



IMPORTANCE OF "HUMAN ORGAN DONATION," TRANSPLANTATION AND ITS ACT

¹Dr. Rajesh Kumar S. Upadhyay, ²Dr. Ujawala M. Divekar and ³Dr. Fulse Sanjiv D.

¹Professor and HOD Agad Tantra Avum Vidhivaidyak, C.S.M.S.S. Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra, India.

²Asso. Professor, Samhita Siddhant Dep. C.S.M.S.S. Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra, India.

³Professor and HOD, Dept. of Kriya Sharir C.S.M.S.S. Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra, India.

***Corresponding Author: Dr. Rajesh Kumar S. Upadhyay**

Professor and HOD Agad Tantra Avum Vidhivaidyak, C.S.M.S.S. Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra, India.

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ABSTRACT

Transplantation of organs in the human body represents a notable advance in medical science and has tremendous life saving potential transplantation of Human organs Act 1994. It come into force in 1995 and deals with the regulation of removal storage and transplantation of human organs for therapeutic purpose and for the prevention of commercial trade in human organs, As per the Act the organs that can be donated include the Kidneys, heart, lungs, liver, Pancreas, eyes, eardrums and ear bones. Presently data of organ Transplantation sources from Indian express more than 10000 people in the country need organ transplant and every year around one thousand people die waiting one cadaver can save at least eight lives. There has been a gradual rise in transplantation in India. So we should create awareness by media, Rally, News Papers, Schools, Hording at crowded aria in all states. Recently uterus transplantation has been done successful in India at Pune first time in 18th May and second on 19th May 2017 and Jan. 2018. All organs are very important for donation because it gives now life. So we should promote this type of activities and create awareness for organ donation.

KEYWORDS: Organ, Human, Law, Act, Transplantation, Rules.

INTRODUCTION

Human organ and tissue transplantation was started in India in 1962 Initially, the organ transplant was unregulated, and organ trafficking was rampant. The act governing the transplantation was passed in 1994. This has been subsequently amended in 2011, and new rules came into force in 2014. Many of the students as well as practicing physician are not aware of the act as it is generally not a part of the curriculum. The main aim of this article is to create awareness among physician, students and General public about legal aspects of transplantation and about knowledge of organ Donation. And this is the requirement of organ to save the life of others.

So our aim is very clear "Save life of needy person with the help of organ.

LITERARY REVIEW

1. The transplantation of human organs act 1994 the act provides for the regulation of removal storage and transplantation of human organs for thereputic purposes and for the presentation of commercial

dealings in human organs and for connected matters. There are three main aspects of the Act^[1] it aims at putting a stop to live unrelated transplants.

2. In the case of a live related transplant, It defines that the donor and recipient are genetically related with an exception it the transplant is done with prior approval of the Authorization committee in an application jointly made by the donor and recipient.
3. It accepts the brain stem death criterion. Certification of death by a panel of experts consisting of medical officer incharge of the Hospital, an independent medical specialist, a neurologist or neurosurgeon, and the doctor treating the patient is essential. The act defined human organ as any part of the human body consisting of a structured arrangement of tissue, which it wholly removed cannot be replicated by the body. Bone marrow transplant is outside the purview of the act. The organs that can be donated after death are Kidney, Heart, Liver, Lungs, Pancreas, Eyes eardrums, and ear bones.
4. The organ can be removed from the dead body of any donor at any place. Removed of the organs from

the donors may be done on his authorization or that of the person lawfully in possession of the body. In case of unclaimed bodies in the hospital or prison, organs can be removed after 48 hours. The organ can be removed should be preserved according to current and accepted scientific methods to ensure viability. The human organs cannot be removed for any purpose other than therapeutic purpose. The doctor should not remove organs unless he had explained all possible efforts, complications and hazards connected with the removal. Transplantations to the donor and recipient respectively. The act imposes for compulsory registration of hospital engaged in the removal, storage or transplantation of human organs. The central and state Governments are empowered to appoint, appropriate authority which can grant registration of hospital, renew, suspend or cancel the registration, and to specify conditions for the same. The Government is also empowered to appoint authorization committee or committees which nominated members for the purpose of imposing restrictions on the removal and transplantation of human organs. This act also provides a side provision for appeal/punishments for unauthorized removal of human organs or for commercial dealings thereof or for contravention of any other provisions of the act, such as punishment ranging from removal of names of the erring medical practitioners from the registers of the state medical council for 2 years for the first offence and permanently for subsequent offences, or imprisonment up to 5 years and fine of Rs. 10000/- based on the nature of the degree of the offence: the Ear Drums, ear bone Act 1982, and eyes act 1982 have been repealed.

5. Rule:- Any person between 1 year and 60 years can become a potential donor. However to donate a kidney during life, the donor has to be not less than 18 years. Normally, the right of possession of a dead body lies with the serving spouse or the next of kin. In case of death in a hospital the hospital is the legal possessor until someone with a better claim to possess it turns up. If nobody turns up to claim the body for 48 hours after death the body may be disposed of by the hospital authorities. If the deceased had left any directions about the manner in which the body is to be disposed of, or the manner in which the tissues are to be used such directions must be respected.

Any transplant must be effective in its own right to be useful. A donation from a living person is more likely to succeed than from a dead donor and in the latter case, success will be inversely proportional to the length of the time between death and donation.

Potential donations are of three types: Donations of tissues that are readily replaceable (e.g. blood). These do not cause any serious problems. Donations of organs that are not essential to the life of the donor.

Donations of one of the paired organs, the other one being capable of maintaining life, as long as it is healthy (it e.g. kidney).

Consent to such donations should be properly obtained, after giving a complete explanation.

During the course of his lifetime, a donor can give his consent for the removal of organs from his body after his death. However, such a consent becomes invalid if the next of kin refuses to allow organs to be removed for transplantation. On the other hand, the legal heir can direct the removal of organs from the dead body, even if the person, while alive, had not made any such commitment.

The ultimate success of transplantation rests on the quality of the donated organ, and this depends on the warm anoxia time to which it is subjected. This is the time between the cessation of arterial oxygen supply and the refrigeration of the isolated organ.

