari Anjana.

<table>
<thead>
<tr>
<th>Group</th>
<th>Procedure</th>
<th>Frequency</th>
<th>Dosage</th>
<th>Duration</th>
<th>Follow up</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Chandraprabha Varti Anjana</td>
<td>Once in a day</td>
<td>1 Vidanga Matra</td>
<td>2 months</td>
<td>Every 7 days</td>
</tr>
<tr>
<td>B</td>
<td>Bhadramusta Vaari Anjana</td>
<td>Once in a day</td>
<td>1 Vidanga Matra</td>
<td>2 months</td>
<td>Every 7 days</td>
</tr>
</tbody>
</table>

Demographic Data

1) Age

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Group A</th>
<th>Group B</th>
<th>Total</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>51-55</td>
<td>8</td>
<td>6</td>
<td>14</td>
<td>10%</td>
</tr>
<tr>
<td>56-60</td>
<td>6</td>
<td>4</td>
<td>10</td>
<td>25%</td>
</tr>
<tr>
<td>61-65</td>
<td>4</td>
<td>5</td>
<td>9</td>
<td>22.50%</td>
</tr>
<tr>
<td>66-70</td>
<td>2</td>
<td>5</td>
<td>7</td>
<td>17.50%</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>20</td>
<td>40</td>
<td>100%</td>
</tr>
</tbody>
</table>

![Table 1: Distribution of Patients According to Age](image)
2) Sex

<table>
<thead>
<tr>
<th>Sex</th>
<th>Group A</th>
<th>Group B</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>12</td>
<td>14</td>
<td>26</td>
<td>65%</td>
</tr>
<tr>
<td>Female</td>
<td>8</td>
<td>6</td>
<td>14</td>
<td>35%</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>20</td>
<td>40</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 2: Distribution of Patients According to Sex

![Sex Distribution Chart]

2) Religion

<table>
<thead>
<tr>
<th>Religion</th>
<th>Group A</th>
<th>Group B</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hindu</td>
<td>19</td>
<td>18</td>
<td>37</td>
<td>92.50%</td>
</tr>
<tr>
<td>Muslim</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>7.50%</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>20</td>
<td>40</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 3: Distribution of Patients According to Religion

![Religion Distribution Chart]
Assessment Criteria:

Effect of therapies was assessed by the signs and symptoms before and after the treatment. It was on the basis of self formulated scoring scale according to signs and symptoms.

Diagnostic Criteria

1) Floaters

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>No. of Patients (n)</th>
<th>Mean Score BT</th>
<th>Mean Score AT</th>
<th>% of relief</th>
<th>S.D</th>
<th>S.E.</th>
<th>'t' Value</th>
<th>'p' Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floaters</td>
<td>20</td>
<td>1.55</td>
<td>0.3</td>
<td>1.25</td>
<td>80.64</td>
<td>0.993</td>
<td>5.483</td>
<td>&lt;0.001</td>
<td>HS</td>
</tr>
</tbody>
</table>

GROUP A

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>No. of Patients (n)</th>
<th>Mean Score BT</th>
<th>Mean Score AT</th>
<th>% of relief</th>
<th>S.D</th>
<th>S.E.</th>
<th>'t' Value</th>
<th>'p' Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floaters</td>
<td>20</td>
<td>1.45</td>
<td>0.25</td>
<td>1.2</td>
<td>82.75</td>
<td>0.871</td>
<td>6.001</td>
<td>&lt;0.001</td>
<td>HS</td>
</tr>
</tbody>
</table>

GROUP B

2) Glare

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>No. of Patients (n)</th>
<th>Mean Score BT</th>
<th>Mean Score AT</th>
<th>% of Relief</th>
<th>S.D</th>
<th>S.E.</th>
<th>'t' Value</th>
<th>'p' Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glare</td>
<td>20</td>
<td>1.2</td>
<td>0.75</td>
<td>0.45</td>
<td>37.5</td>
<td>0.739</td>
<td>2.65</td>
<td>&lt;0.05</td>
<td>HS</td>
</tr>
</tbody>
</table>

GROUP A

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>No. of Patients (n)</th>
<th>Mean Score BT</th>
<th>Mean Score AT</th>
<th>% of Relief</th>
<th>S.D</th>
<th>S.E.</th>
<th>'t' Value</th>
<th>'p' Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glare</td>
<td>20</td>
<td>1.35</td>
<td>0.65</td>
<td>0.7</td>
<td>51.85</td>
<td>0.90</td>
<td>3.39</td>
<td>&lt;0.01</td>
<td>HS</td>
</tr>
</tbody>
</table>
3) Diplopia

### GROUP A

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>No. of Patients (n)</th>
<th>No. of Patients (n) Mean Score</th>
<th>No. of Patients (n) % of Relief</th>
<th>No. of Patients (n) S.D</th>
<th>No. of Patients (n) S.E.</th>
<th>No. of Patients (n) 't' Value</th>
<th>No. of Patients (n) 'p' Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diplopia</td>
<td>20</td>
<td>1.05</td>
<td>0.55</td>
<td>0.5</td>
<td>47.61</td>
<td>0.591</td>
<td>0.132</td>
<td>&lt;0.01 HS</td>
</tr>
</tbody>
</table>

### GROUP B

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>No. of Patients (n)</th>
<th>No. of Patients (n) Mean Score</th>
<th>No. of Patients (n) % of Relief</th>
<th>No. of Patients (n) S.D</th>
<th>No. of Patients (n) S.E.</th>
<th>No. of Patients (n) 't' Value</th>
<th>No. of Patients (n) 'p' Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diplopia</td>
<td>20</td>
<td>0.8</td>
<td>0.4</td>
<td>0.4</td>
<td>50</td>
<td>0.663</td>
<td>0.148</td>
<td>&lt;0.01 HS</td>
</tr>
</tbody>
</table>

4) Distortion of Images

### GROUP A

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>No. of Patients (n)</th>
<th>No. of Patients (n) Mean Score</th>
<th>No. of Patients (n) % of Relief</th>
<th>No. of Patients (n) S.D</th>
<th>No. of Patients (n) S.E.</th>
<th>No. of Patients (n) 't' Value</th>
<th>No. of Patients (n) 'p' Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distortion of images</td>
<td>20</td>
<td>1.15</td>
<td>0.45</td>
<td>0.7</td>
<td>60.86</td>
<td>0.953</td>
<td>0.213</td>
<td>&lt;0.01 HS</td>
</tr>
</tbody>
</table>

### GROUP B

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>No. of Patients (n)</th>
<th>No. of Patients (n) Mean Score</th>
<th>No. of Patients (n) % of Relief</th>
<th>No. of Patients (n) S.D</th>
<th>No. of Patients (n) S.E.</th>
<th>No. of Patients (n) 't' Value</th>
<th>No. of Patients (n) 'p' Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distortion of images</td>
<td>20</td>
<td>1.15</td>
<td>0.3</td>
<td>0.85</td>
<td>73.91</td>
<td>0.792</td>
<td>0.177</td>
<td>&lt;0.01 HS</td>
</tr>
</tbody>
</table>
5) Misty Vision

GROUP A

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>No. of Patients (n)</th>
<th>Mean Score</th>
<th>% of relief</th>
<th>S.D</th>
<th>S.E.</th>
<th>'t' Value</th>
<th>'p' Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Misty vision</td>
<td>20</td>
<td>0.8</td>
<td>0.1</td>
<td>0.7</td>
<td>87.5</td>
<td>0.714</td>
<td>0.159</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

GROUP B

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>No. of Patients (n)</th>
<th>Mean Score</th>
<th>% of relief</th>
<th>S.D</th>
<th>S.E.</th>
<th>'t' Value</th>
<th>'p' Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Misty vision</td>
<td>20</td>
<td>0.75</td>
<td>0.05</td>
<td>0.7</td>
<td>93.33</td>
<td>0.641</td>
<td>0.143</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

6) Loss of Vision

GROUP A

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>No. of Patients (n)</th>
<th>Mean Score</th>
<th>% of relief</th>
<th>S.D</th>
<th>S.E.</th>
<th>'t' Value</th>
<th>'p' Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of vision</td>
<td>20</td>
<td>1.15</td>
<td>0.85</td>
<td>0.3</td>
<td>26.08</td>
<td>0.781</td>
<td>0.174</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>

GROUP B

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>No. of Patients (n)</th>
<th>Mean Score</th>
<th>% of relief</th>
<th>S.D</th>
<th>S.E.</th>
<th>'t' Value</th>
<th>'p' Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of vision</td>
<td>20</td>
<td>1.15</td>
<td>0.7</td>
<td>0.45</td>
<td>39.13</td>
<td>0.804</td>
<td>0.179</td>
<td>&lt;0.05</td>
</tr>
</tbody>
</table>
7) Slit Lamp Examination

**GROUP A**

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>No. of Patients (n)</th>
<th>Mean Score</th>
<th>% of relief</th>
<th>S.D</th>
<th>S.E.</th>
<th>'t' Value</th>
<th>'p' Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slit lamp examination</td>
<td>20</td>
<td>0.9</td>
<td>0.3</td>
<td>0.6</td>
<td>66.67</td>
<td>0.861</td>
<td>0.192</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

**GROUP B**

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>No. of Patients (n)</th>
<th>Mean Score</th>
<th>% of relief</th>
<th>S.D</th>
<th>S.E.</th>
<th>'t' Value</th>
<th>'p' Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slit lamp examination</td>
<td>20</td>
<td>0.75</td>
<td>0.3</td>
<td>0.45</td>
<td>60</td>
<td>0.589</td>
<td>0.131</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

8) Pin hole exam.

**GROUP A**

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>No. of Patients (n)</th>
<th>Mean Score</th>
<th>% of relief</th>
<th>S.D</th>
<th>S.E.</th>
<th>'t' Value</th>
<th>'p' Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pin hole exam</td>
<td>20</td>
<td>1.2</td>
<td>0.7</td>
<td>0.5</td>
<td>41.15</td>
<td>0.921</td>
<td>0.206</td>
<td>&lt;0.05</td>
</tr>
</tbody>
</table>

**GROUP B**

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>No. of Patients (n)</th>
<th>Mean Score</th>
<th>% of relief</th>
<th>S.D</th>
<th>S.E.</th>
<th>'t' Value</th>
<th>'p' Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pin hole exam</td>
<td>20</td>
<td>1.3</td>
<td>0.6</td>
<td>0.7</td>
<td>53.84</td>
<td>0.901</td>
<td>0.201</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>
9) Distant vision

GROUP A

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>No. of Patients (n)</th>
<th>Mean Score</th>
<th>% of relief</th>
<th>S.D</th>
<th>S.E.</th>
<th>t' Value</th>
<th>'p' Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BT</td>
<td>AT</td>
<td>BT-AT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distant vision</td>
<td>20</td>
<td>0.65</td>
<td>0.35</td>
<td>0.3</td>
<td>46.15</td>
<td>0.458</td>
<td>0.102</td>
<td>2.852</td>
</tr>
</tbody>
</table>

GROUP B

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>No. of Patients (n)</th>
<th>Mean Score</th>
<th>% of relief</th>
<th>S.D</th>
<th>S.E.</th>
<th>t' Value</th>
<th>'p' Value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BT</td>
<td>AT</td>
<td>BT-AT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distant vision</td>
<td>20</td>
<td>0.4</td>
<td>0.2</td>
<td>0.2</td>
<td>50</td>
<td>0.401</td>
<td>0.089</td>
<td>2.179</td>
</tr>
</tbody>
</table>

Comparison of effect of therapy between Group A and Group B

<table>
<thead>
<tr>
<th>Sr.No</th>
<th>Symptom</th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BT</td>
<td>AT</td>
<td>BT</td>
</tr>
<tr>
<td>1</td>
<td>Floaters</td>
<td>1.55</td>
<td>0.3</td>
</tr>
<tr>
<td>2</td>
<td>Glare</td>
<td>1.2</td>
<td>0.75</td>
</tr>
<tr>
<td>3</td>
<td>Diplopia</td>
<td>1.05</td>
<td>0.55</td>
</tr>
<tr>
<td>4</td>
<td>Distortion of images</td>
<td>1.15</td>
<td>0.45</td>
</tr>
<tr>
<td>5</td>
<td>Misty vision</td>
<td>0.8</td>
<td>0.1</td>
</tr>
<tr>
<td>6</td>
<td>Loss of vision</td>
<td>1.15</td>
<td>0.85</td>
</tr>
<tr>
<td>7</td>
<td>Slit lamp examination</td>
<td>0.9</td>
<td>0.3</td>
</tr>
<tr>
<td>8</td>
<td>Pin hole exam</td>
<td>1.2</td>
<td>0.7</td>
</tr>
<tr>
<td>9</td>
<td>Distant vision</td>
<td>0.65</td>
<td>0.35</td>
</tr>
</tbody>
</table>
DISCUSSION:

Demographic data

1) **Age** - Age-wise distribution showed the maximum distribution in age group 61-65 years (22.50%) then next in the age group 66-70 years (17.50%) followed by.

2) **Sex** - Majority of patients were males (65%) than females (35%). Here the difference is very more which suggests that, the exposure to nidana are more for females in that particular desa, where the females are usually housewives. The males mostly Farmers are usually prone to the disease especially sunlight, dust etc.

3) **Religion** - Majority of patients were Hindus which suggests the predominance of that community in this region.

1) **Floaters** - In group A patient got relief by 80.64%, and the test was highly significant at 0.001 level. In group B it was 82.75% and the test was highly significant at the level of 0.001. So research hypothesis was accepted.

2) **Glare** - Group A got relief by 37.5% and group B by 51.85% and the tests were highly significant at the level of 0.05 and 0.01 respectively. Null hypothesis was rejected.

3) **Diplopia** - Group A and group B got relief by 47.61% and 50% respectively and both were highly significant at the level of 0.01. Alternate hypothesis was accepted.

4) **Distortion of image** - The test was highly significant in group A and group B as patients got relief by 60.86% and 73.91% at the level of 0.01. Null hypothesis was rejected.

5) **Misty vision** - In group A relief got by patients was 87.5% where in group B it was 93.33. The
test was highly significant at 0.0001 level in both the groups and hence the research hypothesis was accepted.

6) Loss of vision - In group A relief was 26.08% so Null hypothesis was accepted as the test was not significant at 0.05 level. In group B the relief got by patients was 39.13% and the test was significant at the level of 0.05.

7) Slit lamp examination - Group A got the relief by 66.67% and group B got 60% at the level of 0.01%. Hence both the tests were highly significant and Research hypothesis was accepted.

8) Pin hole exam - In group A the test was significant as the relief was 41.15% at the level of 0.05% and the same was highly significant at the level of 0.01% as relief was 53.84%.

9) Distant vision - In both the groups the test was significant at the level of 0.05. Group A got the relief by 46.15% and group B by 50%.

Discussion on Treatment Response:
Effect of therapy was assessed in 40 patients in two divided group on the basis of changes observed in cardinal signs, symptoms and diagnostic tests. Statistical analysis was conducted to know their significance.

- In both Group A and group B there was highly significant reduction in subjective and objective parameter.
- On comparison of result in group A and group B; the Group B showed good result than group A.
- On the basis of Parametric percentile enhancement in symptoms; Chandraprabhavartianjana showed equivalent result as Bhadramustavaarianjana.

Probable mode of action of the drugs:
The medicines are absorbed through Akshikosha, Sandhis, Siras and through minute Srothasasand thus reach upper region and eliminates Doshas.

Rajani- Tikta,Ruksha,Ushna,Katu.
Nimbapatra-Tikta,Laghu,Sheeta,Katu
Pippali-Katu,Laghu,Sheet,Madhur.
Marich-Katu,Laghu,TikshnaUshna,Katu.
Vidanga-Katu,Laghu,Ushna,Katu.
Ajamutra-Katu,Ruksha,Ushna,Katu,Vishaghna
Musta-Katu,Laghu,Ruksha,Sheeta,Katu.

With Katu, Tikta Rasa and Vipaka ; Laghu, Tikshna, KharaGuna and with ChakshushyaGuna contents will act as Lekhana Karma to reduce further opacification.
CONCLUSION:

Increased Guru, Snigdha and Sheeta Gunas in Drishti causing decrease in vision which matches with the discription of immature senile cataract.

It needs both systemic and holistic approach along with the topical therapeutic procedures.

The present clinical study was done on 40 Kaphaj Timira patients fulfilling the inclusion criteria, after getting ethical clearance from the institution. Detailed history was taken and a detail of Pathya Ahara Vihara was explained to the patients.

Application of Chandraprabha Varti Anjana and Bhadramusta Vaari Anjana was done and the results were analyzed before and after treatment by Paired t test to the recent definition of immature senile cataract.

Chandraprabha Varti Anjana and Bhadramusta Vaari Anjana are effective in the management of Kaphaja Timira.

Null hypothesis is rejected and alternate hypothesis is accepted.

No adverse effects were found during the treatment and treatment follow up period.

REFERENCES


Abstract:

Hairs are responsible for beauty appearance of personality and protection. In Ayurveda hairs are called Kesha which is Dhatu mala of Asthi. Hairs are important part which covers all over the body except palm and sole. It protects skull from outer injuries and also a sign of beauty. Now a day various cosmetics are available for hair and people are more conscious for their hair. In Ayurvedic classics information about kesha obtained from various references in relation to hair care, hair diseases and various procedures for improving hair quality etc. The scope of this article deals with understanding of all cosmetic aspect of hair mentioned in ayurvedic texts.

Keywords: Ayurveda, Cosmetics, Hair.

Introduction:

Ayurveda is a life science which deals with every aspects of life like health, diseases their cures and preventions. Main principles of Ayurveda are Tridosha, Saptadhatu & Trimala. Among Saptadhatu Asthi Dhatu has major role in supporting the body. Kesha is Mala of Asthi Dhatu so we can say that kesha is an important part of body. in ayurvedic samhitas they are mentioned importance of hair at many palaces but there was no different branch of hair and its cosmetics. Today in modern era a new terminology has introduced as hair cosmetics for hair care.

Ayurvedic description of Hair

Formation:

Asthidhatvagni acts on Ahar rasa then by Tridha parinaman asthi dhatu, updhatu and Mala of asthi dhatu is formed i.e., (Nakha, Kesha.)

Embryological Aspect:

According to the classics the hair develops in 6th or 7th month of intrauterine life & it is a Pitruja Bhava.
Kesha Sharir:

The matrix of hair is derived from pruthvi Mahabhuta. The healthy hair should be soft black coloured, firm, oily and with a single hair root. Some part of kesha lies above the skin and nutrition is supplied by Rasavahini.

Relation between Kesha & Dosha, Dhatu, Mala:

There is a very close functional relation between kesha and Tridosha. The health of Kesha depends upon dosha. Kapha provides Brumhan and Pitta provides softness however these two dosha depends on function of Vatadosha. Skin receives nourishment from Rasa-Dhatu, Kesha is a part of Twaka therefore kesha also receives nutrition from Rasa-Dhatu. Individual having Rasa Sara is characterized by smooth, soft, clear, fine, deep rooted hair.

A person possess meda sara exhibits snighdha kesha etc. kesha is Mala of asthi Dhatu so whenever there is Vrudhi and kshaya of Asthi Dhatu there will be affect on growth and development of kesha. Out of six Ras Madhur ras promotes healthy skin, hair etc. whereas excess in lavan rasa give rise to premature graying & baldness.

Features of Kesha in Different Prakruti:

<table>
<thead>
<tr>
<th>Vataj</th>
<th>Pittaj</th>
<th>Kaphaj</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parusha</td>
<td>Mrudu</td>
<td>Sthira</td>
</tr>
<tr>
<td>Atiruksha</td>
<td>Alpa</td>
<td>Kutila</td>
</tr>
<tr>
<td>Sphuttita</td>
<td>Kapil</td>
<td>Ghana</td>
</tr>
<tr>
<td>Dhusara</td>
<td>Virala</td>
<td>Nila</td>
</tr>
<tr>
<td>Alpa</td>
<td>Pinga</td>
<td></td>
</tr>
</tbody>
</table>

Disease of Hair:

Khalitya, Indralupta, Darunaka, Palitya etc.

In some diseases hairs are used as diagnostic criteria like in Prameha, Rajyakshma etc. While describing krumi A. Charak writes sthana of Bahya krumi is Kesha etc. and in types Raktaj Krumi he has described Keshaad Krumi also.

Cosmetics & Hair cosmetics:

The word cosmetic derived from Greek word meaning technique of dressing or beauty also known as substances or products used to enhance the appearance or fragrance of body. Hair cosmetics mean the products or substances which are used to enhance appearance of hair. In market there are many cosmetics products are available for hair e.g. Shampoo, serum. Conditioner, hair colors, perfumes, gels, creams, oils etc. but these products contains a lot of chemicals which are harmful for health and may cause severe damage to hair.
Ayurveda and Hair Cosmetics:

In Ayurveda Acharayas has mentioned many types of curative and Preventive treatments or cosmetics for hair.

1. **Dincharya/Ritucharya**: In ayurveda when Tridoshas, saptadhatu, trimala are in balanced condition then it is called health. Dinchraya & Ritucharya helps us to keep these in equilibrium and prevents many diseases including hair diseases.

   As described in Dincharya benefits of pratimarsha Nasya, Dhumpana, Shri-Abhanga, Kesha-Prasadhana etc. on daily basis for good hairs. In Hemant ritucharya Shiro-abhyanga is mentioned, and in Vasant ritucharya using of sneha on shir and Dhumpana etc. are mentioned.

2. **Nasya**: Using of oil or medicines through Nasal route is called as Nasya. It is used for prevention as well as cure of hair and scalp diseases. Daily use of Pratimarsha nasya helps to prevent the hair diseases whiles other type of nasya eg. Virechana Nasya, marsha nasya, Awapid nasya etc. used in different types of shiro-roga and kasha-roga.

3. **Dhumpana**: smoking for therapeutic purpose with a special instrument herbal powder is burnt & emitted smoke is inhaled, it is called as Dhumpana. It is indicated in hair fall, premature graying, e.g. Eranda, devdaru is used for Snehika Dhumpana, Eladi gana are used for Prayogika Dhumpana.

4. **Shiro-Abhyanga**: Shiro means head and Abhyanga refers to massage so it means head massage with oil. It is useful in all diseases of hair, it also gives nutrition to hair, it removes dryness of scalp, itching & headache etc. by using Shiro-Abhyanga hair becomes soft, blackish and it protects from baldness. E.g. nilibhrungadi Taila, Brahmi Taila.

5. **Shiro-Dhara**: It is a therapy that involves gently pouring of liquids over forehead. It is also useful in Baldness, graying of hairs etc. e.g. Jatamansi Taila, Bala taila.

6. **Shiro-pichu**: keeping a cloth dipped in oil on the head is called shiro-pichu. It is useful in Hair fall e.g. Bhringraj Taila.

7. **Shiro-Basti**: In this oil is kept on head with an apparatus or holder. As oil is kept for an appropriate time it gives nutrition to the hair and also useful in all hair problem.

8. **Lepam**: Applying paste of aushadhi dravya on head like paste of heena leafs used for coloring of hair, Keshawardhak lepa, Romoutpadaka lepa for hair fall.

9. **Talapodicchil / Taladharana**: It is a type of shiro-lepa, which is used in keralian panchakarma to cure hair diseases. The lepa dravya are used according to Dosha prakopa. Like bhringraj is used in kaphaj shiroroga.

10. **Shiro-snana**: washing hair with aushadhi siddh jala can be used instead of shampoos e.g. washing hair with Amalaki sidha Jala prevents premature graying of hair.

11. **Keshya Dravya**: dravya which are useful for hair are termed as keshya eg. Bhringraj & Jatamansi gives strength to hair, Ghritkumari gives softness n texture to hair, Brahmi gives nutrition to hair etc.
12 Rasayana: It is a type of internal medication used after shodhan karma. Which is also useful in hair problems like Khalita, Paliya etc. eg. Narsimha Rasayana, Gandhak Rasayana etc.

13 Samshodhan karma: i.e. Vaman, Virechan etc. are useful in dosha-samyata however diseases of hair are cause by dosha prakopa like paliya is mainly cause by pitta dosha.

14 Yoga and Pranayam: There are some yogas like Bhujangasana, Halasana, Trikonasana etc are effective in hair problems.

For good health of hair, Wearing turban helps to protect hair from wind, sunrays & dust. While describing personal hygiene cutting, cleaning and combing of hair are mentioned. As Kesha one of the factor while build the personality of a person. Ayurvedic classics states the advantages of maintenance of hairs provide pleasure, lightness, charm & increases enthusiasm it adds cleanliness and beauty to the personality.

<table>
<thead>
<tr>
<th>Preventive Measures for hair</th>
<th>Benefits</th>
<th>Curative measures for hair</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dincharaya</td>
<td>Prevents all hair diseases</td>
<td>1 Nasya</td>
<td>Different types of Nasya are useful in all diseases of hair.</td>
</tr>
<tr>
<td>2. Ritucharaya</td>
<td>Prevents all hair diseases.</td>
<td>2 Shiro-dhara</td>
<td>Useful in all diseases of hair.</td>
</tr>
<tr>
<td>3. Nasya</td>
<td>Prevents hair fall, premature graying of hair etc.</td>
<td>3 Murdha Tiala Shiro-Abhayanga Pichu</td>
<td>Useful in all diseases of hair.</td>
</tr>
<tr>
<td>4. Dhumpana</td>
<td>Prevents Baldness, hair fall.</td>
<td>4 Parisheka</td>
<td>Useful in all diseases of hair.</td>
</tr>
<tr>
<td>5. Shiro-Abhyanga</td>
<td>Gives nutrition to hair.</td>
<td>5 Shirobasti</td>
<td>Useful in all diseases of hair.</td>
</tr>
<tr>
<td>6. Shiro-dhara</td>
<td>Gives nutrition to hair.</td>
<td>6 Dhumpaan</td>
<td>Specially indicated for baldness &amp; hairfall.</td>
</tr>
<tr>
<td>7. Rasayana</td>
<td>Delays graying of hair in old age and prevent other diseases of hair.</td>
<td>7 Lepa</td>
<td>Useful in all diseases of hair.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 Panchakarmas</td>
<td>Indicated in hair fall, baldness, premature graying.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9 Rasayana</td>
<td>It is used as internal medication along with other local procedures.</td>
</tr>
</tbody>
</table>
Discussion:

Cosmetology deals with various aspects of beauty. Beauty is a quality of being physically attractive. According to Ayurveda the concept of beauty includes physical, mental, social and spiritual element when these are in perfect harmony a person radiates with inner and outer beauty. In fact concept of cosmetics is as old as mankind and civilization.

We can find earliest references of beautifulness in various old books like kajal, tilak etc. were used as body decorative and to create beauty spots on forehead, chin, cheeks, neck or wearing ornaments. In ayurveda knowledge of beauty starts from very basic like in Dincharya, Ratricharya, Ritucharya, panchakarma, Rasayana it is mentioned. Charakacharya classified cosametic drugs as Varnya, Kustagna, Kandugana, Vyasthapak, Kantiprada, Keshya etc. Many lepam, Taila are described in Bruhat-trayi and Laghu-trayi samhitas in context of tawaka and kesha roga.

Today people use different types of hair cosmetics products for hair problems but to prevent and cure hair diseases ayurveda plays an important role as mentioned below.

♦ Khalitya (Hair fall) :
   This is caused by vitiation of pitta and vata dosha and also a lakshan of asthi kshya however may caused by bahya and Raktaj krumi.
   For this along with internal medication for vatta and pitta shaman one should use nasya, Shiroy-abyangha, shiro-Dhara, lepam etc. according to dosha pradhanya. For eg. Anu-Taila, yastimadhuadi taila etc. for pratimarsha nasya, neelibhrungadi-taila etc. for shiro-abyangha or shiro-dhara.

♦ Indralupta (Alopecia Areata) :
   Which also caused by vitiation of pitta and Vata thereafter kapha mixed with rakta creates obstruction result in not appearing of new hairs.
   Dhumpana, virechana nasya etc should be used for removing obstruction of kapha and rakta. Acharya Vagbhatta and Acharya Sharangdhar has told many Indralupatahar lepa like Kasisadi lepa, Gunjadi lepa, Romoutpadaka lepa etc. also shiro-dhara and other karma as mentioned previously.

♦ Palitya (Premature graying of hair) :
   Body heat caused by anger tension etc. along with pitta located in shira causes palitya. Samshodhan karma like virechan should be done for aggravated pitta. After shodhana one should use Rasayana like Narsimha Rasayana, Gandhak-Rasayana etc with that nasya by Vibhitak Taila etc. lepam with Priyaladi lepam, tiladi lepam etc. and other karma which are mentioned previously.

♦ Darunaka (Dandruff) :
   The disease Darunaka is caused by vitiation of Kapha & Vata Dosha. In this skin of scalp & hair become Daruna, Ruksa & associated with Kandu. A. Sushrta while mentioning the treatment of Darunaka told Awapid Nasya, Shiro-basti, Abhayanga etc. A. Sharangdhar told to use Bhringraj taila, Gunja Taila, khashhas beej lepa etc.
Romapharana (Hair removers):
Acharya Sushruta mentioned this term in shasthi upakram. Many yoga like hartaaladi yog, Romanashak lepa are described for this purpose.

Conclusion:

- From above discussion we can say that cosmetics are a part of ayurvedic lifestyle. Ayurveda has explained all terminologies related to hair and cosmetics and we can also find many ayurvedic cosmetics and Kalpas for hair diseases in classics. Ayurvedic cosmetics like different types of oils, lepam & karmas doesn’t contain any chemicals as compared to the cosmetics which are available in market so these are beneficial as well as has no adverse effects.

- The Prayojana of Ayurveda is ‘Swasthasya swatha Rakshnam’ so, if we follow Dincharya, Ritucharya as told by Acharyas and Pathyakar Ahar-Vihar on daily basis so we will not face any health as well as hair problems also. We can also conclude that not only external application is important for good health of hair but along with that internal medication and proper Ahar-Vihar is also necessary.

- For healthy hair and hair diseases we can use all karmas like nasya, shiro-abhyanga etc. which are mentioned previously as hair cosmetics or as hair therapies.

References:

8. Dr. Brahmanand Tripathi, Uttar-khand, Sharangdhara - samhita, Edition; 2012, Chaukhaba surbharti prakashana, Varanasi. pg.no. 394-396
10. Aacharya Vidhyadhar shukla & prof. Ravi dutt tripathi, Sutrasthana, Charak samhita, re-printed in 2010, Chaukhamba surbharti prakashana. chapter-6 pg.no.112 &114

**Statement by the Publisher [From IV (Rule 8)]**

Statement about ownership and other particular about the newspapers to be published in the first issue every year after the last day of February.

1. **Name of Publication** : Deerghayu International
3. **Period of Publication** : Quarterly
4. **Printer’s Name** : Dr. P. H. Kulkarni
5. **Publisher’s Name** : Dr. P. H. Kulkarni
   - **Nationality** : Indian
   - **Address** : As above
6. **Editor’s Name** : Dr. P. H. Kulkarni
   - **Nationality** : Indian
   - **Address** : As above
7. **Names and address of individuals who own the newspaper and partners or Shareholders holding more than one percent of the total capital** : P. H. Kulkarni.

I, Dr. P. H. Kulkarni hereby declare that the particulars given above are true to best of my knowledge and belief.

**Date** : 1st April 2017

*P. H. Kulkarni*
(Signature of publisher)
ABSTRACT:
Muscular dystrophy is an x-linked recessive trait, characterized by progressive muscular weakness. Diagnosis of these disorder based on clinical presentation, genetic testing, muscle biopsy and muscle imaging. Duchenne muscular dystrophy is most common dystrophinopathy with an incidence 1 in 3500 live male births. Its allelic variant, Becker muscular dystrophy, differs from Duchene muscular dystrophy by its later onset.

In ayurveda muscular dystrophies can be classified under adibala pravritta vyadhi which is caused by beeja dushti. In this pathogenesis occurs due to defect in mansa dhatu producing matruja beejabhagaavyava which is result of tridosh dushti in mother during period of conception. In view of ayurveda the muscular dystrophies can be managed by two ways, first at prior to conception for a purpose of beeja shudhi. At that time vitiated doshas eliminated from the mother body by using shodhana karma. So that way healthy beeja produced in mother which ultimately developed in healthy progeny. Second is the treating affected patient with panchakarma along with rasayana therapy.

In the present review article author did an effort not only to highlight etiopathology but also management of muscular dystrophy supported by various studies in the field of ayurveda.

KEY WORDS: Adibala pravritta vyadhi; Mamsa dushti; Muscular dystrophy; Panchakarma; Rasayana.

Number of References: (18)

INTRODUCTION:
The muscular dystrophies are diseases of muscle membrane which are generally characterized by pathological evidence of ongoing muscle degeneration and regeneration. Diagnosis of these disorder based on clinical presentation, genetic testing, muscle biopsy and muscle imaging.[1]

Duchenne muscular dystrophy (DMD) is the most common hereditary neuromuscular disease affecting all races and ethnic groups. Its characteristic clinical features are progressive weakness, intellectual impairment, hypertrophy of the calves, and proliferation of connective tissue in muscle. The incidence is 1:3,600 liveborn infant boys. This disease is inherited as an X-linked recessive trait.[2] The abnormal gene is at the Xp21 locus and is one of the largest...
genes. Becker muscular dystrophy (BMD) is a fundamentally similar disease as DMD, with a genetic defect at the same locus, but clinically it follows a milder and more protracted course.

Infant boys are only rarely symptomatic at birth or in early infancy, although some are mildly hypotonic. Early gross motor skills, such as rolling over, sitting, and standing, are usually achieved at the appropriate ages or may be mildly delayed. Poor head control in infancy may be the first sign of weakness. Distinctive facies are not an early feature because facial muscle weakness is a late event; in later childhood, a “transverse” or horizontal smile may be seen. Walking is often accomplished at the normal age of about 12 month, but hip girdle weakness may be seen in subtle form as early as the 2nd year. Toddlers might assume a lordotic posture when standing to compensate for gluteal weakness. An early Gowers sign is often evident by age 3 yr and is fully expressed by age 5 or 6 yr.

The length of time a patient remains ambulatory varies greatly. Some patients are confined to a wheelchair by 7 yr of age; most patients continue to walk with increasing difficulty until age 10 yr without orthopaedic intervention. With orthotic bracing, physiotherapy, and sometimes minor surgery (Achilles tendon lengthening), most are able to walk until age 12 yr. Ambulation is important not only for postponing the psychologic depression that accompanies the loss of an aspect of personal independence but also because scoliosis usually does not become a major complication as long as a patient remains ambulatory, even for as little as 1 hr per day; scoliosis often becomes rapidly progressive after confinement to a wheelchair.

Death occurs usually at about 18-20 yr of age. The causes of death are respiratory failure in sleep, intractable heart failure, pneumonia, or occasionally aspiration and airway obstruction.

In Becker muscular dystrophy, boys remain ambulatory until late adolescence or early adult life. Calf pseudohypertrophy, cardiomyopathy, and elevated serum levels of creatine kinase (CK) are similar to those of patients with DMD. Learning disabilities are less common. The onset of weakness is later in Becker than in DMD. Death often occurs in the mid to late 20s; fewer than half of patients are still alive by age 40 yr; these survivors are severely disabled.