Donation in Medicolegal Cases

After the authority for removal of organs and / or tissues and consent to donate from brainstem dead are obtained, the Registered medical Practitioner should make a request to the SHO of the area, either directly or through the police post located in the hospital to agree for retrieval of organs from the donor. It has to be ensured that, by retrieving organs, the determination of the cause of death is not jeopardized.

In cases where the definite cause of death is established clinically by the RMP, the post mortem may be waived off by the competent officer on the request of RMP and Investigating officer (IO) of the case.

The RMP who is designated to do the post mortem can do the organ retrieval also. Otherwise, he should be present at the time of retrieval of organs / tissues by the retrieval team. The post mortem report in respect of organs / tissues being retrieved should be prepared at the time of retrieval. Rest of the post mortem procedure should take place at the autopsy room for the purpose of organ (s) / tissue (s) retrieval request for post mortem beyond specified timings can be made by the RMP and IO of the case.

AIM AND OBJECTIVES

1. To study the importance of human organ transplantation.
2. To study the transplantation of Human organ Act 1994.
3. To study rule and procedure of Human organ transplantation.
4. To create awareness about Human organ transplantation.
5. To create awareness about organ Donation among the society

6. To create awareness about organ and its Importance in the body.

MATERIAL AND METHODS

This is conceptual study, data is collected from text books of forensic medicine and toxicology and Internet (Web) and published article.

CONCLUSION

1. After studying the all the aspect we came to conclusion that Human organ is very important for saving other needy person.
2. We can save other life by Donating organ.
3. For Human organ Donation every person should be aware about no loss in the Body after donation.
4. Before going to Human organ donation consent should be very important in alive condition. After complete explanation b Doctor team.
5. Any person between 1 years and 60 years can become a potential Donor. However to donate a Kidney during life, the donor has to be not less than 18 years.
6. Organ donation should be done as per guide line of Govt. Norms and related acts.

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***Ayurveda* for mentally challenged children: A review literature**

Chordiya Harshad L.*¹, Ratnaparkhi Karuna S.²

1. P.G. Scholar,
2. Guide and HOD , Department of Kaumarbhritya,

C.S.M.S.S. Ayurved Mahavidyalaya, Aurangabad, Maharashtra, India.

* **Corresponding author:** harshad.chordiya@gmail.com

Abstract:

Developmental disabilities involve physiological and genetic components in children but etiologic of some these disorders in children are unknown. Learning disorders, communication skill disorders, pervasive developmental disorders, ADHD etc. comes under these category. The management of mentally challenged children need special attention.

Ayurveda the parental origin of all the *pathies* has got different approaches towards diseases from both corners preventive as well as curative. A number of paediatric problems are there which are still incurable and some of them make children mentally handicapped. *Ayurveda* is a system of traditional Indian therapies that includes herbs, yoga, *panchakarma* and use of various traditional formulations like; *Medhya Rasayanas* which are helpful in enhancing cognition, intellect, attention span.

Parents have to face several hardships for bringing up of special children or mentally challenged children. Parents use different ways to raise such children so that they may live an independent life or can become self-

sufficient. Majority of parents of mentally challenged children have some form of frustration, guilt or emotional disturbance due to the limited abilities of their child to carry out social life. Sometimes it may lead to parental rejection due to some form of social stigma attached to such conditions. Acceptance of sub average of their child by parents and their consistent and concern behavior for management of such child plays important role to improve outcome of treatment.

Ayurveda enhances mental ability, perception and behaviour through natural techniques, etc. *Ayurvedic* classics described that mentally challenged children have hypo function of *Dhee*, *Dhriti* and *smriti*. *Lehana Kalpana* as described by *Aacharya Kashyapa* has major role in treating mentally subnormal children. *Medhya Rasayanas* and *Medhya yogas* described in *Ayurvedic* classics improves the intelligence and memory, also it increases the efficacy of *Manovaha Srotas*. This paper shares some *Ayurvedic* approaches of treating mentally challenged children.



Keywords: Mentally challenged children, *Ayurvedic* Herbs, Yoga and Meditation, *Panchakarma*.

Introduction:

Children are the vulnerable people of the society. A healthy child can make a healthy nation but inspire of several scientific efforts the morbidity and mortality rate in children is gradually increasing.^[1]

In *Ayurvedic* classics, 'Mentally retarded children' have been described as '*Balbuddhimandya*' by *Acharya*.^[2] The references like *Jada* (inert), *Mudha* (dull), *Nirbuddhi*, *Abuddha*, etc. are found in different context, meaning intellectually impaired persons.^[3] Mental Retardation (MR) refers to significantly sub average general intellectual functioning resulting in or associated with concurrent impairment in adaptive behaviour and manifested during the development period.^[4] Mental retardation (MR) is formally diagnosed by an assessment of intelligent quotient (IQ) below 70 and adaptive behavior. Adaptive behavior, or adaptive functioning, refers to the skills needed to live independently. Children with intellectual disability learn more slowly than a typical child. Children may take longer to learn language, develop social skills, communicating skills and take care of their personal needs such as dressing or eating.^[5] Research work in various aspects of MR has been conducted all over the world with growing awareness in order to solve this complex phenomenon. Currently, there is no 'cure' for an established disability though with appropriate support and teaching, most individuals can learn to do many things.

There are four broad areas of intervention. These include psychosocial treatments, behavioral treatments, cognitive behavioral treatments and family – oriented strategies.^[6] Psychotropic drugs have been used extensively to reduce the symptoms associated with psychiatric disorders, but they too have their own side effects.^[7]

A fundamental approach of *Ayurveda* to treat mental illness is to enhance *dhi*, *dhruti* and *smriti* which ultimately enhance the mental co-ordination. *Ayurvedic* herbs, *Medhya rasayanas*, Yoga and meditation, some kind of *panchakarma* used to treat mentally challenged children are safe and very effective. As per *Ayurveda*, balanced foods, simple herbs and spices can also boost mental health if used properly. Most mental illness is caused by *gunic* and *doshic* imbalance, may also be due to the *avidya* or ignorance of our true nature.^[8]