In ayurveda this pathogenesis can be clearly understand by concept of adibala pravritta vyadhi viz. Sushruta’s vyadhi vargikan. In this disorder pathogenesis occurs due to the mtruja beejabhagaayava dushti during period of garbha utpatti because of tridosh prakopa in mother. It leads to vata prakopa takes sthana samshraya in mamsa dhatu vitiates and depletes them (x-linked progressive degenerative disorder of muscle tissue).

Acharya Charaka has clearly mentioned about the close relation of both mamsa and medo dhatu viz. To dhatukshayas vata pathogenesis which in term degrades and cause the dushti (a defect in the sarcolemmal membrane). This ansha-ansha kalpana of dhatus clearly signifies the involvement of the dhatvagnimandya causes kshaya. Thisagnimandya caused at the level of the dhatu leads formation of ama. Madhavakara explained strotodushti as type of ama itself. While strotoradha a subtype of strotodushti produces the hypertrophy in the particular region, it also manifests as first prakopa then depletion i.e. due to vata. This complex variety of pathogenesis indeed is responsible for the progressive wasting and necrosis of muscle fibres. Therefore it was well understood thousands of year back with its severity and
termed as ashadhya.[7]

**MANAGEMENT:**

In India, with this incidence and no cure in contemporary system of medicine, patients of muscular dystrophy approaches Ayurveda with lots of hope. In view of ayurveda the muscular dystrophies can be managed by two ways, first at prior to conception. This period is very crucial for future child so ayurveda gives great importance the preparation of both partners prior to conception. the birth of a healthy child is seen as equivalent to planting a tree for which we need a seed, soil, time and the right nourishment this approach can be seen as the ultimate in a preventative medicine with action a few month prior to conception having lifelong effect on future child.

Just as a healthy seed bears healthy fruit, the first step in producing healthy sperm and eggs is achieved through a deep internal cleansing to balance the doshas and remove toxins (known as ama) by detoxifying the body (known as panchkarma). Pathya apathay sevana equally important for both partners especially keeping away from alcoholism, smoking etc. Who indulges daily in healthy foods and activities treatment for conceiving physically, mentally and emotionally healthy offspring. This can be achieved by panchakarma, rasayana (rejuvenation) and vajikaran (aphrodisiac) medicines.[8]

Second is the application of shodhana and shaman chikitsa along with rasayana therapy in affected patient. In ayurveda for the management of this disorder concept of the paraspar dhatu paka is of prime importance whereas acharya have mentioned specific chikitsa sootra for the condition by considering its severity and importance which can easily understood by the physicians.Acharyas while explaining the dhatupaka avastha clearly signifies the importance of agni which is whole and sole responsible for the formation of the next dhatus. Thus correction of agni should be done by administration of deepana and pachana dravyas. [9]

**Snehana** both bahya and abhyantara helps to pacifies the vata dosha . in contrast abhyanga a variety of bahya sneha with oil like chadanbalalakshadi taila, Bala taila mahanarayana taila, and mahamansadi taila helps in subsiding the vata dosha improves the tonicity of the muscle and compacts the body. Svedana karma by shashtishali pinda svedana increases the metabolic activity which in turn increases the oxygen demand and blood flow. This vasodilatation stimulates the superficial nerve ending causing a reflex dilation of the arterioles. Thus, svedana can bring about changes in conduction of nerve stimuli, by changing sodium ion concentration.[10]

**Panchakarma** treatment which is basically a Bio-cleansing regimen intended to eliminate the toxic elements from the body and there by enhances the immunity of the body and increases the acceptability of body to various therapeutic regimens like Rasayana (Rejuvenation) and Vajikarana (Aphrodisiac). Thus Panchakarma therapy is believed to impart radical elimination of disease causing factors and maintain the equilibrium of Doshas. Panchakarma is the ultimate mind body healing experience for detoxifying the body, strengthening the immune system and restoring balance and well being its one of the most effective healing modality in ayurvedic treatment. It promotes detoxification and rejuvenation.Fivefold measures comprehended as Panchakarma are: Yamana (Therapeutic
Emesis), Virechana (Therapeutic Purgation), Anuvasana (Medicated Oil Enema), Asthapan (Medicated Decoction Enema), Nasya (Nasal Insufflations).

*Mridu sadyo vaman* should be given for this purpose two or three apamarg tandul (*Achyranthes aspera*) with madhu and ghrta. No pre therapy procedures are required in infancy and in early childhood. No purvakarma required. Because Bala sarra snigdha. The repeated courses of *Mridu virechana karma* by using amaltas (*cassia fistula*) is beneficial in muscular dystrophy because its anulomana and tridosahara property. Shankhini tail (*Convulvulus pluricaulis*) and errand tail (*Ricinus communis*) can be used for the purpose of abhyantar snehapana as well as mridu virechana. Research shows that virechana does the detoxification which leads to better absorption of rasayana drugs, other brihana dravyas and correction of agni.

*Basti* is another variety of the karma especially brihan variety of basti which clearly shows its efficacy in this condition for example usage of *mans ras basti* and *yapana basti* with kala and karma format, considering the condition as gambhir dhatu gata vikara. *Phala tail* and errand basti can be administered as anuvasana basti. It also rejuvenates the body and further helps in improving from the dhatukshaya caused due by the vata dosha. Thus these modalities are of prime importance as no treatment acts on prime pathogenesis and present approach is taken to improve quality of over muscular dystrophy.

**CONCLUSION:**

The absence of specific treatment for muscular dystrophy in modern medicine demands the role of contemporary and alternative approaches of treatment. In *ayurvedic science* muscular dystrophy can be managed with the help of *panchakarma* procedures followed by administration of rasayana dravyas. Ayurveda never claims the cure of muscular dystrophy with reference to asadhya where is its unique or pioneer approach gives patient of muscular dystrophy, quality of life and longer survival upon muscular dystrophy.

**REFERENCE:**

5. Shashtri K, Chaturvedi G. Editor (1st ed.) Caraka samhita Of Aghivesa revised by Caraka, Sharir Sthana; Mahatigarbhavakrant: Chapter 4, Varanassi: choukambha bharati Acadami 2013; 877-878

7. Upadhyaya Y. editor (1st ed.) Madhavnidanam with Madhukosha Vyakhya; vatvyadhinidan: Chapter 22, Varanasi: Choukambha sanskrita pratishthan; 2005, 496-497

8. Shashtri K, Chaturvedi G. Editor (1st ed.) Caraka samhita Of Agnivesa revised by Caraka, Sharir Sthana: Jatisutriyashariradhyaya; Chapter 8, Varanassi: choukambha bharati Acadami 2013; 916-21


10. Shashtri K, Chaturvedi G. Editor (1st ed.) Caraka samhita Of Agnivesa revised by Caraka, Sootra Sthana; Snehadhyaya: Chapter 13, Varanassi: choukambha bharati Acadami 2013; 286-287


15. Bhisgacharya S. Editor (1st ed.) Kashyapa Samhita By Vrddha Jivaka Revised by Vatsya, Siddhi Sthana; Snehadhyaya: Chapter 22, Varanasi: choukambha sanskrita sansthan; 2012, 17

16. Tripathi B. Editor (1st ed.) Ashtang hridya Of Vagbhata, Sootra Sthana; Vamanvirechniyadhyaya: Chapter 18, Varanasi: Choukambha sanskrita pratishthan; 2010, 227-228


18. Bhisgacharya S. Editor (1st ed.) Kashyapa Samhita By Vrddha Jivaka Revised by Vatsya, Khila Sthana; Bastivishshnivyadhyaya: Chapter 8, Varanasi: choukambha sanskrita sansthan; 2012, 284-85

(126)
Abstract:
Stroke is characterised by the rapid appearance of a focal deficit of Brain function which is diagnosed through several techniques like neurological examination, CT scans, MRI scans, Doppler Ultrasound & Arteriography.

In Ayurveda, Vata, Pitta, Kapha are the three main Doshas which control various functions in the body. Out of these three Doshas, Vata is predominant to all Doshas. As each Dosha has its five types, Vata dosha also has five types as Prana, Udana, Apana, Vyana & Samana.

Functions of Prana Vayu are focused in this article. One of the important functions of Prana Vayu is 'Indriyadruk' which gets deranged in the patients of Stroke. One of the main location of Prana Vayu is 'Murdha' which is nothing but 'Brain'. As in stroke, there is impaired functions of Brain, we can compare it with an Ayurvedic perspective as Vatavyadhi which comes under Pakshaghata. For the patients of Stroke or Pakshaghata, Ayurvedic line of treatment proves to be effective with respect to the muscle power regaining. Snehana, Swedana, Nasya & Basti are the line of treatments for Pakshaghata. How do these treatments try to balance physiology of Pranavayu? Because after commencing these treatments, patient’s functioning of Dnyanendriyas & Karmendriyas get improved. So efforts are taken to explore physiological aspect of Prana Vayu in the patients of Stroke.

According to modern medicine, the main cause of Stroke results either from Cerebral haemorrhage due to uncontrolled Hypertension or due to Cerebral thrombosis or Accidents. From Ayurvedic perspective, symptoms of stroke can be compared with different Vaata Vyadhis. This article will help Ayurvedic Physicians definitely to assess prognosis of stroke in the patients getting Ayurvedic treatments.

KEY WORDS: Deranged function of Prana vayu, Functional mechanism of Pranna Vayu, Indriyadruk function & Budhidruk function, Pakshaghata, Stroke

INTRODUCTION:
Anuloma is the normal direction of Prana Vayu by which external Food, Water & Air enter the body through the following functional mechanisms1: 

Total Number of References - 5
1. Nishwasa : Control over Inspiration
2. Annapravesh : Control over Deglutition
3. Hrudayadruk : Control over Heart rate
4. Indriyadruk : control over special senses
5. Budhidruk : Control over Intellectual functions
6. Chittadruk : Control over functions of mind
7. Shthivana : Control over Spitting process
8. Kshavathu : Controls Sneezing reflex
9. Udgara : Controls Belching

'Indriyadruk function' & 'Budhidruk function' are the important functional mechanisms of Prana Vayu given in Ashtang Hridaya. There are five Dnyanendriyas & five Karmendriyas which are commonly known as INDRIYA. The functions of these Indriyas are controlled by Prana Vayu. Listening, Watching, Touch, smell & taste are the functions of Dnyanendriyas which are carried out by Prana Vayu, while Walking, Holding of an object, movements of Hands & Legs are the functions of Karmendriyas which are controlled by Prana Vayu. 'Budhidruk function' consists of Perception & Analysis of an input which is done with the help of Prana Vayu.

As in Stroke there is involvement of Paralysis of Limbs, Face & trunk, loss in reflexes or hyper reflexes, there is an impairment in Indriyadruk function of Pranavayu. Also in later stage, there can be memory loss or extreme forgetfulness, Altered sensorium i.e. inability to think & concentrate, Disorientation of time & place, fits or seizures, Sothere can be impairment in 'Budhidruk function' of Prana Vayu.

AIM : To study the Ayurvedic review of functional mechanism of Prana Vayu with respect to Stroke.

OBJECTIVES :
2. Study of Stroke from modern medicine book.

Materials & Methods : The functions of Karmendriyas of Prana Vayu can be examined by Superficial & Deep reflexes with respect to clinical examination of Stroke. The clinical practice of stroke involves Lesion of UMN i.e. Upper motor neuron or Lesion of LMN i.e. Lower motor neuron. Lesions of UMN appear as Vascular lesions which is the commonest cause of Hemiplegia. There is thrombosis of the Middle cerebral artery or its branches causing infarction in small or large areas of Brain in complete Hemiplegia. Face, Arms & Legs are paralysed. But trunk & some cranial muscles escape at least partially. These signs may persist for less than 24 hours in which the episode is known as TIA(Transient ischemic attack). If they persist more than 24 hours & not progressive, then the episode is known as Completed Stroke. In Paraplegia, there is Paralysis of both Lower limbs. If the lesion is in
the Cervical lesion, the arms may also be get affected called as \textbf{Quadriplegia}.

In lesions of LMN, Lower neuron may get injured or diseased. A chronic degeneration of Anterior horn cells occurs as a part of Motor neuron disease which includes Progressive muscular atrophy. The lesions may occur in Anterior Cerebral artery & the defects are seen\textsuperscript{3}.

Depending on site of these lesions in Cerebrum or in other parts of Brain, Stroke is associated with Monoplegia / Hemiplegia/Paraplegia/ Quadriplegia with or without Facial Paralysis. In this, Sphincter control may or may not get lost. These symptoms of stroke indicate loss of Indriyadruk function of Prana Vayu. Considering all these factors, Symptoms of stroke can be compared with Pakshagahta , Ekangavata , Saravangavata or Ardit in which Prana Vayu get affected.

Pakshaghata is nothing but \textit{Vatavyadhi} which attacks either left or right side of the body in which there is shrinking of Siras (Blood vessels) or Snayus(muscles& Ligaments) & restriction in body movements\textsuperscript{4}.

Many conditions of Vaatavyadhai are described in Charaka Samhita which involve Ekangavata means Monoplegia, Sarvangavta means Quadriplegia, Ardit means Hemiplegia with or without Facial Paralysis.

In the following chart, deranged physiological functions of Prana Vayu can be correlated with signs & symptoms of Stroke.

1. **Budhidruk function**
   - 1. Loss or sudden increased in consciousness
   - 2. Hemisensory loss
   - 3. Gait Apraxia (difficulty to perform tasks)
   - 4. Ataxia (lack of voluntary coordination of muscle movements)

2. **Indriyadruk function**
   - Dnyanendriyas
   - Karmendriyas

(129)
1. **chakshurendriya**:
   1. Monocular or binocular visual defects
   2. Diplopia
   3. Horner’s syndrome
   4. Hemianopia (defective vision)

2. **Sparshnendriya**:
   1. loss in reflexes or hyper reflexes
      e.g. Babinski’s sign & clonus
   2. Ekangavata (Monoplegia)
   3. Sarvangavata (Quadriplegia)

3. **Ghranendriya**:
   1. loss in sneezing reflex

4. **Strotrendriya**:
   1. Vertigo associated with brain stem
   2. Stroke with hearing disturbance

**Discussion**

After extensive clinical research, physiology & etio-pathogenesis of Pakshaghata is explained in Ayurvedic compendia. Like modern medicine, Sira (Blood vessels), Snayu (Muscles & Ligaments) & Rakta Dhatu get affected by imbalance of Vata Dosha.

Clinical examination of Nervous system includes:

Superficial reflexes:
1. Abdominal reflexes
2. Cremasteric reflexes
3. Plantar reflex
4. Gluteal reflex
5. Anal reflex
6. Bulbocaverous reflex
7. Scapular reflex
8. Postural reflex
9. Tonic neck reflex
10. Grasp reflex
11. Sphinctor reflex

(130)
Deep reflexes:
1. Bicep reflex
2. Supinator/Radial reflex
3. Tricep reflex
4. Knee reflex
5. Ankle reflex

These reflexes are helpful in this condition before doing MRI, CT scan, Cerebral Arteriography & these investigations are helpful to assess functions of Prana Vayu in the patient of Stroke. Imbalance of Prana Vayu is the main cause of Stroke but it is Vyana Vayu which first alters Cerebral circulation which may lead to Haemorrhage. So along with Prana Vayu imbalance of Vyana Vayu should be taken into consideration.

Imbalanced Vyana Vayu

Uncontrolled Hypertension

Cerebral Hemorrhage

Imbalanced Prana Vayu

Stroke (Pakshaghata)
Conclusion:
Rehabilitation of Stroke patients with the help of Ayurvedic treatments aims at balancing of Vata Dosha especially Prana Vayu.

As according to modern medicine, cause of stroke is a outcome of circulatory imbalance, etiological factors according to Ayurveda is imbalance of Vata Dosha.

Irrespective of treatment, Ayurvedic Physician can follow modern clinical examination of Nervous system, MRI, CT scan, Cerebral Angiography to bring perfection in Ayurvedic Diagnosis, Prognosis & Treatment.

Aetiology of Pakshaghata & Stroke may differ from Ayurveda & from modern perspective but clinical picture of Ayurvedic compendia is not different. Clinical examination of Nervous system in the patients of Stroke(Pakshaghata) should be adopted for better analysis which is immensely helpful for Ayurvedic Doctor for Diagnosis & Prognosis.

References:
1. Colin Ogilvie & Christopher C. Evans, Chamberlain's Symptoms & Signs in Clinical Medicine, An introduction to Medical Diagnosis, 12th edition Page no. 254 to 257
2. Nicki R. Colledge Brain R. Walker, Staurt H. Radston, Davidson’s Principles & Practice of Medicine, 21st edition, Page no. 1180
Abstract:

Dosha, Dhatu and Mala are the basic principles of Ayurveda. Dosha are three important body elements, they are; Vata, pitta and kapha, which can be called as three bio-energies or functional and structural units of body.

Body constituent which is responsible for any sort of movement is called as Vata Dosha.

Key Words: Articulation, Function of Udan Vayu, Phonation, Uchwasan (expiration), Vakprarutti (physiology of speech).

Total Number Of References: 31

Introduction:

Vakprarutti (Physiology of speech) is the important function of Udanvayu. Vakprarutti means process of speech. Property persuade by Shotrendriya is called as Shabdha which is a special property of Akash Mahabhut. Generation of sound (Shabdha) requires cavity (kha) and Sound which is produced in Larynx is called as Vakprarutti.

In human body organs which controls speech process are Larynx, pharynx, nose and oral cavity. All these organs contain cavity which signify dominance of cavity (Aakash).

Role of Vayu Mahabhuta along with Aakash Mahabhuta is equally important for generation of sound in larynx. Vayu Mahabhuta in human body exist in the form of Vata Dosha which is composed of Aakash and Vayu Mahabhuta.

Five types of Vata Dosha are described in Charak Sanhita.

1-Pran Vayu  2-Udan Vayu  
3-Vyan Vayu  4-Saman Vayu  
5-Apan Vayu

Vata Dosha which moves in upward direction and which is responsible for speech and sound is Udan Vayu and the same Vayu controls physiology of expiration (Uchwasan).
Aim:
To study correlation of Uchwasan (expiration) and Vakpravrruti (speech) function of Udan Vayu.

Objectives:
1. To explain Vakpraruti (Physiology of speech) function of Udan Vayu.
2. To explain Uchwasan (expiration) function of Udan Vayu.
3. To explain Physiology of speech, Phonation and Articulation.
4. To explain Physics of speech and its correlation with Uchwasan (Expiration) process.

Materials And Methods:
Functions of Udan Vayu-

Human beings are blessed with ability to express thoughts and emotions by speech, sound and gesture. Ayurveda has described physiology of speech with contest to Udan Vayu. This is an effort to explore interrelation between Uchwasan (expiration) and Vakpravrruti (speech) both which is controlled by Udan Vayu.

Physiology of Respiration is well described in Ayurveda. Physiology of Respiration is composed of Inspiration and expiration, out of which Pran Vayu controls Inspiration while Udan Vayu controls expiration. Dalhana has explained that along with speech, Uchwasan (expiration) is controlled by Udan Vayu. During the process of uchwasan (expiration), air is taken out of the lungs.

Expiration process involves relaxation of diaphragm and intercostals muscles, reduction in volume of thoracic cavity and lungs. As volume of lungs get reduced, intrapulmonary pressure increases than that of the atmospheric pressure and air moves out of the lungs.

Expiration is a passive process which depends on recoiling of muscles which are involved in the process of inspiration, so it should be note down that Uchwasan (expiration) is not explained by Sushruta but it is explained by Dalhana in his critic on the verse of function of Udan Vayu.

Along with Uchwasan (expiration), Vakpravrruti (speech) is also controlled by Udana Vayu. In Ayurveda, Pranavaha srotas (Respiratory system) and its organs like Lungs (Phupphusa) are mentioned. But direct reference of Larynx is not available.

Sushruta has mentioned Swar vahi dhannis (Dhamanis conducting sound). Though references of Larynx are not found in Ayurvedic compendia but in Swarbheda Adhyaya of Sushrut Sanhita, Uttar tantra, reference of Swarvaha Srotas is mentioned.

Even if direct reference of Larynx is not found in Ayurveda but from the etio-pathology of disease, Swarbheda it is understood that association of speech with expiration was well realized by Acharya Sushruta.
In Sharir Sthan of Sushrut Sanhita, references of Shabdha Vah dhamaani are found. According to Sushruta, two Shabda vah dhamaani are responsible for Phonation (Ghosh) and two Shandha vah dhamaani are responsible for Articulation (Bhashyate).

In Sushrut Sanhita, Physiology of expiration and Physiology of speech are explained under the function of Udan Vayu which can be well comprehended in the view of Modern Physiology of speech.

Larynx is the organ of speech which is also called as voice box. It is situated in the midline of the neck. It extends from the fourth cervical vertebra to the sixth cervical vertebra. Larynx is composed of three unpaired cartilages and three paired cartilages. Arytenoid cartilages which are paired cartilages, give attachment to vocal cords. Larynx consist of three cavities from the inlet to the lower border for cricoids cartilage.

In addition to the sphincter functions of Larynx for the protection and control of respiratory activities, Larynx modify the expiratory stream to produce highly complex patterns of sound with varying loudness, frequency and duration.

Vocal cords (vocal folds) are the structure meant for voice production. Length of vocal cord is 2.5 cm in an adult male. In female vocal cord are shorter than male.

The two pairs of vocal cords are follows:
1. Superior false vocal cords which are also called as Ventricular folds or Vestibular folds.
2. Inferior pair of vocal cords is called as true vocal cords or vocal folds.

Bands of elastic ligaments are attached to the inferior surface of vocal folds. These bands of elastic ligaments are stretched like strings of guitar.

Larynx initiates the process of voice production or phonation, when the process of phonation begins Vocal folds are adducted, then only voice is produced in Larynx.

Speech consist of two steps
1. Phonation
2. Articulation

Integration of all references from different compendia are important to understand control of Udan Vayu on speech process. Because physiology of speech is composed of Vibration of Larynx for production of sound. Vibration is a type of movement for which according to Ayurveda, Vata Dosha is responsible. When person attend to speech Larynx is set in to vibration. During process of speech person do not expire air and it is hold in lungs. Air which
is being held in lungs is expelled in the laryngeal cavity with great speed. Due to high speed of air pressure in the laryngeal cavity is less than that of pressure in the lungs. Due to pressure differences vocal cord adduct and held close to each other due to velocity of air vocal cord start vibrating and they go on vibrating till we talk.

Voice is produced due to vibration of vocal cord. Due to contraction of intrinsic muscle of Larynx, elastic ligament below the surface of vocal cord are pulled and stretch tightly still we talk.

Steady flow of expired air in laryngeal cavity drops down pressure in it than that of lungs. Which keeps vocal cords vibrating. According to Ayurveda expansion of lungs, vibration of vocal cords are nothing but gati (movement) controlled by Udan Vayu.

Volume of voice depend on air pressure generated by lungs. More the healthy lungs more the volume of voice. Peach of the voice depend on tension of vocal cords. When person want to talk or speak longer time lung has to expel air from Larynx more forcefully. Controlled relaxation of Diaphragm exerts expiratory force which is used to speak Loudness of sound depends on air pressure lung has applied in the laryngeal cavity. Pharynx, mouth, nasal cavity, paranasal sinuses act as resonators and voice become more clear and loud.

Articulation - Articulation is important steps of speech, which gives the voice its human nature. Mouth, teeth, and cheeks are the organ of articulation.

Co-ordinated movements of muscles of mouth, cheeks and teeth produces meaningful words, which are called as language.

**Physics of Speech**

For production of any sound it needs source of energy (initiation), a structure or structures which can oscillate (phonation) and a resonator. In the case of human voice the source of energy is the momentum of expired air. In speech the force exerted is of the order of 7 cm H$_2$O with a range of about 5-355 cm H$_2$O in singing.

The expiratory force used in speech is produced by the controlled relaxation of the expiratory muscles mainly the diaphragm. These muscles can affect not only the pitch but also the loudness and phrasing of speech. The anterior abdominal muscles which are used in prolonged and forced expiration, and in some subjects at the end of quiet respiration, may be involved in speech especially in shouting and attempts to speak without the interruption necessary for inspiration.

**Discussion**

Vakpraruti (Physiology of speech) and Uchwasan (Expiration) are the interrelated functions of Udan Vayu. How they are interrelated, can be learned from the physics of speech.

Udan Vayu controls Uchwasan (expiration) and when person wants to speak, the same Udan Vayu streamlines this expired air in the larynx. This expired air is used as source of energy.
Due to expired air in the larynx, vocal cords are set into vibration.

Udan Vayu create force which is used in speech on which pitch and loudness of voice are depends.

More the strength of lungs more louder the voice/speech. Physics of speech is not different than Vakapruti (Physiology of speech) function described by Sushruta.

**Conclusion:**

Sushruta has correlated Uchwasan (expiration) process with speech (Vakpraruti). Speech process according to Ayurveda requires normal expiration process Uchwasan (expiration), force (Bala) with which phonation process takes place depends on balanced state of Udana Vayu. According to physics of speech also pitch and loudness of speech depends on expiratory force exerted by muscles of respiration. Force explained in physics of speech is bala of Udana Vayu which is generated during Uchwasan (Expiration) process.

So, it is great vision of ancient Ayurvedic wisdom to establish relation between Thoracic cavity, Lungs, Larynx, Uchwasan Karma (Expiration process) and Vakpraruti (Speech).

Clinical examination of respiratory system also includes examinations related with act of speech called as Vocal resonance and Tactile Vocal Fremitus (T.V.F.) which depicts correlation between Lungs, Expiration and speech.

From this review it can be further said that process of Phonation is under control of Udan Vayu but this can not be said about Articulation. Articulation means process of formation of coherent words, which is controlled by Pran Vayu.

**References:**


4) Advaitvedanta alkartark, Tarksangrah, shashikant jog, hingane khurd, singhad, pune, Edited print 1888.


ABSTRACT:
As the word suggest “Bahupitta” means Pitta PradoshajVikar, a disease of Vitiated Pitta Dosha.

In today’s era of globalization & industrialization, lack of concern about Dincharya and Rutucharya is seen everywhere which does give rise to many hazardous disorders. Bahupitta Kamala- Hepatocellular jaundice is one of them.

Since Hepatocellular jaundice is an infectious disease of liver with clinical features of jaundice, Abdominal pain, Nausea, Anorexia, Fatigue. And there is no treatment of jaundice in Modern Medical Science, a need aroused to search out an effective ayurvedic herbal medicine that would be cost effective and easy to administer.

Here, is a case study of Bahupitta Kamala (Hepatocellular jaundice) treated with Vasadikwath and Madhu internally with atmost positive results. Line of treatment for Bahupitta Kamala is Madhur, Tikta and Sheet Virya and VirechanDravya. Therefore, here is a herbal combination of Vasa, Amruta, Triphala, Kutki, Nimba, Bhunimba as the main constituents of Vasadikwath. This combination acts on the root of disease and thereby break down Pathophysiology of Hepatocellular jaundice i.e. Bahupitta Kamala.

Total number of references: 14

Keywords: Bahupitta kamala, Dincharya, Pitta pradoshaj vikar , Rutucharya, Vasadi kwath.

INTRODUCTION:
The terminology of the word ‘kamala’ is “Vividhan Kaman lati Kamala” means loss of desire of doing work, eating. It can be called as severe anorexia or malaise. To be more specific Kamala vyadhi can be defined according to ayurvedic text as “Haridranetra subhrusham haridratwak-nakha-aanan” which means the disease which is characterize by yellowish discoloration of eyes (sclera), urine, faeces, skin and buccal cavity. It's modern correlation can be associated with icterus, which is a predominating feature of Hepatocellular jaundice. Since the root of the disease Kamala is “Vitiated Pitta Dosha” above lakshanas are predominantly present.
Having a brief review of today’s lifestyle issues and circumstances, the factors that are responsible for repeated vitiation of Pitta Dosha and thereby interrupting healthy well being of man can be enlisted as overeating of spicy food, excessive use of junk food like vadapav, missal, fried food stuffs i.e. Ati-Amla-Lavan-Katu-Kshar-Ushnna-Tikshna RasAahar and Alcohol consumption tendency, irregular times of eating, (Atitkalbhojan, Adhyashan). The ‘Bahupittakamala’ is one of the hazardous disorder emerge out of these grounds.

In this era of Globalization and Industrialization, the life style of mankind has been drastically changed. Due to Lack of concern about ‘Dincharya and Rutucharya’, everyone is keeping his health at least preference while earning money at first preference.

Now, for the vitiation of Pitta Dosha, which factors are responsible and which are the consequences of this vitiation, how should this vitiation can be brought to the normal using ayurvedic hearbs, one should know all about these facts. The main objective of ayurveda is maintenance of health and treatment of diseases “Dhatusamyakriyachokta Tantrasyaasasyapravyojanam”(Cha Su.1/53.) So, for the well being of a person suffering from Kamala Vyadhi considering his physical, socioeconomical status, need for putting forward the beneficial aspects of Vasadi Kwath has been developed.

In ayurveda, the disease ‘Kamala’ is known from ancient times, right from the vedickala specially in Rigveda and Atharvaveda. Ayurveda acharys of “Bruhatrayi” i.e. Charaka, Shushruta and Vagbhatta had explained ‘Kamala’ as “Pravardhaman awastha” or “Updrawa of PanduVyadhi”. Therefore Panduroga is the important etiological factor of this disease. But, the pathogenesis can also takes place independently where it is presented as Swatantra vyadhi also.

The liver plays major role in the maintenance of Metabolic homeostasis. The development of clinically important liver disease is accompanied by diverse manifestation of disordered metabolism. Kamala is considered a purely PaittikRog caused by RaktaDushti due to Vitiated Pitta and vice versa. Jaundice is a hallmark symptom of liver disease and perhaps the most reliable marker of severity. The importance of ayurvedic remedies in the management of “Bahupittakamala” is that these ayurvedic herbs act on the root of the disease i.e. ‘Vitiated pitta’ by their madhur, tikta rasa and sheet virya. The pathya-apathy also playa important role since they regulate the dincharya and ahar-vihar which is necessary for quick and long lasting relief from the disease.

Since there is no effective remedy for hepatocellular jaundice in modern science, the ayurvedic formulations must to be known to everyone.

“Bahupittakamala” shows similarity with signs and symptoms of Hepatocellular Jaundice which is an initial of infectious disease affecting liver i.e. Hepatitis. Ayurvedic herbs are proved to be good acting on liver functions and thereby on Hepatocellular Jaundice.

Patients usually report darkening of urine before they notice scleral icterus. Patients also complaints of fatigue, anorexia and nausea.

A single case study of Bahupitta Kamala (Hepatocellular Jaundice) is reported here in which vitiated doshas were eliminated with the use of Vasadi Kwath with madhu internally.
CASE REPORT:

A 32 years old male patient came to the Kayachikitsa OPD of Dr. VJD Gramin Ayurved Rugnalaya, Patur with the complaints of Aruchi (dyspepsia), Agnimandhya (loss of appetite), Daurbalya (weakness), Abdominal pain, Netrapitata (icterus), Mutrapitata (yellow coloured urine) since 15 days. Patient did not received any treatment untill he came to the OPD of Dr VJD Ayurved Rugnalaya. Patient was thourghly examined and detailed history was taken.

History: Patient was labour by occupation, Chronic aloholic drinker, was taking spicy food from long time. This all are the Pitta prakopak hetus. Patient was also having history of jaundice before an year.

On examination: Patient was afebrile, pulse rate was 82 / min. regular, no pallor, no cyanosis, no clubbing. Icterus was present. Patient was having tenderness at right hypochondrium. No hepatomegaly and No splenomegaly was present.

Investigations of the patient had done. They are as follows:

CBC of the patient was normal. Patient was having raised Sr. Billirubiin level, i.e., 10.4 mg/dl. HBSAG of the patient were investigated and found to be negative. HIV was done and found to be negative. USG Abdomen and pelvis was done to rule out obstructive pathology. USG confirmed the diagnosis as Bahupittakamla (Hepatocellular jaundice).

Treatment: Patient was treated with VasadiKwath 40 ml with 5ml of Madhu (honey) twice a day in Madhya bhaktakala. Patient experienced increase in appetite after 3 days of treatment. After 7 days of treatment patient experienced decrease in yellowishness of urine, Icterus was reduced, decrease in abdominal pain.

ON 7th DAY: Sr. Bilirubin was 5.2mg/dl. Patient was continued the treatment for next 7 days. Patient was given the Pitta shamak Aahar like sugarcane juice, Mudga yusha, jwar roti.

ON 14th DAY: Sr. Bilirubin was 1.05mg/dl. Patient was having no complaints. Colour of the urine was normal, no abdominal pain, appetite was normal, weakness was slight present and slight Icterus was still present.

DISCUSSION:

In ayurveda increased intake of oily, spicy, hot and alkaline food, are depicted for aggregration of Pitta Dosha. The Aggrevated Pitta then impaires the blood and the muscle tissue of liver causing damage in the channels of the liver and thus Pitta is thrown back into the blood leading to Icterus.

Vagbhatacharya has recommended VasadiKwath in Ashtang Hridayam Pandurog chikitsa in order to break down pathophysiology of Kamala Vyadhi by using Pitta shaman, RaktaPrasadan, YakrutaUttejana and Pitta Sarak herbs of which detailed description is given below.
VasadiKwath A
Vasa Guduchi Triphala Katvi Bhunimb Nimb A

The drug description is summarized in the table given below.