Balbuddhimandya is a disease which belongs to '*Manovahastrotas*. *Ayurvedic* philosophy deals with Manna as a supreme of *indriyas* co-ordinating it's specific role with *indriyas* time to time as per various necessities.^[9] e.g. physical, mental, psychological, physiological, emotional, spiritual, etc. The manna is an inorganic phenomenon which contains three universal factors *Satva*, *Raja* and *Tama*, hence this manna is *Trigunatmak*. In '*Balabuddhimandya*' *tamoguna* is found to be highly raised in comparison to *Raja guna*, whereas *Satvaguna* is observed very negligible. That's why a child suffering from *Balbuddhimandya* doesn't functioning properly.^[2]

Ayurveda suggest that achieving *doshic*



balance, promoting healthy habits and strengthening immunity and *agni* in early childhood can set the foundation for optimal mental growth and development.^[10]

Incidence: According to World health organization, mental disorders are to increase by 50% in 2020, become on the international level one of the main causes of morbidity in children. Children constitute about 40% of our population and in Indian studies the reported rate of psychopathology among children is 5-15%. A recent analysis estimated that the global cumulative impact of mental disorder in terms of lost economic output will amount to US\$1600 billion over next 20 years.^[11]

The incidence of developmental disabilities in children per thousand is as given below^[12]:

- Mental retardation 25-30
- Cerebral palsy 02-03
- Attention- deficit/ hyperactivity Disorder 75-100
- learning disabilities 75
- Communication disorders including hearing loss 02-03
- Childhood autism 0.2-0.5

Improvement of Mental performance by Ayurvedic therapy -

The different studies were conducted to enhance mental performance of children by improving their reaction time. The study found that different herbs were significantly effective in improving total mental performance. Ayurveda believes a different view regarding cognition processes and theories of information, processing, therefore possesses new approaches for management

of cognition related disorders. Herbal therapy is highly effective in improving total reaction time and no adverse effects were observed with herbal treatment.^[13]

As per Ayurveda the mechanism of regulating mental performances involves predominantly *Tikta, Katu-rasa, Laghu, Tikshna, Ushna, Sara-guna, Rasayana, Dipana, Pachana* and *Tridosha Shamaka property* and *Medhya Prabhava*.

- *Tikta rasa* has direct action on *medha* (intellect)
- *Ushna, Tikshna, and Laghu guna* dispel the *avarana* of *Tama* and increases the *Sattva guna* of *Mana*.
- *Ushna virya* and *Tikshna guna* enhance *grahana* (perception) and *Smarana* (retrieval) by harmonizing the *Pitta*.
- *Sara guna* improves *prerana* (channelizing/motivation)
- *Tridosha shamaka* property of ingredients harmonizing specially *Vata*,

There by regularize the function of *mana* and improve an attention, working memory and procedural memory.^[14]

Medhya Herbs

- **Bramhi** : (*Bacopa monnieri*) In *ayurvedic* classics, *bramhi* was described as brain tonic, being useful for sharpening the intellect and improving mental health. Ancient *vedic* scholars are reported to have used *bramhi* to aid in memorizing extensive sacred hymns and scriptures.^[15] *Bramhi* has been shown to improve cognition function and mental capacity including enhancement of learning and memory acquisition and retention.^[16] A



number of studies have explored possible mechanisms by which *bramhi* may enhance memory and cognition. There is evidence to suggest *bramhi* can enhance cholinergic neurotransmission, a key aspects of cognition.^[17]

- **Ashwagandha** :(*Withania somnifera*) In mild cognitive impairment confirms its traditional use to improve memory. Some studies concluded that *ashwagandha* may be useful in enhancing immediate and general memory, executive function, attention and information processing speed in people with mild cognitive impairment. *Ashwagandha* root has been found to possess antioxidant, *neuroprotective*, anti-inflammatory, anti-depressant, *anxiolytic* and *immunomodulating* activities.^[18]

- **Madukparni:** (*Centella asiatica*) The plant is valued in indigenous medicine to improve memory. In pharmacological and clinical trials, it has been found to improve the power of concentration and general ability and behaviour of mentally retarded children.^[19]

- **Shankhpushpi** :(*Convolvulus pluricalis*) *Shankhpushpi* improves the ability to receive, retain and recall information, which helps to enhance memory. The positive effects of *Shankhpushpi* include better concentration levels, improved grasping of information, clear thinking, verbal learning skills, reasoning, improved motor skills and quicker recalling of information.^[20]

- **Vacha** : (*Acorus calamus*) *Vacha* specifically targets the nervous system and penetrates deep into the brain tissues. It scrapes toxins from the subtle channels in the mind and opens the *nadis* of the higher chakras. It treats headache,

mental stress, laziness and emotional imbalance. *Vacha's* heating qualities stimulate the brain and increase alertness and focus. It significantly aids information and memory recall as it promotes cerebral circulation. It is curative for memory loss and any attention deficit disorders.^[21]

Some traditional *Medhya* preparation :

- **Bramhi Ghrita** : It is widely used as medicine and also in preparatory procedure called *snehakarma* for the treatment of improving learning skills, intelligence, memory, speech. It stimulates and nourishes brain.^[22]

- **Mahakalyanaka Ghrita** : It is a *polyherbal Ayurvedic* medicated ghee. It is useful in treatment of mental and psychological disorders. It improves memory and concentration.^[23]

- **Panchagavya Ghrita** : It is an ancient *Ayurvedic* preparation which increases memory, concentration grasping power and confidence. It reduces irritability, anger, ADHD, anxiety, nervousness.^[24]

- **Saraswatharishtam** :*Saraswatharishtam* increases memory, attention span, concentration, intelligence, mental stamina and glow on the face. It decreases stress and mental fatigue.^[25]

- **Bramha Rasayana** : *Acharya Charak* described *brahma rasayana* in *chikitsasthana*. *Bramha rasayana* is natural rejuvenator. It enhance *Dhee*, *Dhruti*, *Smriti*, *Medha*.^[26]

- **Ashwagandharishta**: It's an *Ashwagandha* based liquid used in *Ayurveda*. It treats a variety of problems like Neurological, Physical and mental problems. *Ashwagandharishta* brings



Vitality. As it possesses the property of being an *Adaptogenic* as well as Antioxidants, it acts on the adrenal glands of human beings who face problems such as weakness. This brings balance in hormones and stabilizes brain function. The intellectual capability of an individual is improved and one can notice more clarity in perceiving thoughts and decision. The body is rejuvenated and revitalized promptly.^[27]

● **Samvardhan Ghrita** : In *Sutrasthana leha adhaya* of *Kashayap samhita* the author confidently declares that *Samvardhan ghrita* is effective in the child suffering from the symptoms of *Panguta, Mukata, Jadata*, which are collectively seen in the mentally retarded child.^[28]

Yoga

A mentally retarded child learns at much slower rate than a normal child. At maturity his/her capacity to understand and learn will be less than average. Yoga practices reduce stress in life and enhance life span along with increasing memory. Due to mental disabilities children faces many problems and overall poor performance in school. Yoga can help humanity in a major way by making individuals overcome challenges posed by mental disabilities.