**Drug Description for VasadiKwath :**

<table>
<thead>
<tr>
<th>DRA VYA</th>
<th>LATIN NAME</th>
<th>FAMILY</th>
<th>GUNA</th>
<th>RASA</th>
<th>VIR YA</th>
<th>VIPA KA</th>
<th>PRABHA V &amp; UPYUKT AANGA</th>
<th>KARMAUKTA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vasa</td>
<td>Adhatodavsica</td>
<td>Acanthaceae</td>
<td>LaghuRuksha</td>
<td>TiktaKashaya</td>
<td>Sheeta</td>
<td>Katu</td>
<td>Patrachurna</td>
<td>Pitta shaman &amp;RaktaPrasadan</td>
</tr>
<tr>
<td>Amruta</td>
<td>Tinosporacordifolia</td>
<td>Menispermaceae</td>
<td>Mrudu LaghuRuksha</td>
<td>Tikta Katu Kashaya</td>
<td>Ushna</td>
<td>Madhur</td>
<td>Kandachurna</td>
<td>Pitta shaman &amp;YakrutUttejana</td>
</tr>
<tr>
<td>Haritki</td>
<td>Terminaliaceae</td>
<td>Combrataceae</td>
<td>LaghuRuksha</td>
<td>Tikta Katu Kashaya</td>
<td>Ushna</td>
<td>Madhur</td>
<td>Tridoshar</td>
<td>Deepan, Pachan, Yakrut-Uttejan, Anuloman, Mruduvirecha, Krimignha</td>
</tr>
<tr>
<td>Bibliak</td>
<td>Terminaliaelatirica</td>
<td>Combrataceae</td>
<td>Guru, Ruksha</td>
<td>Kashaya</td>
<td>Ushna</td>
<td>Madhur</td>
<td>-</td>
<td>Deepan, Pachan, Anuloman, Krimignha, Grahi, Trishna&amp;chhardinigrah an</td>
</tr>
<tr>
<td>Amalaki</td>
<td>Embelicaofficinalis</td>
<td>Euphorbiaceae</td>
<td>LaghuRuksha</td>
<td>Lavanrati 5 rasa mainly Amla</td>
<td>Sheeta</td>
<td>Madhur</td>
<td>-</td>
<td>Agnideepan, Ruchikar, Anuloman, Amnapanchan</td>
</tr>
<tr>
<td>Nimb a</td>
<td>Azadiractanica</td>
<td>Meliaceae</td>
<td>LaghuRuksha</td>
<td>Tikta Katu Kashaya</td>
<td>Sheeta</td>
<td>Katu</td>
<td>Patrachurna</td>
<td>Raktagataa&amp;Yakrutastha Pitta Shaman</td>
</tr>
<tr>
<td>Bhunimba</td>
<td>Swertiachaita</td>
<td>Gentianaceae</td>
<td>LaghuRuksha</td>
<td>Tikta</td>
<td>Sheeta</td>
<td>Katu</td>
<td>Panchagna</td>
<td>Pitta SarakaShodhanAgnideepam&amp;Ampancham</td>
</tr>
<tr>
<td>Kutki</td>
<td>Picrorrhizakurroo</td>
<td>Scrophulariaceae</td>
<td>LaghuRuksha</td>
<td>Tikta</td>
<td>Sheeta</td>
<td>Katu</td>
<td>Mula</td>
<td>YakrutUttejana&amp;Tuchikar Deepan Pitta Saraka</td>
</tr>
<tr>
<td>Madh u</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TridoshaShamaka</td>
</tr>
</tbody>
</table>

Since these drugs are Pitta Sarak, Symptoms like MutraPitata, NetraPitata decreases. Also these drugs are hepatoprotective so Sr. Billirubin level also decreases.
CONCLUSION:

Bahupitta Kamala, since a Paittik Rog, Pitta Prakruti people are more prone to that, which can be minimized by use of such Pittaghana Aushadhi and Aahar like Wheat, Jwar, Sugar cane Juice, Laghu SuppachyaAahar etc. Here a case of Bahupitta Kamala is successfully treated with Vasadi Kwath and PathyaApathya told accordingly. From this study it can be said that Vasadi Kwath with PathyaApathya provides very good and faster relief in patients of Hepatocellular Jaundice in just 14 days.

REFERENCES:

1) Acharya Ravidutta Tripathi, Charaka Samhita, Chikitsasthana 16/63, Published by Chaukhamba Sanskrit sansthan, Varanasi, Reprint year 2006, Page no.590.


3) Anant Ram Sharma, Sushruta Samhita, Uttar tantra, Chapter no.44, Published by Chaukhambasur bharti Prakashan,Varanasi, year 2008 –Page no.354.

4) Yadavaji Trikamji Acharya, Sushruta Samhita Uttar tantra, Chapter no.44,with the Nibandhsangrah commentary of Dalhanacharya, 5th edition Published by Chaukhambaorientalia, Varanasi, year 2003- Page no.732.


6) Brahmanand Tripathi, Madhavniyanam 1 & 2 of shri. Madhavkara with the Sanskrit commentary Madhukosha, Published by ChaukhambaparakshanVaranasi, year 2007.


8) Brahamanad Tripathi, Sharangdhar Samhita Madhyamakhandha, Chapter no.2, with Dipika commentary, Chaukhamba prakashanVaranasi, year 2004 –Page no.133

9) A.D. Āthavale, Ashtāṅga Samgraha, Chikitsasthana, 16/13 –InduTīkā Published by Ātreyā Prākāṣeṇa-1980, Page no. 613.

10) Prof. P. V. Shrama, Dravya gun vidnyan vol. 2 16th edition 1994, Published by Chaukhamba Bhrati Academy, Varanasi.

11) Dr. Indradev Tripathi, Raj Nighantu by Panditnarhari, Published by Krishnadas Academy, Varanasi, 1st edition, Page no.71.

12) Harrisons principles of Internal Medicine


Study of uses of Chandraprabha Vati in Gynaecological Disorders

Review:

Dr. Mrs. Arati Anil Kale, M.S. (Ayu-Streerog-Prasuti Tantra), Assistant professor,
Dept. of Streerog-Prasuti Tantra, Ashtang Ayurved College, Pune - 30,
Mobile No: 9850976638 E-mail Id: aratiakale@gmail.com

Dr. Sulakshana B. Varpe, M.D.(Ayu) Rasashastra. Associate Prof.
Dept. of RSBK PDEA's College of Ayurveda & Research Centre, Nigdi, Pune.
Mobile No: 9370544574 E-mail Id: varpe_sb@yahoo.com

Dr. Shweta Ramesh Helge, PG scholar,
Dept. of RSBK PDEA's College of Ayurveda & Research Centre, Nigdi, Pune.
Mobile No: 9503060107 E-mail Id: hshweta04@gmail.com

Abstract:

Now a day’s women are facing many gynaecological disorders due to changing lifestyle. These affect women health physiologically and psychologically. To overcome this, authentic subject material was reviewed from, Ayurvedic classics, medical journals and internet for effective treatment. Our aim was to illustrate a single drug instead of using various herbal preparations for gynaecological problem. When we were thinking of a compact capsule of treatment we came across the drug Chandraprabha vati.

Chandraprabha vati is one of the popular Ayurvedic Formula. It consists of 37 ingredients. It is useful in many diseases. Chandra means moon and Prabha means Glow. That means the use of this classical formulation brings glow to your body because the property of Chandraprabha vati. Main Objective of this review article is to discuss Pharmacological properties and clinical uses of Chandraprabha vati with special reference to Gynaecological diseases.

Formulation of a drug was studied along with its properties and authentification. Classification of gynaecology disorder like menstrual disorders, infertility, yonivyapad, menopausal syndrome, pregnancy and puerperal diseases was done. Co-relation of ingredients herbal drugs Chandraprabha vati along with overcome/treatment of actual pathology in that particular disease was completed.

Keywords:

Chandraprabha vati, Gynaecological disorders, Ayurvedic classics, rasayana, yonivyapad, herbal ingredients.

Introduction:

In last few years, drastic increase in various gynaecological diseases is noted due to lifestyle changes. Reasons for this are work overload, stress in job, irregular timing of food intake, pesticide rich food, sleeping disturbances, excessive junk food, over ambition etc. In present eras for establishing career, late marriages or delaying pregnancies also results in gynaecological diseases and infertility. This also results in menstrual abnormalities like pre menstrual syndrome, irregular menses, obesity, uterine fibroids, PCOS etc. During handling OPDs, increase in such patient is significantly noted.

(145)
In modern medicine these diseases are mainly treated by hormones which may have certain side effects. Ayurveda focus to rectify system from its base not just to treat symptomatically. It has suggested appropriate use of herbal remedies. While treating OPD patients, we observed that chandraprabha vati, can be used in different gynaecological disorders used along with other herbal drugs like shatawari, lodhra etc. This article is an effort to find collective information. In ayurvedic classics regarding chandraprabha vati and its uses with special reference to gynaecological diseases. Here we classified gynaecological diseases according to the stages of woman's life and tried to establish action of drug.

Formulation of the drug was studied along with its properties Co-relation of ingredients of Chandraprabha vati along with overcome/treatment of actual pathology in that particular disease was studied.

**Aims and Objectives :**

1. Properties and action of chandraprabha wati along with its formulations.
2. To review literature regarding effects of drug in various gynaecological disorders so as to established efficiency and utility of drugs.
3. To review literature on gynaecological disorders and correlate it with actions of herbal ingredients in drug and also correlate it clinically.
4. To prove supportive substitute for modern drugs used in gynaecological disorders so as to introduce principles of ancient ayurvedic science to modern era.
5. To propagate natural, low cost, palatable, easily available, safest ayurvedic medicine in day to day's practice.
6. To give scientific platform to students and teachers of Ayurveda for future study in same.

**Material and Methods :**

**A. Review Literature of Chandraprabha Vati :**

Chandraprabha Vati is actually tonic for the all organs in the reproductive system and organs in the pelvis. It assists other medicines to act better and more efficiently. Therefore, it is recommended in every case with reproductive disorders. It is mentioned in Sharangdhara Samhita Madhyama Khand 7/40 – 49 and Bhaishajyaratnavali Prameha chikitsa also there is one reference mentioned in Arsha chikitsa. Here we are taking reference of chandraprabha mentioned in prameha chikitsa

The name Chandraprabha is given due to – Chandra refers to moon; this tablet is as calming and effective as the aura of moon. With the word Chandraprabha, 3 herbs are considered.
- **Karpoora** – Camphor – Cinnamomum camphora (as per Kashiram, Gudardha Deepika commentary on Sharangdhara Samhita). Camphor is the most commonly used ingredient.
- **Kapoor Kachur** – Shati – Hedychium spicatum (as per Rasendra Sara Sangraha, by Kirhna Gopala Bhatta) - **Bakuchi** – Psoralea corylifolia (as per Vaidyaka Shabda Sindhu)
Ingredients of Chandraprabha Vati:

3 grams each of Dravya:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Dravya</th>
<th>English Name</th>
<th>Latin Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Karpura</td>
<td>Camphor</td>
<td>Cinnamomum camphora</td>
</tr>
<tr>
<td>2</td>
<td>Vacha</td>
<td>-</td>
<td>Acorus calamus</td>
</tr>
<tr>
<td>3</td>
<td>Musta</td>
<td>Nut grass (root)</td>
<td>Cyperus rotundus</td>
</tr>
<tr>
<td>4</td>
<td>Bhunimba</td>
<td>The Creat (whole plant)</td>
<td>Andrographis paniculata</td>
</tr>
<tr>
<td>5</td>
<td>Amruta</td>
<td>Indian Tinospora (stem)</td>
<td>Tinospora cordifolia</td>
</tr>
<tr>
<td>6</td>
<td>Daruka</td>
<td>Himalayan cedar (bark)</td>
<td>Cedrus deodara</td>
</tr>
<tr>
<td>7</td>
<td>Hantra</td>
<td>Turmeric rhizome</td>
<td>Curcuma longa</td>
</tr>
<tr>
<td>8</td>
<td>Ativisha</td>
<td>-</td>
<td>Aconitum heterophyllum</td>
</tr>
<tr>
<td>9</td>
<td>Darvi</td>
<td>Tree Turmeric (stem)</td>
<td>Berberis aristata</td>
</tr>
<tr>
<td>10</td>
<td>Pippalimoola</td>
<td>Long pepper root</td>
<td>Piper longum</td>
</tr>
<tr>
<td>11</td>
<td>Chitraka</td>
<td>Lead Wort (root)</td>
<td>Plumbago zeylanica</td>
</tr>
<tr>
<td>12</td>
<td>Dhanyaka</td>
<td>Coriander</td>
<td>Coriandrum sativum</td>
</tr>
<tr>
<td>13</td>
<td>Haritaki</td>
<td>Chebulic Myrobalan fruit rind</td>
<td>Terminalia chebula</td>
</tr>
<tr>
<td>14</td>
<td>Vibhitaki</td>
<td>Belliric Myrobalan fruit rind</td>
<td>Terminalia bellirica</td>
</tr>
<tr>
<td>15</td>
<td>Amalaki</td>
<td>Indian gooseberry fruit</td>
<td>Emblica officinalis Gaertn.</td>
</tr>
<tr>
<td>16</td>
<td>Chavya</td>
<td>Java Long Pepper</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Vidanga</td>
<td>False black pepper</td>
<td>Embelia ribes</td>
</tr>
<tr>
<td>18</td>
<td>Gajajipipali</td>
<td>Java Long Pepper (fruit)</td>
<td>Piper chaba</td>
</tr>
<tr>
<td>19</td>
<td>Shunti</td>
<td>Ginger Rhizome</td>
<td>Zingiber officinalis</td>
</tr>
<tr>
<td>20</td>
<td>Maricha</td>
<td>Black pepper</td>
<td>Piper nigrum</td>
</tr>
<tr>
<td>21</td>
<td>Pippali</td>
<td>Long pepper fruit</td>
<td>Piper longum</td>
</tr>
<tr>
<td>22</td>
<td>Makshika</td>
<td>Purified Copper Iron Sulphate</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Yava Kshara</td>
<td>Kshara of Barley</td>
<td>Hordeum vulgare</td>
</tr>
<tr>
<td>24</td>
<td>Swarjika Kshara</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Saindhava Lavana</td>
<td>-</td>
<td>Rock salt</td>
</tr>
<tr>
<td>26</td>
<td>Sauvachala Lavana</td>
<td>-</td>
<td>Sochal salt</td>
</tr>
<tr>
<td>27</td>
<td>Vida Lavana</td>
<td>-</td>
<td>Vida salt</td>
</tr>
</tbody>
</table>

12 g fine powder of each of

<table>
<thead>
<tr>
<th>Dravya</th>
<th>Latin Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>28 Trivit</td>
<td>Operculina turpethum</td>
</tr>
<tr>
<td>29 Danti</td>
<td>baliospermum montanum</td>
</tr>
<tr>
<td>30 Patra</td>
<td>Cinnamomum tamala</td>
</tr>
<tr>
<td>31 Twak– Cinnamon</td>
<td>Cinnamomum zeylanicum</td>
</tr>
<tr>
<td>32 Ela– Cardamom</td>
<td>Elettaria cardamomum</td>
</tr>
<tr>
<td>33 Vamshalochna</td>
<td>Bambusa bambos</td>
</tr>
</tbody>
</table>
34 Loha Bhasma  Iron Bhasma  24 gms.
35 Sita  Sugar  48 g fine powder
36 Shilajatu  Asphaltum  96 g
37 Guggulu  Indian bedelium  (Commiphora mukul)  96 g

Sarvaroga Pranashini Useful in all disorders.
Yogayahi acts as catalyst for other herbal ingredients to deliver swift therapeutic action.
Prameha Urinary tract disorders, diabetes
Mutarakrichra dysuria, difficulty to pass urine
Mutraghata urinary obstruction
Ashmari urinary calculi
Vibandha constipation
Anaha bloating, gaseous distension of abdomen
Shoolia abdominal colic
Meha urinary tract disorders, diabetes
Granthi tumor, fibroid
Arbuda cancer
Andavrudhi orchitis
Pandu Anemia, initial stages of liver disorders
Kamala jaundice
Haleemaka Liver cirrhosis
Antravrudhi Hernia
Kati shoola low back ache
Shwasa asthma, respiratory disorders involving difficulty in breathing
Kasa cold, cough
Vicharchika eczema
Kushta skin diseases
Arsha Hemorrhoids
Kandu itching
Pleehodara splenomegaly, enlarged spleen
Bhagandhara fistula in ano
Dantaroga teeth disorders
Netraroga eye disorders
Artavaruja Painful periods, menorrhagia
Shukra Doshasemen, sperm anomalies
Mandagni low digestion strength
Aruchi Anorexia, lack of interest in food
Balances Vata, Pitta and Kapha Dosha
Vrushya aphrodisiac
Rasayani anti aging, rejuvenative
Effect on Tridosha – balances Vata, Pitta and Kapha.

Chandraprabhavati is the drug of choice in case of apana vayu dushti. The main contents are shilajit, guggulu, swamamakshika bhasma, lavana & kshara all having key role to play in the action of drug. It is having tridoshahara, balya, vrushya properties does the action on kaphaavruta vata, relieves the avruta apana vayu & maintains the potency to normal flow of arthava & also helps in relieving pain also having medhya & smitivardhak action this corrects the pituitary function & maintains the LH & FSH levels. Maximum numbers of drugs have ushna veerya, snigdha guna, kaphavatahara, dipana, pachana properties helps in amapachan. Improves Agni & relieves pain. Trikatu improves Agni, thereby formation of dhatus & improve general health. Pippali is anti-spasmodic. Shunthi, Pippali have anti-inflammatory activity. Shunthi has vatanulomaka & shoolprashaman property.

A. Uses of Chandraprabha Vati in gynecological disorders:

(I) In Yonivyapad

1. Kafaja yonivyapad:-

Chandraprabha along with arogyavardhani, shilagkit gives good result in kafaja yonivyapad. Ruksha and ushna dravya should be used in kafaja yonivyapad and kafa shodhan is important. Vaginal track infection, vaginal muscle laxation(yonishithlya), and feeble pain occurs due to kafa.

Action of chandraprabha vati – Strengthen muscle- acts on yonishithlya.

Mild antispasmodic action due to ingredients like ginger, pepper etc. Act on vaginal pain.

2. Ashruja yonivyapad:-

When there is pitta and rakta dushti, prakupit rakta makes it’s way out from the vaginal trac in excessive quantity, eventhough if it’s a state of pregnancy bleeding doesn’t stop.

Related to habitual abortions - chandraprabha acts as uterine tonic. It strengthens uterine muscles to prevent further blood loss. Give more results when used with lodhra and ashwagandha so used in repetitive abortions or BOH (bad obstetric history)

3. Acharna yonivyapad:-

Due to unhygienic conditions there creates bacterial infection in the vaginal tract which leads to itching. Chandraprabha controls vaginal infections. Acts as antiseptic, purification of genital tract.

4. Arajaska yonivyapad:-

Due to pittaprakopa raja in uterus becomes impure and because of the ushna guna of
pitta raja looses its moisture and becomes dry. Hence rajapravrtti doesn’t occur. Chandraprabha corrects hormonal imbalance in woman and acts as a uterine tonic. It corrects amenorrhoea, oligomenorrhea.

5. **Aticharna yonivyapad:**
   Atimaithun, vaatprakop, vaginal oedema, supti, shool may result in infertility. Chandraprabha acts on all the above complaints.

6. **Pragcharna Yonivyapad:**
   In this type before the development of reproductive organs if any sexual activity occurs vaatprakop resulting shooladi lakshana and yonidushti. Chandraprabha acts on shula and also vaginal infections, vaginitis so cures the symptoms.

7. **Upapluta yonivyapad:**
   In this type there is kafa vaata dushti it is particularly seen in garbhan in which vagina discharges whitish sticky discharge. Chandraprabha acts on hamonal imbalance in women improves uterine tone. Used in leucorhoea along with other medicines like lodhra, pushyanug etc.

(II) **In Gynaecological disorders**

1. **Dysmenorrhoea** –
   Chandraprabha has mild antispasmodic action due to ingredients like ginger, pepper, lohabhasma, etc. It decreases menstrual cramps and lower abdominal pain in menstruation.

2. **Amenorrhoea, oligomenorrhoea**-
   Chandraprabha cures hormonal imbalance in woman so useful in amenorrhoea and oligomenorrhoea. Acts as uterine tonic also tonic for pelvic and reproductive organs. Chandraprabha with kumari asav and kanchannar guggulu helps in oligomenorrhoea.

3. **Dysfunctional uterine bleeding along with uterine polyp**-
   Chandraprabha along with kanchanar guggulu is used for this, due to lekhaniyakarma it reduces size of uterine polyp and thus acts on excessive bleeding. In menorrhagic conditions chandraprabha along with mochras or praval pishti is useful.

4. **Sexual problems**
   Chandraprabha along with ashwagandha in male sexual problems like impotency, erectile, dysfunctioning. Chandraprabha + ashwagandha + shatavari - strengthens muscle tone. It helps to moisten dry tissue of female sexual organs and increase testosterone level. If used with musli affects female libido, helps in purification of both genital organ tracts.
5. Mental stress and fatigue - chandraprabha + shilajeet

6. Endometriosis –
May result in PID, infertility. It is endometrial cell implants outside uterus like in ovaries, fallopian tubes, vagina, cervix etc. ovarian and fallopian tube endometriosis result in infertility. In ovarian endometriosis oovian follicle is replaced by endometrial tissue. Fallopian tube motility is affected poorly results in carrying pregnancy in early stages. Chandraprabha + daruharidra + shatavari + ashwagandha is used.

7. Used in PCOS/PCOD –
PCOS can be correlated with kafaj granthi. Generally increased in cyst size, slightly painful chandraprabha + kanchannar guggulu + aloevera juice is used. Lekhaniya and anti-inflammatory properties reduce size of cyst and arrest further growth, removes strothorodh if any, strengthens ovaries and prevents cysts. Chandraprabha is used in irregular menstrual cycle, increases strength of rajovaha strothas. It eradicates obstruction responsible for less or no flow of menses thus helps in regulation. PCOS complex disorder which results in artava shaya, anartava, rasavaha, medavaha, artavaha, rajovaha strotho dushti. Chandraprabha along with kumariasav and ashokarishta, shatavari, ashwagandha destroys cysts, stimulate ovulation, induces menstruation, regulate flow during menses and thus aids conception naturally.

8. Male infertility –
In oligosoermia, impotency, erectile dysfunction chandraprabha + ashwagandha is used which works on male reproductive system. Rectify natural infections, increases sperm count helps in physical weakness. Improves shukradhatu in body by providing nourishment to body tissue, toning of pelvic muscles and maintaining hormonal level in body. Overall improvement of urogenital organs help in easy conception.

9. Female infertility –
Chandraprabha acts on blockages of fallopian tube by lekhana karma. PCOS and endometriosis. In PID chandraprabha with kaishor guggulu, trifala guggulu, guduchi is used.

(III) Uses in Pregnancy Diseases:
1. Garbhopadrava:
   a. Garbhini Shotha:
   Chandraprabha vati acts as aampachak. It reduces pedal oedema and oedema of whole body. Albuminuria occurs in pregnancy induced hypertension (PIH). In this Chandraprabha vati along with Kamdudha Vati is used. It reduces loss of albumin in urine.
   b. Garbhini Prameha:
   Chandraprabha vati is useful in increased frequency of micturation. It acts on deformities of Kleda, Meda, Kapha etc.
2. Habitual miscarriage:
   Occurs due to weak tone of uterus. Chandraprabha strengthens uterine muscle tone and
   is used with ashwagandha extract.

(IV) Uses in Puerperal Diseases:
1. Sutika Jwara: In pakwa aawatha: Chandraprabha Vati along with aarogyawardhini tablet
   is used.
2. Sutika Upadrava: Used in retention of urine in puerperal diseases.
3. Sutika Shotha: In pachyaman and pakwa avastha, used along with Guggul, Kalpa. Also
   controls pain, insomnia, puerperal vaginal infection etc.
4. Sutika Paricharya: On first day after delivery woman has pain, retention of urine,
   weakness, symptoms of Vata Vitiation. Chandraprabha along with Dashamula Kwatha
   and Vata Gajankush Rasa gives good results.

(V) Uses in Menopausal Diseases:
In menopause, oestrogen production continues but ovaries no longer function as endocrine
disorder. This causes fatigue, hot flushes, anxiety, depression, mood swings, insomnia
etc. In psychological changes, chandraprabha acts by Sheelajit by decreasing stress
and fatigue. Chandraprabha along with Shatawari and Vidari contain phyto-oestrogen
helps to regulate hormonal level in menopause. Chandraprabha along with Bramhi and
Shankhapushpi helps to relieve nervous system symptoms. It removes toxics metabolites
from body.

(VI) Uses as Rasayan (Tonic):
Chandraprabha is total health tonic, it is supplement for reducing general debility, increase
physical strength due to content like Sheelajit, Lohabhashma. Revitalizes body with
refreshing feeling can be used in malnourished woman, haematinic. Used as fat burner in
obesity. Helps to promote total gain of physical and mental health.

Conclusions:
By addressing simple lifestyle factors and using herbal remedies offered in Ayurveda classicals,
ayurvedic practitioners can help female patients having gynaecological disorders to a certain
extent. This review article proved importance of use of chandraprabha wati in female disorders.
In presented collective knowledge of therapeutic pharmacological and medicinal applications
of chandraprabha wati and its constituents. It gives strength to reproductive organs, acts as
rasayan(health tonic) corrects hormonal imbalance in female, overcome menstrual
abnormalities. Drug has good role in uro genital diseases. The drug is clinically safe in
pregnancy and lactation (but no scientific evaluation available for this. It is clinically proven
that is no any adverse effect noted after taking the drug) from all scientific literary review from
Ayurveda classicals, we can conclude that chandraprabhawati can be used safely in various gynecological disorders. Easily available not expensive easy to take palatable drug.

Outcome of the study will encourage students and teachers of ayurveda for further study related to this article subject.

References:

Books-

Websites -
- www.ayurvedaalive.in
- www.ayurmedinfo.com
- www.madanpalas.com
- www.ayurtimes.com
- www.lovenaturalremedies.com
- www.ayurvedaforwomen.wordpress.com
- www.ibooks.google.co.in
- www.desimd.com
- www.nirogam.com

Medical Journals and Articles-
- www.ijams.in
- www.ijrap.net
- www.irjponline.com
- www.iamj.in
Abstract:

Trividnyayas is the unique concept described in Ayurveda. The present article deals with critical review of trividnyayas referred in terms of digestion, absorption and formation of various tissues from diet according to modern sciences. Ayurveda has its own Moolbhuta Siddhant (basic principle) to explain the exact process of pachan (digestion) with detailing of factors involved in process up to development of each type of tissue from food.

These three pachannyayas has been stated by Chakrapani, tikakar of Charak Samhita in 15th adhayay "Grahani". They are named as 1) Kshirdadinaya 2) Kedarkullya 3) Khalekapot.

The article narrates the modern perspective of digestion, absorption and formation of tissues. It also tried to interpret and compare the processes of digestion in both sciences.

Key words: Ayurveda, pachan, Grahani, Kshirdadinaya, Kedarkullya, Khalekapot, Dhatu, Jatharagni.

References: (7)

Introduction:

Trividnyayas is very important concept discussed by ancient Ayurvedic experts. Through this concept one can very well understand how processes of digestion takes place or how exactly the bodily tissues are produced from the food material by simple ways. It is very important to correlate the trivid nyayas and modern process of digestion as there are many misconceptions and misunderstanding regarding the applicability of trividnyayas in today’s Ayurveda.

These three theories are about the modes of dhatu formation (nourishment) which has explained by Chakrapani commentator of Charak Samhita in 15th adhayay "Grahani" of chikistasthan which is related to digestion, metabolism & formation of dhatus. The Grahani disease is basically caused due to Agnivikuti.

In the processes of digestion, food consumed is digested by digestive fire (Jatharagni) situated in Amashaya (stomach) and transformed in ahara-rasa (nutrient fluid) and mala (waste products).

After this primary digestion there will be the next step of microdigestion or can called as
sukshmapachan. In this step there is process of further metabolic transformation. The ahara-rasa is metabolised by Rasagni and nourishes the rasa dhatu, the nutrient fraction of rasa dhatu provides nourishment to Raktadhatu that of Rakta to Mamsa and so on till the last dhatu, Shukra.

Commentator Chakrapani tried to explain that how exactly each dhatu got nourishment from ahara-rasa and that to in this particular sequence. Through these commentators have elaborated the process of synthesis of dhatu from ahara-rasa which are known as theories of Dhatu-poshana.

Three theories about modes of dhatu formation are as follows-

1) Kshira-Dadhi Nyaya³ – In this theory commentator elucidate that how ahar rasa which is different in appearance from seven dhatus is capable of nourishing and replenishing all dhatus. According to this concept, the preceding dhatus get transformed into succeeding dhatus due toagni of that particular dhatu. This transformation is supported by giving example of bioconversion of milk into curd. From curd is converted into butter and butter after heating is converted into ghee. These conversion suggest that milk is converted into various forms which are entirely different from the original milk with the help of agni or heat. Through this example commentator explain that due to agni (digestive fire) different types of food is gets converted into different dhatus like Rasa, Rakta, Mamsa etc.

Basically this nyayay explains the transformation of food material into bodily tissues with the help of digestive fire.

2) Kedara – Kulya nyayas⁴ - As explained that the tissue nourishment from ahar-rasa is a successive process with particular sequence. Ahar-rasa was formed first followed by rasa dhatu and the processes continues till shukradhatu, which is a main dhatu, next dhatu nourishing part, updhatu& mala. To elaborate how this particular sequence is followed and in which way exactly the subsidiary products are formed are as follows . Through this theory one can understand that from inner organs to outermost organs like skin got nourishment from ahar-rasa. This transportation is supported by giving example of irrigation of different fields by water from a canal.

Kedar means field and kulya means channels through which water flows. When water flows through field, first portion of field is soaked first and then flowing water will go on to soaked next portion of field one by one in sequence. In the same way ahar-rasa first nourishes rasadhatus with the help of rasa-agni at the same time nourishing element of for raktadhatu is formed with updhatu and mala of rasadhatus. This same process is repeated simultaneously up to shukradhatu.

Basically this nyaya explain the process of transportation of nutrients to each and every cell of the body.

3) Khale-kapotnyaya – This is the third theory to explain that how every dhatu takes nourishment from ahar-rasa. It states that Khale means thrashing field, Kapot means bird,
the bird picks up what it needs and flew in own direction. The bird closer to field get grains
earlier and who is at distant will get grains later. In the same way the every dhatu will uptake
the nutrients from ahar-rasa what is needs and own selection. The dhatu who are nearer get
replenished earlier and distant dhatus will get replenished later.

Basically this nyayas explain the selective processes of reabsorption and rejection of unwanted
substance from ahar-ras.

This all about the Ayurvedic perspective regarding the process of digestion and metabolism.

If we take look on the modern processes of digestion and metabolism explained in books of
physiology.

Definition of Digestion 5 — The energy required for all the processes and activities that take
place in our bodies is derived from the food we ingest. The digestive system allows us to
utilized food from such diverse sources as meat from animal, roots of plants, utilize them as
an energy source.

The process of digestion is a fascinating and complex one that takes the food we place in our
mouth and turns it into energy and waste products. Digestion is the process of changing food into a form that the body can absorb and use as
energy or raw materials to repair and build new tissue.

Digestive enzymes & water are responsible for the breakdown of complex molecules such as
fats proteins carbohydrates into smaller molecules. These smaller molecules can then be
absorbed by cells.

Digestion is the breakdown of large insoluble food molecules into small water soluble food
molecules so that they can be absorbed into the watery blood plasma.

Digestion is the form of catabolism that is often divided into 2 process based on how food is
breakdown i.e mechanical & chemical digestion.

The term mechanical digestion refer to physical breakdown of large pieces of food into smaller
pieces which are absorbed by digestive enzymes.

The term chemical digestion refer to enzymes breakdown food in smaller molecules the body
can use.

Digestion takes place including 3 phases. 6 cephalic phase,gastric phase,intestinal phase.

The cephalic phase occurs at the sight through & smell of food which stimulate the cerebral
cortex. Taste & smell stimuli are sent to hypothalamus & medulla oblongata.

The gastric phase takes 3to4 hours . It stimulated by distention of stomach. Presence of food
in stomach & decrease in ph. Distension activates long & missentric reflexes which stimulates
the release of more gastric juices. Inhibition of gastrin & gastric acid secretion is lifted.

Intestinal phase has 2 parts i.e excitatory & inhibitory. Partially digested food fills the
duodenum. This triggers intestinal gastrin to be released. Enterogastric reflex inhibit vagal nuclei, acting sympathetic fibers causing the pyloric sphincter to tighten to prevent more food entering & inhibits local reflexes.

The digestive system performed 6 basic processes: Ingestion, secretion, mixing & propulsion, digestion, absorption & defecation.

Ingestion - It involves taking food & liquids into mouth. Placing food into mouth.

Secretion - Each day cell within wall of tract & accessory digestive organ secrete a total of about 7 liters of water, acid, buffer, enzymes, into lumen of tract.

Mixing - Churning & propulsion of food through G.I tract.

Digestion - Mechanical, chemical process breakdown ingested food into smaller molecules.

Absorption - It is the passage of digested products from G.I tract into blood & lymph. Absorption of nutrient from digestive system to circulatory & lymphatic capillaries through osmosis, active transport & diffusion.

Defecation - Wastes, indigested substances bacteria cells sloughed from the lining of GI tract. The elimination of faeces from the GI tract. It is also called excretion or egestion.

Chemical digestion - 8 digestive enzymes are responsible for chemical digestion.

Nuclease - Any group of enzymes that split nucleic acid into nucleotides & other products.

Protease - Any of various enzymes including the proteinase & peptidase that catalyse the hydrolytic breakdown of proteins.

Collagenase - Any of various enzymes that catalyse the hydrolytic of collagen & gelatin.

Lipase - Any of group lipolytic enzymes that cleaves a fatty acid residue in a neutral fat or phospholipid.

Amylase - Any of group of enzymes that catalyse the hydrolysis of starch to sugar to produce carbohydrates derivatives.

Elastase - Any enzyme capable of catalysing the digestion of elastic tissue.

Trypsin - A proteolytic digestive enzymes produced by exocrine gland, Pancreas that catalyses in small intestine the breakdown of dietary protein to peptones peptides & amino acid.

Chymotrypsin - A proteolytic enzymes produced by the Pancreas that catalyzes the hydrolysis of casein & gelatin.

Protein digestion - Protein digestion occurs in the stomach & duodenum in which 3 main enzymes i.e pepsin trypsin chymotrypsin.

Pepsin secreted by the Stomach & trypsin secreted by the pancreas. Breakdown food proteins into polypeptides that are then breakdown by various exopetidase & dipeptidase into aminoacid.
Fat digestion—Digestion of some fats can begin in the mouth where lingual lipase breakdown some short chain lipids into diglycerides. Fat are mainly digested into small intestine. The presence of fat in small intestine produce hormones that stimulates the release of pancreatic lipase from the pancreas and bile from liver which help in emulsification of fats for absorption of fatty acids.

Carbohydrates—during digestion bonds between glucose molecules are broken by salivary & pancreatic amylase. Lactose is an enzyme that breaks the disaccharides lactose to its components parts glucose & galactose. Glucose & galactose can be absorb by small intestine. Sucrose is an enzyme that break down the disaccharide sucrose commonly known as sugar, cane sugar. Sucrose digestion sugar fructose & glucose which are readily absorbed by small intestine.

Comparison:

Trividnyaya explains the various patterns of pachan according to Ayurveda like Kedarkulyanyayas refer to microcirculation & tissue perfusion. Khalekapotnyayas refer as selective uptake of nutrients by respective cell. & Kshirdadhinyayas refer to final transformation of nutrients. Modern sciences explains the various processes like 3 phases, mechanical digestion, chemical digestion, formation, excretion etc. Hence, trividnyaya can be correlated with processes of digestion there many misconceptions & misunderstanding regarding the applicability of trividnyayas in today's Ayurveda person.

References:

7. www.smartlivingnetwork.com
ABSTRACT

Artava in females is considered equivalent to Sukra in males. There lies the importance of maintaining menstrual health for a healthy progeny. Menstruation can be considered as an additional opportunity of the body for cleansing or removal of toxins. It is believed that some amount of Ojas is also lost during menstruation. When the menstrual cycle itself is considered, the menstrual phase is dominated by Pitta Dosha, later the influence of Kapha persists a few days before ovulation. During the time of ovulation the Vata Dosha becomes powerful enough to propel the ovum out of the follicle. In the absence of fertilization Vata during the premenstrual days and during menstruation. Most of the discomforts during menstruation are because of the imbalance of Doshas. So within the inherent constitutional frame work of Doshas timely and purposeful administration of Aushadha, Aahara and Vihara will restore the doshic balance. Thus menstrual health can be maintained from the onset till the period of menopause. Various drugs like Satavari, Tulsi, Asoka etc have proved very effective in case of menstrual abnormalities.