An integrated approach to yoga is necessary for holistic development of memory. **Tadasana** develops physical and mental balance. **Tiryak tadasana** balance the body as well as the mind.^[29] **Vrukshasana** gives sense of balance and poise. **Virbhadrasana** develops concentration power. **Trikonasan** stimulates nervous system and alleviates nervous depression. **Kapalbhati** energises

the body for mental work^[30] while performing **Anuloma Viloma**, breathing through left nostril tends to activate right hemisphere and breathing through right nostril activate left hemisphere. It has calming effect and relieves anxiety, improves concentration and stimulates *Ajna chakra*. The brain centre are stimulated to work nearer to their optimum capacity. **Bhramary** relieves stress and cerebral tension and thus help in alleviating anger, anxiety and insomnia. **Omkar Dhyana** produces benefits at many levels of life. It simultaneously influences body emotions, mental functioning. It is known that regular practice of yoga builds up the personality at physical, mental, intellectual and emotional in normal person some research proved that mentally challenged children also improve considerably by yoga practices. The children became more alert and less aggressive after yoga so that it was much less strenuous for the parents to handle the child.^[31]

These *asanas* help in increasing blood flow to the head region and when performed alternately with standing postures the changes in the blood flow will activate the brain cells through releasing the blockages in the *nadis* for flow of *prana*. The *Satvasarata* state leads to excellence of memory, this state can be brought about by the regular practice of yoga.

Meditation

It is difficult to teach meditation to mentally challenged children although it is the most essential component of yoga for better brain functions. Meditation also improves brain functioning, enhance the ability to focus, improves perception and memory, promotes development of



intelligence, induces relaxation and decreases stress. Meditation is an inherent ability of the human body. Meditation is an activity whereby the nervous system, brain and senses get tuned themselves for best functioning. During meditation, the concentration on different chakras like on *Muladhara* chakra enhances health and *Vidya*, *Manipura* chakra enhances *vidya* and capacity, *Vishuddha* chakra brings about improvement in speech and knowledge.^[31]

Panchakarma

Panchakarma is a powerful detoxification treatment, which can help to get rid of several acute and chronic disorders and diseases. However, it is advisable to take extra precautions in case of infants and young children.

●**Snehan** – Internal and external *oleation* (*snehan*) includes oil massages. A specific type of oil massage is performed on body to remove toxin from the gastrointestinal tract. These oil also rejuvenate the nervous system and relax the muscles. *Ayurveda* does recommend *oleation* or *snehanin* infant and children.^[32]

●**Basti** – As enema is half of medicinal therapy or even complete treatment,^[33] Basti heals numerous neurological disorders like muscular dystrophy, *hemiplegia*, muscle and nervous atrophy. It helps in mental condition such as epilepsy, mental retardation and sensory disorders. Basti has multidimensional utility. It can fulfil the purpose of elimination, palliation, nourishment and rejuvenation.^[34]

●**Nasya** – As mentioned in *Ayurveda* a nose is opening to reach brain,

any medicine instilled in nasal cavity acts directly on brain and stimulate vitals centres of brain that reduce stress, regulate emotion and improves mood.^[35]

●**Shirodhara** – is one of the allied of *Panchakarma* procedure to rejuvenate the body and mind, and which helps in calms the mind and relaxes the entire physiology thus helping to alleviate stress, strain and anxiety.^[36]

Discussion:

Ayurveda has described three types of managements especially for psychiatric and neuropsychiatric disorders viz; *Daivya Vyapshrya Chikitsa* (*Ayurvedic psychotherapy*) and *Yukti Vyapashraya Chikitsa* (rational use of drugs, diet and activities) which includes *Sanshodhana* i.e. elimination of vitiated *doshas* by different types of drugs, diet and activities. In *Ayurveda*, drugs or diet articles that reverse or break the *Samprapti* (pathogenesis) without producing any side effects is consider as ideal. Although in modern medicine very effective antipsychotic drugs and advanced psychotherapy along with other treatment modalities are available but outcome is still not promising. Since from the ancient time *Ayurvedic* physician were managing the mental disabilities and they got success because they were manufacturing medicine by themselves or under their strict supervision. *Ayurveda* has many herbal and *herbo-mineral* formulations in different dosage form. Majority of these drugs are *Ghrita* preparations. *Bhavprakashana* has mentioned that *Ghrita* is *rasayana* and is good for health, stimulant for digestion, maintain glow and beauty enhances memory and stamina, longevity and protect body from diseases.



Ghrita preparation may have nootropic action as *Mastiska* (brain) is made up of Meda (fatty substance). *Medhya rasayana* drugs have specific effect on mental performance and on higher on central nervous system functions. It may be potential source for developing and improving psychotropic drugs to relieve stress, anxiety, and depression related to psychotic and neurotic disorders. Thus *Medhya rasayanas* act as brain tonics and promote mental health. *Medhya rasayanas* promotes function of *Buddhi* and *Manas* by correcting disturbing of *Rajas* and *Tamas* also. Beside above mentioned herbal and *herbo*-mineral formulations are described in various *Ayurvedic* text for management of mental disabilities. Different types of dosage forms make these formulation palatable to every children. The safety and efficacy of these drugs are depending upon manufacturing of these drugs as per described classical methods. By use of these drugs alone or in proper combination or as adjuvant to allopathic drugs we can not only control but also cure mental disabilities.

Conclusion:

It is very unfortunate that in spite of that advancement in modern medicine today its success is very limited in context with neurological and psychiatric disorders due to multi factorial nature of these mental disabilities.

A fundamental theme of *Ayurveda* to treat mental disorders is to develop ones full mental potential through *Medhya Rasayanas* and herbs that provide power full nourishment to the mind. *Medhya Rasayanas* enhances *dhi*, *dhriti* and *smriti* individually and improves coordination between various mental factors.

Children are pillars of society. *Medhya Rasayanas*, Yoga, Meditation and *Panchakarma* therapy helps mentally subnormal children to contribute healthy nation.

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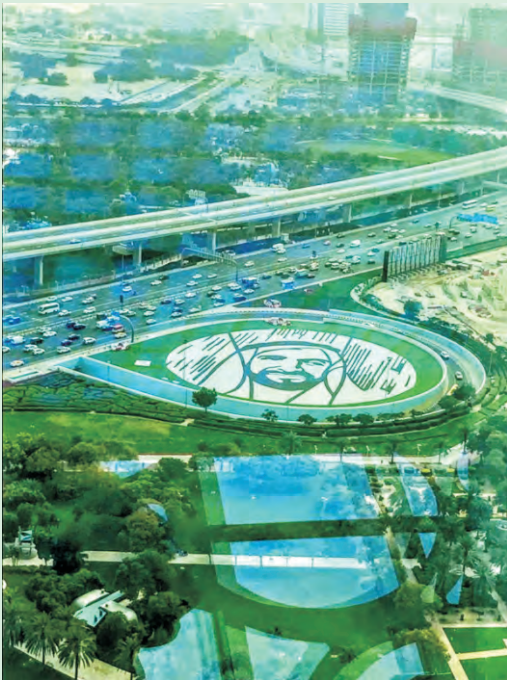
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Prof. Dr. P. H. Kulkarni

EDITOR

Prof. Dr. Kavita Indapurkar

Editorial Correspondence

E-mail : kavitaindapurkar@gmail.com, Mob. : 9890791688

ASSOCIATE EDITOR

Prof. Dr. Atul Rakshe,

Administrative Office

draksheatul@gmail.com, Mob. : 9422034506

Registered Office

Kothrud Ayurveda Clinic,

Opp. Mhatoba Temple, Bodhi Vruksha, Navagraha Maruti,

36, Kothrud Gaothan, Pune - 411 038. (INDIA)

Telefax : +91 - 20 - 25382130, Mob. : 9822037665

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Index

	Page No.
Review :	
1) Conceptual Insight of Terminology in Rachana Sharir : A Review Satpal Nirania, Indra Rani	3
Research :	
2) Effects Of Yoga Therapy On Diabetes Mellitus In Nursing Staff Of S.G.H. Akut Priyanka V. Sangle S. A., Ambekar M. S.	13
3) Purusharthas Past & Present Lucia Tommasini Giannandrea	18
Case Study :	
4) Pittaj Daha - A Single Case Study Yashashri Vitonde, A. K. Burley	22
5) Concept of Dosha - apprehension and assessment Mrs. Indapurkar Kavita	27

Conceptual Insight of Terminology in Rachana Sharir : A Review

Satpal Niralia, Indra Rani



Satpal Nirania



Indra Rani

Conceptual Insight of Terminology in Rachana Sharir : A Review

Dr. Satpal Nirania^{1*}, Dr. Indra Rani²,

1. PG Scholar of Dept. of Rachana Sharir, Ch. Brahm Prakash Ayurved Charak Sanathan, Najafgarh, New Delhi-110073. Mail id – satpal2652@gmail.com, 7307757840.

2. PG Scholar of Dept. of Kriya Sharir, Ch. Brahm Prakash Ayurved Charak Sanathan, Najafgarh, New Delhi-110073. Mail id – ayurvedindra@gmail.com Mob. No. 9650399524.

Abstract : Ayurveda is life science, which consequences all the knowledge of body for healthy life. Life is the combination of four entities viz. *sharir*, *indriya*, *sattva* and *atma*. *Acharya* Susruta is considered as father of surgery. *Acharya* Susruta has given careful consideration towards the basic organization of the human body. He ought to be considered as the father of *Rachana Sharir*. *Acharya* Charka additionally contemplated the organization of the human body and different organs. Many other *acharyas* have contributed their opinion regarding organization of body. The knowledge of *Rachana Sharir* is mandatory for the students for come across the practice of each system of medicine. It is a vibrant focus in pre-clinical studies. So the present paper is aimed to make easy the concepts of *Rachana sharir* and make easy to understand the views of various ayurvedic texts.

Key words : anatomy, *ayurveda*, *sharir* (44).

Introduction :

Ayurveda is life science, which consequences all the knowledge of body for healthy life. Life is the combination of four entities viz. *sharir*, *indriya*, *sattva* and *atma*^[1]. *Rachana Sharir* (Anatomy) is broadly appreciated as being one of the keystones of Ayurveda. If we go through the Ayurvedic literature, it seems that anatomy is well recognized from *acharya* Susruta's time. *Acharya* Susruta is considered as father of surgery even today, however on the off chance that we experience the *Ayurvedic* texts, basics of human body structures are correctly depicted so he ought to be considered as the father of *Rachana Sharir*. *Acharya* Susruta has given careful consideration towards the basic organization of the human body. This was accentuated to such a degree, to the point that no specialist should begin his carrier in Surgery except if he is very much aware with body structures. *Acharya* Charka additionally contemplated the organization of the human body and different organs. He additionally portrayed various numbers of muscles, joints and so forth in human body. Many other *acharyas* have contributed their opinion regarding organization of body. The knowledge of *Rachana Sharir* is mandatory for the students for come across the practice of each system of medicine. It is a vibrant focus in pre-clinical studies. So the present paper is aimed to make easy the concepts of *Rachana sharir* and make easy to understand the views of various ayurvedic texts.