Key words: - Artava, menstruation, Doshas, drugs

INTRODUCTION

Ayurveda is one of the few sciences that look at the reproductive tissues outside of the major transitions of puberty, pregnancy and menopause. By being familiar and in tune with our menstrual cycle, we can understand very clearly, what doshic imbalances our body is struggling with.

The menstrual flow after all is also a byproduct, of the most basic tissues of the body. After we ingest our breakfast, this food undergoes transformation through the seven tissue layers of the body (saptha dhatus). The first is plasma(rasa dhatu), then blood(rakta), which is then followed by the muscle(mansa dhatu) and fat tissues(med dhatu). After these four layers, comes the bony tissue(asthi dhatu), nervous system, and, lastly, the reproductive tissues(artava). The actual menstrual flow, is considered to be a byproduct of the first layer, rasa dhatu, or the plasma. Plasma is a vehicle for nourishment. It carries hormones, vitamins, minerals, water for nourishment. The second layer, rakta dhatu, or the layer of blood, also is
part of the menstrual flow, releasing due to excess of pitta dosha. The rasa dhatu and rakta dhatu are also the first two to be vitiated by excess vata, pitta, or kapha. As such, it is most quick to change in quality and consistency. Thus, by paying attention to flow, its qualities, and symptoms associated before and after its release, we can get a strong sense of how the doshas are at play important role in menstruation.

**Aims and Objectives:**

An attempt has been done to analyze the characteristics of Menstruation according to Prakruthi or Doshic constitution of a women

**The Cycle:**

The first menstrual period occurs after the onset of pubertal growth, and is called menarche. The average age of menarche is 12 to 15. Menstruation is the most visible phase of the menstrual cycle and its beginning is used as the marker between cycles. The first day of menstrual bleeding is the date used for the last menstrual period (LMP). The typical length of time between the first day of one period and the first day of the next is 21 to 45 days in young women, and 21 to 31 days in adults (an average of 28 days)

The doshas come to play and each dosha will show its face and have the most impact in specific parts of the cycle.

1. Kapha dominates the first half of the cycle, called rutukala, after menstruation, as the endometrium thickens and becomes more and more glandular. Rutukala culminates in ovulation.

2. Ovulation marks the beginning of the next phase, rutvyatitata kala, dominated by pitta. Pitta mainly acts through the blood tissue layer, and as such, the endometrium becomes more engorged with blood vessels in preparation for fertilized egg.

3. If the egg is not fertilized, the last phase, rajahkala, starts, Sushruta, described this process as "the weeping of the vagina for the deceased ovum." It is a sudden rise in vata that begins the menstrual period, and it acts as a moving force, enabling the flow of menstruation.

**Rajahkala:**

Menarche occurs on average around the age of fourteen, those with strong pitta in their constitution can begin menstruating as early as nine years old. This is consistent with findings that females in a more pitta dominant, urban society enter into menarche earlier than those in a rural society. On the other hand, kapha tends to slow things down and stabilize what exists, such that menarche can occur as late as sixteen years of age. Without the kapha, there would not be enough tissues for menstruation, and without sufficient pitta and rasa and rakta, the flow would be less in quantity.

In the female reproductive tissue, vata acts through blood vessels, helping flow go down and exit. Vata has a multitude of directional flows, and without a fine balance, the downward flow
of menstruation can be compromised by strong, upward functions in the body. Apana vayu, which governs downward flow, particularly in the pelvis, is the easy outlet of wastes, such as feces and urine, in addition to menstruation. Without this vata subtype, many imbalances happen in the pelvis, creating a variety of disorders. Generally it is the upward flow of energy caused by activities, like too much speaking, thinking, laughing, and running, that pull apana up out of its normal directional flow.

If all of these play their functions normally, we get a healthy flow. According to the classics, a healthy menstrual flow has the following characteristics:

1. Bright red in color.
2. Does not stain clothing (a common characteristic of ama, or toxic, unprocessed substance in our body that block channels and creates dysfunction).
3. Has an odor that is not foul.
4. Has an amount that is on average, four anjalees.

(A single anjalee is the amount of liquid that would fit into one of your cupped hands. Hence, there is no set amount; it depends on the person, their constitution, and their size.)

**Doshic Differences in Menstruation and Management:**

**Vata Menstrual Flow:**

**Characteristics of a Vata-Vitiated Flow:**

As vata enters through the blood vessels and into the uterus, its Sheeta guna along with Khara guna bring a sense of tightening. Blood vessels constrict. Dryness depletes all bodily tissues and can eventually lead abnormality, which is a known cause of cessation of menstrual flow. The process begins with a decrease in the plasma and blood tissues, decreasing nourishment to and thinning out the lining of the uterus, thereby decreasing overall flow and discharge of the menstrual flow. And, as a general rule, wherever there is pain, there is some form of vitiation or blockage of the free flow of vata. So most vata-vitiated cycles are accompanied by pain. As the flow of blood is slowed and even obstructed, fresh blood is mixed in with some old blood as it exits the system, giving a darkened color of the menstrual flow. As we know about the qualities of vata (light, mobile, cold, dry, rough, subtle, clear), the types of vata menstrual qualities become obvious. Position of vata dosha—the pelvis and thighs—the symptoms will often arise in those areas.

**Pain**

Prickling, sharp, spasmodic, often in lower abdomen or back

**Emotions**

Anxiety, nervousness, fear

**Menstruation**

Frothy, thin, dry (absence of mucous), dark in color, lightening of the flow

**Other symptoms**

Stiffness, sensation of creeping ants

(161)
Balancing Vata Menstrual Flow:
For balancing the menstrual cycle, treat with the opposite qualities. Thus, for a vata menstrual cycle, opposite qualities like heaviness, warmth, stability, oiliness, and liquid would be done.

1. Diet and lifestyle
Start with the basics. Eat warm, mushy foods cooked in warm spices and plenty of ghee, especially if your menstrual cycle seems to be decreasing in flow or appears to be dry.

2. Castor Oil Packs
Castor oil has the qualities of being oily, heavy, sticky, sharp, penetrating and is heating internally. Castor oil will not only nourish apana vayu and the tissues, but also can break stagnation and blockages caused by dried up vata, as in the case of constipation. This should not be done while you are menstruating.

3. Hydration
Hydrate the body. Vata, dry and scanty cycles are usually due to a depletion of the nourishing rasa dhatu. Drink plenty of water. Also accompany water with healthy oils, such as ghee, flaxseed oil and hempseed oil, which will help bring more moisture to tissues.

4. Pranayama and Yoga
Focus on yoga poses for the vata individual when not on the menstrual cycle. Pranayama that will pacify the lightness and erratic nature of vata are anuloma viloma, bhramari.

5. Herbs
Herbs are supportive to the vata menstrual cycle. Healthy Vata and Vata Digest can pacify systemic vata. Combining a formulation like Vata Digest with nourishing herbs, like Shatavari and Ashwagandha, helps to digest these powerful herbs, unlocking their nourishing and building actions. These herbs are available individually in tablet form or in a complete formula with other vata pacifying herbs. A hot Dashamula kwath twice daily can bring stability and strength to vitiated vata. Fresh ginger kwath can also be very helpful in menses accompanied by discomfort.

Pitta Menstrual Flow:

Characteristics of a Pitta-Vitiated Flow:
Pitta is characteristically Ushna and Tikshna. It brings heat and fluidity and a spreading nature to the blood. Pitta reside in the blood, and in excess, it will seek to be released through its path. Hence pitta menstrual cycles are often heavy. With the heat, it comes with inflammations, which can result into swelling. In some cases women will experience tenderness, swollen breast, during the premenstrual period.
Pain
Burning sensation

Emotions
Anger, irritability

Menstruation
Yellow or red, hot, profuse, fleshy smelling or foul smelling, heavier flow

Other
Inflammation, increased body temperature, headache, tender breast, acne, nausea, vomiting, diarrhea

Balancing Pitta Menstrual Flow:
To effectively bring balance to the pitta flow, there must be a counterbalance of the Ushna guna with Sheeta and the Tishna with Mrudu guna.

1. Diet and lifestyle
Bring calmness and softness, competition and anger that is so common with our pitta dominated society. Avoid spicy and oily foods. Be careful, not to aggravate vata in the process.

2. Nasya
For pitta type premenstrual symptoms that often seen, such as headaches, try Nasya. The practice of nasya has a balancing affect to the energy in the head. Avoid this practice while menstruating.

3. Coconut oil pack
This is done just as one would with the castor oil pack, except replace the castor oil with cooling, coconut oil. Coconut oil is especially balancing to pitta because it is cooling quality and sweet taste. We can do this pack daily, not during menstruation.

4. Breast massage
Breast massage can be helpful, for those who suffer from tender breast during the premenstrual period. Try Breast Care Balm, a balm specially formulated to help promote the movement of lymph. Massage thoroughly, as often as daily, during the premenstrual period and until the pain resides.

5. Pranayama and Yoga
Sheetali and sheetkari pranayamas are ideal for bringing coolness to the pitta individual.

6. Herbs
Herbs can really be of assistance in the pitta flow. In the Ayurvedic classics, cleansing the blood is the best and most permanent way to release pitta. Blood cleanse contains herbs that will balance the blood and help discarding toxins. For additional cleansing, Raktamokshna can also be done. Aloe vera juice or gel, consumed twice daily, not only cools and cleanses the blood of pitta, but it also has a strong affinity to the female system. Ashoka tones the uterus and is thus eases a heavier flow. For the female reproductive system and to remove
vitiated pitta from reproductive system, Shatavari, Guduchi, Aloe vera, and Brahmi, amongst other supportive herbs.

**Kapha Menstrual Flow:**

**Characteristics of a Kapha-Vitiated Flow:**

Stagnation, arising from its denseness, heaviness, dullness, stickiness and coolness, poses difficulty to those with a kapha imbalance. Stagnation causes, obstruction and blockages of the system occur, particularly in the rasa dhatu at first. This gives rise to the sensation of bloating, puffiness, and swelling that so many women experiences during their premenstrual and menstrual period. Stronger the blockage, the more the tissue is likely to go into a mode of overgrowth. As more blood vessels grow to supply this growth, the kapha cycle is more likely to experience a heavier flow than the vata cycle.

<table>
<thead>
<tr>
<th>Pain</th>
<th>Dull pain and itching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotions</td>
<td>Depression, emotional eating</td>
</tr>
<tr>
<td>Menstruation</td>
<td>Yellowish, mucoid, unctuous, a heavier, yet longer, flow</td>
</tr>
<tr>
<td>Other symptoms</td>
<td>Swelling, water retention, bloating, leucorrhea, yeast infections, increased sleep</td>
</tr>
</tbody>
</table>

**Balancing Kapha Menstrual Flow:**

Kapha has Guru, Shlashna, Snigdha, Mand gunas which causes heaviness, thickness, oiliness, dullness and slowness into rasa dhatu, which goes directly to the female system. Opposite gunas like lightness, thinness, and more fluidity, relives the stagnation in the system. To accomplish this, stimulate Agni, the metabolic and transformative fire within our body. The Agni will counteract all of the qualities of kapha and melt it to its healthy state.

**1. Diet and lifestyle**

Throughout the day, keep warm and dry. Stimulate Agni with spices such as ginger, cinnamon, cardamom, and black pepper. Wake up early with the sun and avoid daytime napping. Stay active!

**2. Exercise**

Walk daily. By exercising, we are stimulating the movement of blood and lymph throughout the body. Be mindful, however, to keep calm and rested during the menstrual cycle.

**3. Castor oil pack**

Castor oil has warm and penetrating qualities; we can break up quite a bit of stagnation latent in the pelvis. Don’t be over conscious if your first flow is heavier than normal. This is a sign of blockage release, and generally subsides after the first cycle or two. Again, remember that this practice should not be done while menstruating.

(164)
4. Salt scrub
Add a salt scrub to your daily self-massage. The addition of salt increases roughness and friction, bringing movement and heat to the skin. The friction also penetrates deeper to help lymph move.

5. Pranayama and yoga
In addition to a Kapha yoga program, pranayama is greatly beneficial because it facilitates the proper movement of Prana. Releasing stagnation in this subtle layer can have profound effects on the more gross, physical layer. Further, pranayama, especially bhastrika and kapalabhati, directly activate muscles that massage the lower abdomen and pelvis. By increasing agni, Bhastrika and Kapalabati bring warmth and helps relieve stagnation.

6. Herbs
Herbs that help to reduce swelling and excess water in the body, while keeping the waters of the body flowing, will greatly benefit the kapha flow. Ginger and Tulsi Kwath have a great affinity to this tissue layer and nourish it through their warming and building qualities. If excess tissue in the reproductive tract, Kanchanar Guggulu, may be a good choice as it is a combination of herbs that breaks down deep-seated Kapha.

General Menstrual Self-Care:
The menstrual cycle is effectively a monthly cleanse and is treated as such in the Ayurvedic tradition. Our goal is to support the process of cleansing. As with any other cleanse, importance is placed on rest and rejuvenation of Agni. For this reason, for centuries, women in India have been given the opportunity to be relieved from their daily duties and go away from other so that their body may fully cleanse both on the physical and mental level. The menstrual cycle is a gift that is unique to the female gender, and can be viewed as such, instead of being viewed as a nuisance or inconvenience.

Basic Guidelines for a Healthy Menstrual Cleanse:
1. Eat a simple diet.
   Reserve all of our body’s digestive fire for the purpose of cleansing. Eating kitchari and other warm, thoroughly cooked meals will do just that. Try adding spices, such as ginger, cardamom, saffron, cumin, coriander, fennel, and cinnamon.

2. Rest and rejuvenation. Cleansing involves the movement of wastes down and out of the body and we want to be sure that that directional flow is not counteracted by upward movements, like excessive talking or thinking, sexual intercourse, and even pranayama and yoga. These activities also take up a lot of energy and your body needs to use all of its reserve energy towards cleansing.

3. Don't suppress urges, like urination, defecation, and sneezing. Doing so promotes vata to go opposite of its normal downward flow.
4. Reflect and Meditate.

5. Hydrate. As with any other cleanse, hydration is of utmost importance to move wastes. During a menstrual cleanse, hydrate with warm teas, such as ginger tea, lemon tea with honey, or cumin, coriander.

Maintaining balance when you are not menstruating is of equal importance. Below are some tips to keep the flow of Vata grounded and prevent stagnation or vitiation within the plasma and blood tissues of the body. The key is to keep the Doshas in check.

♦ Cleansing (Panchkarma) There is no better way to balance the doshas than to do a yearly cleanse. Seasonal cleansing (Panchkarma) is a highly effective way to balance and rejuvenate all bodily tissues so that they function optimally.

♦ Daily Routine. A daily routine keeps the body in rhythm and moving on schedule. Try to follow appropriate routine day to day life, that it does not cause further vitiation of doshas.

♦ Self-massage.

♦ Exercise.

♦ Eat at a consistent time.

♦ Pranayama. Nadi Shodhana is important for balancing in the mind, as it seeks to equalize the left and right side of the brain. As this balance is gained, the neurochemistry of the brain, including hormones, normalize. The ideal for this purpose is to do twenty minutes before sleep. Continue the Pranayamas discussed previously as per our doshic menstrual flow.

♦ Yoga. A strong yoga practice as per our dosha will keep our body strong and limber, removing physical blockages for pranic flow. Poses particularly great for the female reproductive system are Child's pose (Balasana), Butterfly's pose (Baddha Konasana), Bridge pose (Setu bandhasana), Plow pose (Halasana) and reclining hero pose (supta virasana).

Herbal support:

The formulations mentioned in each doshic menstrual type are catered for that dosha. The herbs mentioned with them are also very helpful to target a specific menstrual flow. In addition to those, the following herbs can aid in particular needs.

♦ Ashoka

Ashoka is the important herbs for the female reproductive system, as a uterine tonic and aiding in heavy bleeding and pain. Literally meaning, “remover of sorrow,” this herb will aid in physical as well as psychological pain. Its astringent taste also aids in removing excess tissue and wastes and helps tone the uterus, aiding in heavy cycles.
♦ Shatavari
Shatavari has been translated as the “women who has a hundred husbands.” This herb has pitta reducing, and has a affinity to the female reproductive tract and urinary system. As such, it is seen as an adaptogen during times of stress and over taxation of the body.

♦ Ashwagandha
This herb is more known for its benefits in men, it is also used traditionally as a great tonic and adaptogen for the nervous system, including the adrenals. Along with its building properties, it has also emaciation and burn-out properties, which can cause a scanty, Vata flow.

♦ Kanchanar guggulu
This guggulu formulation contains heating and cleansing herbs in addition to Kanchanar. It has great property of scraping and moving out wastes, particularly in gynecologic imbalances involving stagnation and congestion.

♦ Anantamul
In Ayurvedic classics Anantamul is blood cleanser, and also used in genitourinary tract diseases. It acts as a cleanser, in addition to being a nourisher.

♦ Aloe vera
In Sanskrit, this herb is called Kumari, meaning “young maiden.” Aloe vera is widely respected as being highly supportive of a woman’s reproductive system. In such a way, the classic Ayurvedic texts have referred to this herb repeatedly for gynecological disturbances. Aloe is cooling and cleansing to the urine, blood, and plasma. It removes stagnation and blockages and acts as a tonic. It is often used in conjunction with other herbs as a vehicle to the reproductive system.

♦ Manjistha
Manjistha is an excellent blood cleanser, removing pitta, while also building the blood gently. It cleanses the blood, it also able to remove stagnation and constriction within the reproductive tract.

♦ Triphala
Triphala is most known for its ability for elimination of wastes, particularly from the gastrointestinal tract, and removing toxins from the body. In addition, it is a great rejuvenative.

♦ Tulsi
Tulsi is not only warming and nourishing to the lungs and prana, but it is a builder and nourisher of the rasa dhatu, making it a beautiful herb for nourishment for flow.
DISCUSSION:

Vatika menstrual flow:

As Vata dominates the uterus, its Sheeta and Khara qualities cause the blood vessels to constrict. Ruksha guna depletes the bodily tissues and finally causes early cessation of menstrual flow. Due to decrease in plasma and blood tissues, decreased nourishment to the endometrial lining of uterus the overall flow and menstrual discharge will be less. Where ever there is a blockage for the free flow of Vata, there will be pain. So most of the Vata dominating cycles will be painful.

Paittika menstrual flow:

Pitta is hot and sharp. So it brings more fluidity to the blood so that it flows easily. Pitta resides in blood and in excess I may cause heavy bleeding. As it causes tendency for swelling, it leads to tender, swollen breasts, acne etc that women experience during their premenstrual period.

Kaphaja menstrual flow:

Kapha is dull, heavy and sticky. Stronger the influence of Kapha Dosha, the more likely to get a prominent growth of the endometrial tissue. As more blood vessels grow to supply this growth, the Kapha cycle is more likely to experience a heavier flow than Vata cycle.

CONCLUSION:

Being the natural cleansing process of the body menstruation needs an assistance from the individual. The unobstructed flow of menstrual blood will be possible only by the optimal assistance of the Tridoshas. Any disturbance in the equilibrium of Doshas will create problems in menstrual cycle. In a particular Prakruthi there is a physiological increase in the level of that particular dosha, which may show its effect on the characteristics of menstruation. Such effects due to the Prakruthi of the individual may cause some ailments which can be considered physiological. So understanding the Doshic play and adequate application of medication, control of diet and regiments is needed to restore the optimal action of menstrual cycle which is very crucial to maintain the health of a women.

REFERENCES:


(168)
♦ Ashatangsangraha Part II "SarvangsundarVyakhya Acharya Raghuvirprasad Trivedi, Baidyanath Ayurved Bhavan, Nagpur, I Edition Feb 1989


♦ Ashatanghrudayam, with commentaries of Sarvangasundara Vyakhya and Ayurvedarasayana, Dr. Anna Moreshwar Kunte, Krushnadas Academy Varanasi, Adhyaya 1 Page no. 363,443, I Edition (Reprint 2000)


♦ Acharya JT. Charaka Samhita with Ayurveda Dipika commentary of Chakrapani Datta. Reprint ed. Varanasi (India) : Chaukambha Orientalia; 2009
Abstract:
Now a day continuous changing life style, dietary habits have made human a victim of many anorectal diseases like Hemorrhoids (Arsha) Fissure in ano (Parikartika), Fistula in ano (Bhagandar) etc. These are troublesome diseases which cause intense pain. These diseases hamper day to day life of an individual. When there is no result by medicinal management, surgery is only one option in these conditions. Surgery relieves the symptoms of this disease, but in initial post operative day’s pain and burning sensation at operative site are most troublesome symptoms. Analgesic relieves these symptoms for some extent but these analgesic have many side effect on human body. Jatyadi Tail Matra Basti and Avgah Swed (sitz bath) give significant relief in these symptoms and also avoid the post operative anal stricture after haemorrhoidectomy.

Keywords : Arsha, Avgah swed, Bhagandar, Jatyadi Tail Matra Basti, Parikartika etc. (No.of references used- 4)

Introduction:
Now a day, due to busy life style one has to work hard. Due to these, routine of all has changed considerably. .Due to change in food habits, eating junk, preserved fast food one has to face various diseases. Amongst all these disease Arsh (Hemorrhoids) is very common now. There are some conditions in which surgical treatment (haemorrhoidectomy) is unavoidable. But in initial post operative days patient experiences intense pain and burning sensation at the operative site and later there may be an anal stricture as post operative complication. Pain is the commonest post operative manifestation after any surgical procedure. Effective post operative pain relief encourages early mobilization and discharge from the hospital. Analgesic plays limited role in this condition .Also their side effects are more, so for getting relief from these symptoms we tried the Jatyadi tail matrabasti with Avgah swed in post operative pain of haemorrhoidectomy.

Case Report : A 58 years male patient came with complains of Sarkta(P/R bleed), Sashul (pain) malpravrutti sa-pravahan malpravrutti & mucosal prolapsed since two years. He is clinically diagnosed as a case of internal & external hemorrhoids (3, 7, 11 o’clock position) with mucosal prolapsed. Accordingly patient undergoes open haemorrhoidectomy on 31/02/2017
Patient : - ABC
Gender : - Male
Age : - 58 years
Occupation : - Farmer
Diet : - Non vegetarian
Pradhan Lakshana : - Pain and burning sensation at anal region after defecation since 3 days
Constipation since 3 days
Surgical History : - K/C/O-Open Haemorrhoidectomy (3, 7, 11 o’clock position) under spinal anesthesia
HTN since 2 years (Rx-Tab.BETACARD AM 1OD
N/H/O :- DM/Bronchial asthma/Koch
Addiction :- Not specific
Rugna Pariksha :-
Nadi (pulse) :- Prakrut Kapha Pittamta, 78/min
Jivha (tongue) :- Sama (Coated)
Kshudha (Hunger) :- Prakrut
Trusha (Thirst) :- Prakrut
Nidra (Sleep) :- Anidra
Mutra Pravrutti (urine) :- Prakrut
Mala Pravrutti (Bowel habit) :- Malavstambha, Hard stool (use stool Softener)
Udara Parikshana (P/A) :- Prakrut
Sthanik Parikshana (Local Examination):-
Inspection: - Raw area after haemorrhoidectomy.(3,7,11 o’clock position)
Edematous skin tags.
Palpation: -
Tender and edematous skin tags
Moderate sphincter spasm
Haemorrhoidal stump palpable
Investigations :
CBC :- Hb- 10.3 gm/dl
WBC - 7400cumm
Platelets - 1.5 lacs
BSL® - 130 mg/dl

(171)
Sr Creatinine -0.9
HIV-Negative
HBsAg-Negative
Urine R/M – epithelial cells-2-3/hpf
Pus cells-2-3/hpf

Intervention:-

After haemorrhoidectomy, antibiotics given for three days. In spite of this, treatment patient was having intense pain and burning sensation after defecation.

According to Ayurvedic approach patient was treated with *Jatyadi Tail Basti* (20ml), *Avgah Swed* Two times a day and *Jatyadi tail Pichu* for seven days after meal from post operative day three to post operative day ten.

After above treatment patient got relief from pain and burning sensation after defecation and also relieve the sphincter spasm.

Criteria for Assessment:-

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Procedure</th>
<th>Aushadhi</th>
<th>Matra</th>
<th>Kala</th>
<th>Position</th>
<th>Duration of treatment</th>
<th>Other material used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Matra Basti</td>
<td>Jatyadi tail</td>
<td>20ml</td>
<td>Once in a day at morning before meal</td>
<td>Left lateral position</td>
<td>Seven days</td>
<td>20ml syringe, Feeding tube no. 8</td>
</tr>
<tr>
<td>2</td>
<td>Pichu</td>
<td>Jatyadi tail</td>
<td>5ml</td>
<td>Once in a day at night before meal</td>
<td>Left lateral position</td>
<td>Seven days</td>
<td>Pichu made from cotton and gauze piece</td>
</tr>
<tr>
<td>3</td>
<td>Avgah Swed</td>
<td>Triphala Kwath</td>
<td>As requirement</td>
<td>Once in a day at morning before meal</td>
<td>Sitting position</td>
<td>Seven days</td>
<td>Plastic tub</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sr.No</th>
<th>Criteria</th>
<th>D₀</th>
<th>D₃</th>
<th>D₇</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pain(Vedana)</td>
<td>+++</td>
<td>++</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Burning(Dah)</td>
<td>+++</td>
<td>++</td>
<td>+</td>
</tr>
<tr>
<td>3</td>
<td>Constipation(Malavstambh)</td>
<td>++</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Result - Ayurvedic management i.e. *Jatyadi Tail Matrabasti Pichu and Avgah Swed* in post operative pain after haemorrhoidectomy is effective.
Discussion:-

Probable action of Drugs :-

**Jatyadi Tail** :- In post haemorrhoidectomy wound, the main cause of pain is due to Vatprakopa according to Ayurvedic literature. *Jatyadi tail* having Snehan property which makes anal canal smoothening and reduces congestion caused by secondary to haemorrhoidectomy ultimately it helps in reducing the pain, burning sensation and constipation. It also prevents post operative anal fibrosis and will not cause symptoms like anal stricture. *Jatyadi tail* consists jatipatra, gokshur, manjistha, lodhra, khadir, yashtimadhu, water, and tail. Due to this polyherbal combination this drug act as antimicrobial, anti-inflammatory, and analgesic action and good wound healing property.

**Avgah Swed :-** *Triphala Kwath* used in Avgah swed shows Tridosh shaman property which helps in Vata and pitta shanana ultimately it helps for decrease in pain and burning sensation after haemorrhoidectomy. *Triphala* also shows Vrana Ropan and antimicrobial property which helps in fast wound healing.

**Jatyadi Tail Pichu :-** Effect of *Jatyadi Tail Pichu* and *Jatyadi Tail Matrabasti* is almost same but *Pichu* remains for more duration at the operative site so it shows strong wound healing effect than *matra basti* and also reduces pain and burning after defecation.

Conclusion :-

♦ This is the single case study but this treatment is useful for management of post operative pain after haemorrhoidectomy. There is need of further study on large population.
♦ The treatment is found to be significantly effective in post haemorrhoidectomy pain.
♦ Prompt use of this treatment in early stage can decrease the pain and avoid the unnecessary use of NSAIDs and their side effects. Long term use of *Jatyadi tail matra basti* also helps to avoid the post operative anal stricture.
♦ This is less expensive and cost effective treatment.
♦ This is local treatment so is very effective in post haemorrhoidectomy pain.
♦ It needs less expertly and easy to perform so patient compliance is good.

References :-

- Acharya Vidyadhara Shukla, Prof. Ravidatta Tripathi, Charaka Samhita, Chaukhamba Sanskritit Pratisthana, Dehli, Reprint-2009, vol.2 pg.no.221.
- Dr. Bhrahmananda Tripathi, Sharangadhara Samhita with 'Deepika' Hindi Commentary Chaukhamba Surabharati Prakashan, Varanasi, Reprint-2010,
Guidelines for submission of articles.

1) Left top corner of article write one of following:
   a) Research, b) Case Study, c) Review, d) Experiment, e) Short communication,
   f) Research method, g) Standardization, h) Proceedings paper, i) Opinion paper, j) Patent etc.
2) Title
3) Authors’ name, e mail id, phone no. college/institute, university,
4) Abstract not more than 200 words.
5) Mention no. of references for the article in the bracket.
6) Keywords in alphabetical order.
7) Introduction, aims, objects, methodology, observations, discussion, conclusion, etc. as per requirements.
8) References with details such as section, chapter, page no. etc.
9) References be written as follows e.g.
10) Send article via e mail with biography, photo to:
    a) kavitaindapurkar@gmail.com
    b) deerghayuinternational@gmail.com
11) Send Bank Demand Draft OR cheque payable at par for Rs. 1500/- to - Editor, Deerghayu International, 36 Kothrud Gaonthan, opp.Mhatoba Mandir, Pune 411 038.
12) Author can deposit money in the following Bank account.
    Deerghayu International, UCO Bank, Kothrud Branch, Pune 411 038,
    A/c no. 14690200000611, IFSC code : UCBA 0001469, MICR code : 411028011.

DEERGHAYU INTERNATIONAL

1) The peer reviewed quarterly journal for Ayurveda and Health Sciences since 1984.
2) International Standard Serial Number is ISSN 0970 - 3381 since 1986.
3) Included in Indian Citation Index.
4) Impact factor published from time to time.
5) Articles published in Deerghayu International is being uploaded to AYUSH portal by National Institute for Indian Medical Heritage, Hyderabad.
A) Books by Prof. Dr. P. H. Kulkarni, Maha vaidya

Publisher: Sadguru Publication / Indian Books Centre, Delhi.

1) Musing Ayurveda
2) Ayurveda Vistas
3) Biorythm
4) Ayurveda Therapy
5) Ayurveda Therapeutics
6) Ayurveda Chikitsa
7) Ayurveda Nidana
8) Ayurveda Philisophy
9) Ayurveda Herbs
10) Ayurveda Minerals
11) Ayurveda Panchakarma Papers
12) Ayurveda Aahar/ Food - Diet
13) Ayurveda Soundaryam
14) Ayurveda Upachar
15) Ayurveda Panchakarma
16) Secrets of Body, Mind Soul
17) Hand Book of Clinical Ayurveda Practice
18) Ayurveda for Women
19) Ayurvedic Aahar
20) Common Symptoms Effective Remedies
21) Ayurveda & Hepatic Disorders.
22) Ayurveda Vajikaran,
23) The Primer of Ayurveda
24) Prameh-Veda / Diabetes
25) Cancer and Aids - Their Care / Cure in Ayurveda and other Health Sciences.
26) Surgery in Ayurveda
27) Skin Care and Cure in Ayurveda
28) The Ayurvedic Plants
29) Subtle (Sookshma) Ayurvedic Medicines.
30) Complimentary Medicine.
31) Heart Care in Ayurveda
32) Bronchial Asthma, Care in Ayurveda and Holistic Systems.
33) Know Ayurveda
34) Ayurveda for Child Care.
35) Ayurveda Rejuvenation.
36) Neurological Disorders and Care in Ayurveda
37) Joint Disorders Care / Cure in Ayurveda.
38) The Encyclopedia of Ayurveda, 2 Volumes.

Contact email: anil4013@Yahoo.com
vkgupta@indianbookcentre.com
Prof. Dr. P. H. KulKarni email: deerghayuninternational@gmail.com
B) Books by Prof. Dr. P. H. Kulkarni

Publisher : Deerghayu International, Pune, India,

1) Abhyanga Tantra - Ayurveda Massage.
2) Ayurveda for You.
3) Ayurveda Jidnyasa.
4) Cancer and Ayurveda.
5) Clinical Ayurveda Practice - Hand Book.
6) Diabetes - Ayurveda Care.
7) Heart Care - Hrudayam.
8) Joint Care and Ayurveda.
9) Naadee Pareeksha - Pulse Examination in Ayurveda.
10) Shishu Health, Care in Ayurveda.
11) Stree Roga - Gynaecology in Ayurveda.
12) Swastha - The Eternal Life.
13) Yoga with Ayurveda.
14) Liver Care & Cure in Ayurveda.
15) Obesity - Holistic Medicine.
16) Five Cleansing Procedures ~ Panchakarma in Ayurveda.
17) Anna - Ayurvedic Healthy Diet.
18) English Charak Sarnhita, Poorvardha Uttarardha.
19) vajikarana - Sexology in Ayurveda

Contact: 1) www.bookganga.com,

Telephone 91 20 24 52 52 52.
2) Shri Swami Samarth Agency, Pune.

Telephone: 91 20 2538 2130.
C) Ayurveda books by Prof. Dr. P. H. Kulkarni.

Published by Divine Books / Vasu Publication, Delhi.

1) Ayurveda Philosophy and Practice.
2) Ayurveda Nidana - The Diagnosis and Pathogenesis
3) Experiments with Drugs of Ayurveda.
4) Bhasma / Calx - Ash Concept in Ayurveda.
6) Pictorial Ayurveda Panchakarma.
7) Five Cleansing Procedures - The Ayurveda Panchakarma.
8) Mental Health and Care / Cure in Ayurveda.
9) Ayurveda Herbs for Health.
10) Kidney Disorders, Care and Cure in Ayurveda.
11) The Ayurvedic Care & Cure of Digestive System.

Contact: e mail - sunilgupta405@gmail.com.
Telephone: 91 9871552640
deerghayuinternational@gmail.com
Dr. P.H. Kulkarni, a great human being and a man with tremendous knowledge of Ayurveda. I have known him for many years and had been a fellow Rotarian. I have been wanting to write about my experience of his Ayurveda knowledge, since many years.

Some years back, I had a problem with my ear as it had been troubling and my left ear had started leaking. I was under treatment of leading ENT specialist of Pune. He once made me to undergo a procedure of planting a drum in my ear curtain, which eventually came out and trouble continued. The ENT specialist told me that I have to undergo ear surgery and told me to get admitted to the Hospital where he was attached and booked my admission there. Fortunately on that day, we had our weekly Rotary meeting and Dr PH met me. I told him about my problem and mentioned to him that I have to get admitted to Hospital tomorrow for the ear surgery.

He told me to inform the ENT specialist that, I am busy and would like to be operated after couple of months and PH (we used to address him as PH) told me to meet him next week day at his clinic.

Next day I went to him and he said that my problem is not with the ear but route cause is cold. He asked me to avoid some foods like curd and fruit salads and gave me Ayurvedic treatment course of 3 months. I followed this religiously and within 3 months my ear problem had completely disappeared.

Thereafter I visited the ENT specialist whom I had been consulting. After my check up he could not decide, which ear had a problem. He said you are absolutely all right. What did you do. I said nothing, it just disappeared.

Big Thank you to Dr. P H Pandurang Kulkarni.

I just remembered this and I thought I must right this on your timeline.