Sharir (Body): Body is defined as the seat of consciousness composed by aggregation of the product of the five *mahabhutas* and carrying of equilibrium maintaining health and imbalance get subjected to disease^[2]. *Acharya* Susruta mentioned that when *garbha* is endowed with hands, feet, tongue, nose, ear, buttocks etc. then it derive the name *sharira* (the body)^[3]. These are of two types i.e. *Sathul Sharir* (Gross Body) is a combination of *panchmahabhuta* (five external elements) and it provide milieu for consciousness. It is also seat of all diseases and pains. Other one is *Sukshma Sharir* (Subtle Body), is composed of eighteen elusive substances such as five sense-organs, five *karmendriya* (motor organs), *mahat* (intellect), *ahamkara* (ego), *manas* (mind) and five *tanmatra* (subtle elements). Subtle body carries all impression of previous life through mind. Subtle body is a seat of consciousness.

Shadangasharir (Regional anatomy): *Acharya* Charak and Susruta have divided the human body into six following regions two upper extremities, two lower extremities, head, neck and trunk. *Acharya* Vagbhatta has also said that head, trunk, two arms and two legs are in brief the six *anga* (component) of the body^[4].

The head is the controller of all our activities and the trunk have an important role in vital functioning such as respiration, digestion, metabolism and excretion. In the form of physical activity and locomotion, the extremities are destined.

Other smaller parts of body are considered as *pratyanga* which are positioned in the larger *angas* (parts) which includes umbilicus, nose, chin, ears, eyes, eye-brow, temporal bone, axilla, breasts, testis, knees and fingers. *Pratyanga* also includes *kala* (various membranes), liver, spleen, lung, caecum, heart, bones, joints, *srotas*, *sira* and *dhamani*.

Pramana Sharir: *Pramana* means measure, scale and standard. *Angul-pramana* is one of the important concepts of *ayurveda* which is of anatomical significance for determination of *ayu* (longevity), *ojas* (immunity) and *bala* (strength) of an individual. In relation to measure the body entities there are two types of *pramana* – *anjali-pramana* and *angul-pramana*. *Anjali-pramana* is considered for the measurement of *dosha* and *dhatu* while *angul-pramana* is useful for rule out growth and development of different body parts. *Angul-pramana* play a major role in determination of life span of a person. It enlightens that individual having appropriate measurement will attain the long life. In *ayurved* different *acharya* describe the length and breadth of different *anga-pratyanga* (body parts) measuring by *angula*. As length and breadth of fingers of every person differs from each other, that's why for measuring body parts own *angul* of individual is taken, considered as *swangul*. In modern science *pramana-sharir* is described under the heading of anthropometry which is useful for assessing height, age, race and nationality of an individual. It deals with the systemic measurement of body size and shape^[5].

Twak: *Twacha* (skin) is one of the five sensory organs. It helps to make a sense of touch and regulate sensation and covers whole body. It has direct relation with *manas* (mind), considered as *cheta-samvayi*. During the process of fertilization, union of sperm (*shukra*)

and ovum (*sonita*) in uterus (*garbhashaya*) it undergoes transformation of seven layers of skin in third and fifth month of fetal age. According to modern skin is derived from three diverse components. The dermis on the dorsal aspect of head and trunk arises from dermatomes. The dermis of limb, lateral and ventral aspect of trunk arises from lateral plate of mesoderm. The dermis over most of head and over anterior aspect of neck is derived from neural crest^[6].

Garbha (Fetus): During the process fertilization *Shukra* (semen) and *sonita* (ovum) combine with *atma* (soul), *prakriti* (primary stuff) and *vikara* (primary evaluates) is known as *garbha* (embryo).^[7] The combination of sperm, ovum and soul when get implanted in the uterus, is known as embryo^[8].

Prana (vital breath): *Agni, soma, vayu, sattva, rajas, tamas, panch-indriya* and *bhutatma* together constitute *prana* ^[9]. Damage of any one among them can lead to death definitely.

Prana-ayatana: There are only ten seats where vital breath is located such as two temples (*sankha*), three vital organs (heart, urinary bladder and head), *kantha* (larynx and tracheal region), *rakta* (blood), *shukra* (sperm), *ojas* (vital essence) and *guda* (anal region). A physician who has knowledge of these vital seats, sense organs, consciousness and disease, is known as the promoters of vital breath (life).^[10]

Kala (membrane/sheaths): *Kala* is a membrane which covers inner side of all *dhatu* (tissues) and *asayas* (hollow organs). These are seven in number^[11]. It is just as pith which is seen when the wood (stem of tree) is splitted, similarly when *dhatu* like *mamsa* (muscle) etc. are splitted, *kala* become visible. These are distinguished as *snayupraticanna* (covered/formed from ligaments), *jarayusantata* (expansion of / continuation of fetal covering) and *slesmavastita* (coated with *kapha*). The moisture present in the *dhatu* (tissues) undergo transformation by the heat of the body and differentiated into structure known as *kala* (membrane or sheath).^[12] The moisture that remain in the *dhatu* (tissues) gets processed by heat of tissues, differentiated into structure similar the stem of tree and get covered with *snayu* (tendon like sheath), *sleshma* (*kapha*), and *jarayu* (chorionic membrane). It is called *kala*, as it is formed from very little quantity of *rasa* and essence of *dhatu* (tissues).

Asthi-Sanghata (Confluence of bones): *Asthi-sanghata* are fourteen in number, present in *gulpha, janu* and *vankshan* (groin) in both leg and in both arms are *manibandha, kurpara* and *kaksha*, one each is at the *trika* (upper back) and *sira* (head)^[13]. Commentator Dalhana has elaborated two structures as *trika*, although one in pelvis and other in upper back (between both shoulder and neck) considered as one in *asthi-sanghata*.

Simanta (Border/binding structures): *Simanta* (structure forming the boundary) are also fourteen in numbers, these are counted similar to *asthi-sanghata* as having confluence of bones, because confluences are bound by these. *Asthi-sanghata* having such *simanta* are eighteen according to some other authorities^[14].

Marma (Seat of life): *Marma* (Fatal spot) are convergence of muscle, veins, ligaments, bones and joints. In these places *prana* (life) resides specially by nature, hence when fatal

spots are injured, they produce their respective effects even death^[15]. The *marma* (vital spots) are so called because they can cause death. They are the meeting place of muscles, veins, tendon, bones and joints. Any injury or assault to them especially cause danger to life^[16]. On assault which can lead to death is called *marma*.^[17]

Shira (Head) : It is seat of vital breath of living being, which is located along with all the sense organs. It is superior to all organs is known as head^[18]. *Shira* is prime site of *pranavayu*, *alochakapitta* and *tarpakakapha* also seat of thirty seven *marma* (vital points). It is stated that man is like tree having his root above and branches below, hence disease which destroy the root should be won over quickly from root.^[19] *Shira* is vital organ where all the sense organs resides and *prana* (life activity) is centralized, and chief among all the parts of the body should be protected.

Hridya (Heart) : *Hridya* is understood similar to *pundrika* (lotus bud) is facing downward, it opens when the person is awoken and close when person is into deep sleep. It is a vital organ of body, any injury to it definitely lead to death^[20]. It is considered as prime site of *sadhakpitta*, *vyanvayu* and *avlambakakapha*. It is one among *tri-marma* of body.

Basti (Urinary Bladder) : *Basti/Mutarasaya* is receptacle organ of *mutra* (urine) and an important seat of life. It is situated in the midst of the umbilicus, back, waist, scrotum, rectum, groin and penis. It is a structure having thin covering with one orifice and placed facing downward. *Basti* (bladder), *bastishira* (fundus of bladder), *pourusa* (prostate), *vrisana* (testicles) and *guda* (rectum) are interrelated and situated inside the cavity of the pelvis, pelvic bone and rectum. It is similar to *alabu* (pitcher gourd) in shape and supported by *sira* (veins/blood vessels) and *snayu* (ligaments).^[21]

Srotas (Channels) : *Srotas* are channels of circulation or tracts within the body. These are having the tendency of trickling or oozing of secretions so considered as *srotas*. These are pathways (*ayana*) for nutrient products, waste-products and *dosha* during metabolism. *Srotas* are originated from vacant spaces (hollow organs) spread throughout the body and purveys materials are considered as *srotas* (channels). These are apart from *sira* and *dhamn*^[22]. *Srotas* are defined as transporting passage of *dhatus*, undergoing transformation^[23]. *Srotas* are passage from which *manas* (mind), *prana* (life), *anna* (food), *jala* (water), *dosha*, *dhatu*, *updhatu*, *mala*, *mutra* or *vistha* are transported, are called *srotas*. These are numerous and immeasurable^[24]. The basic sites of *srotas* are different with different functions and are fixed as they are carrying the material, their openings are innumerable. The *Srotas* can be corelated with the unicellular structures such as capillaries or alveoli of lungs.

Sira (Vein) : *Sira* are those vessels which tend to take *doshas* (impurities) along with them. *Sira* is considered as *sarnat-sira* i.e. smooth flow. *Acharya* Susruta has stated *sira* in two context first i.e. *sira* has been used to denote the vessels second in specific sense *sira* means veins. In general, *sira* includes artery, vein, capillary and lymphatic together. These are 700 in number and four types depending upon the site and transport of particular *dosha* such as *vatavasira*, *pittavasira*, *kaphavasira* and *raktavasira* each is 175 in

numbers. All *sira* are originated from the umbilicus, from where they travel upward, downward and in oblique directions. In the fetal life *sira* are concerned with the nutrition of the fetus through the umbilical cord, thus *Acharya Susruta's* description regarding the origin of *sira* seems to be correct. *Acharya Susruta* has mentioned *siramarma* and also the description of bloodletting and vena section (*sira-vedhan*) which is substitute to various surgical procedures. In various diseases, there is specific anatomical site is mentioned for *sira-vedhan* for particular disease^[25].

Dhamani (Artery) : *Dhamani* is tubular vessel or canal starting from heart or from the naval to carry *rasadhātu*. *Dhamani* refers to *dhamanad* considered as a tract which produces pulsation. *Acharya Susruta* has mentioned that *dhamani* are different from *sira* by virtue of pulsatile movement. Also *sira* and *dhamani* are the channels other than *srota*. *Dhamani* originate from *nabhi* (umbilicus) and these are twenty four in number dispersing ten upward, ten downward and four obliquely. In Charak *samhita*, Astanga-sangraha and Astanga-hridaya, *nabhi* word has been used in context to fetal life. *Acharya Charak* has also stated that *dhamani* arise from *hridaya* and 200 in numbers^[26].

Sevani (Suture/ Raphe) : *Sevani* (sutures/raphe) are seven in numbers, among them five are in head and one each in tongue and *sephas* (penis). These should be avoided from the use of sharp instruments (surgical operation).^[27] Injury to *sevani* (Raphe) give rise to pain^[28]. Among seven these are two in *sankha* (temporal region), two in *karkatika*, one is going direct on head one in tongue and one in *sephas* (raphe of scrotum)^[29]. Raphe: A fibrous band made up of inter-digitating fibers of the tendon or aponeurosis, unlike a ligament, as it is stretchable. Suture: These are peculiar to skull and immovable. Depending upon the contour of bony margins, the suture can be plane, squamous serrate etc.

Kurcha (Brush like Structure) : *Kurcha* are six in numbers. They are two in hands (one in each), two in feet (one in each foot), one in neck and penis.^[30] *Kurcha* are spread like *jala* (net) in body. These are the structures which are made up of muscle, bones, veins and ligaments. Aponeurosis is flattened tendon.

Jalal Jalak (networks of lymphatic, arteries or nerves) : There are four *jala*. These are each of *mamsa-jala* (muscle), *sira-jala* (veins), *snayu-jala* (ligaments) and *asthi-jala* (bones) separately. In *manibandha* (wrist) and *gulpha* (ankle) these are present together combine with one another and forming windows (space in between) by their combination. These four kinds of network form *gavaksita* (having window) in entire body^[31].

Kandra (Tendon) : *Kandra* is considered as thick *snayu* (ligaments)^[32]. Commentator Dalhana has mentioned *Kandra asmaha-snayu* (big ligament)^[33]. *Kandra* and *sira* are nourished by *rakta* (blood)^[34]. Tendon are very strong structure assigning a muscle to bone may be a direct one, but quite often the muscle fibers end in cord like structure called tendon. It conveys the pull of muscle to bone.

Mamsa-rajju (Muscle bands/ropes) : Larger *mamsa-rajju* (muscular straps) are four in numbers. These are intended for binding the *peshi* (individual muscles) to the bones located

on both side of the vertebral column i.e. two outside and two inside^[35]. *Mamsa-rajju* can be correlated with longissimus spinalis or iliocostalis.

Rasayni (Duct): Due to weakness of the *rasayni* (ducts/channel of rasa or lymph), the *osas* do not get accumulated in the upper parts of body, hence in patient of *madhumeha* (Diabetic mellitus) eruption develop in the lower parts of body^[36].

Snayu (Ligament): Like boat human body is able to carry weight, because the joints are secured tightly by *snayu* in many ways so that normal movements can occur smoothly preventing abnormal movements. Body entities such as bones, muscles, veins or joint do not lead to death when injured while; *snayu* may lead to death^[37]. *Medas* nourish the *snayu* (ligaments) and *sandhi* (joints)^[38]. These are of four types *sushir* (porous), *prithul* (broad), *pratanvarti* (stretched) and *vritta* (circular) and nine hundred in numbers. Ligaments are fibrous band like structure which connects the adjacent bones, forming integral parts of the joints responsible for smooth movement.

Kostha: Trunk is commonly known as the great channel (*maha-srotas*) in the middle of body extending from above downwards including many *ashaya* such as *amasaya* (stomach) and *pakwasya*(intestine).^[39] It is seat of *ama* (undigested food), *agni*, *pakva* (digested food), *mutra* (urine), *rudhir* (blood), *hridaya* (heart), *unduk* (caecum) and *phuphus* (lungs) are together known as *kostha* (viscera inside the chest and abdomen).^[40]

Aasya: Aasya is hollow organ of the body which contain either *dosha* (bodily humors), *rasa* (lymph), *dhatu* (supportive structures), *mala* (waste products) or *garbha* (fetus) within it. Aasya of body are structures like cavities or organs where the *vayu* has constantly shoot in its embryonic lives.⁴¹ There are eight numbers of *aashayas* and meant for storage of specific material and have a surrounding outer covering. They are named as *vatashaya*, *pittashaya*, *shleshmashaya*, *raktashaya*, *aamashaya*, *pakvashaya*, *mutrashaya* and in female the eighth *aashaya* is *garbhashaya*. *Vatashaya* may be considered as colon, *pittashaya* may be gall-bladder as it stores bile, *shleshmashaya* may be lungs, *raktashaya* may be organs like liver, spleen and heart, *aamashaya* as stomach, *pakvashaya* as organs like large and small intestine, *mutrashaya* to urinary bladder and for *garbhashaya*, uterus may be considered.

Peshi (Muscle): *Peshi* is compact form of *mamsa dhatu*, having muscle fibers are arranged side by side separated with each other. *Peshi* are lengthy and having fleshy appearance. *Acharya Susruta* mentioned that *vayu* (*vata*) combined with *usma* (*pitta*) get processed and creates *srotas* (channels) entering into the muscle tissue, *vayu* and *pitta* divide the muscle into *peshi* (individual muscle).^[42]

Asthi (Bone): *Asthi* is stubborn constituent which sustain further even after most part of body has been decayed after death. It remains like a last identity of person even after demise.^[43]

Sandhi (Joints): *Sandhi* is stated as *asthisamyoga-sthaana* considered as to unite or the meeting point of two or more structures. *Asthi-sandhi* is considered as only bony joints

under the term *sandhis*. Many *acharya* have mentioned different numbers of *sandhi*. According to *acharya* Susruta *sandhi* are two hundred ten in number. *Sandhi* are responsible for various movements of the body parts^[44].

Conclusion: After such explicit discussion, it can be concluded that in Ayurveda, concept of regional anatomy is assumed as *shadanga-sharir*. Classification of bones based on shape, size and texture was given firstly in *Samhita*. The basis of classification and nomenclature of muscles in modern science is similar to the *Ayurvedic* description of *Peshi*. The elaborated description of *Pramana-sharir* in the ancient literature show well established concept of anthropometry in past era. In spite of the fact that *Charak-samhita* is *Kayachikitsa* (medicine) predominant, however he has referenced distinctive purpose of *RachanaSharir* than others as *Tri-marma-sharir*. *Susruta-samhita* is *Shalya* (surgery) predominant, consequently referenced *Rachana Sharir* in detail and has offered significance to *MarmaSharir*, *TwakSharir*, *PramanaSharir*, *Shava-chedan Paddhati* (dissection), *GarbhaPrakaran* and so on in detail as Surgery perspective. *Acharya* Vagbhata has referenced unexpected indicates in comparison to others as *Dhamani Marma* and *Maha-marma*. *Acharya* Sharangadhara has referenced *Yakrit-pleehadhara Kala* i.e. different from others. *Madhvanidan* has acknowledged *Rachana Sharir* in various *vyadhi* (diseases). *Acharya* Bhavaprakash has referenced *YoniNadi* quite unique from others.

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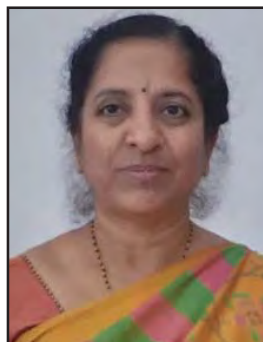
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Effects Of Yoga Therapy On Diabetes Mellitus In Nursing Staff Of S.G.H.

Akut Priyanka V. Sangale S. A., Ambekar M. S.



Sangale S. A.



Akut Priyanka V.

Research :

Effects Of Yoga Therapy On Diabetes Mellitus In Nursing Staff Of S.G.H.

1. **Akut Priyanka V.**, M. A. M. Sc Nursing. Professor cum Principal Seva Nursing College Shirampur
Tel. : (020) – 24356777 Mobile : 9423573546 Email : priyanka_akut@rediffmail.com
2. **Dr. Sangle S. A.**, M. D Prof. cum HOD –Medicine Sassoon General Hospital Pune
Mobile: 9822874712 Email : shashisangale@yahoo.com
3. **Dr. Ambekar M. S.**, Prof. & HOD Ophthalmology
Sassoon General Hospital Pune Mobile : 9049784962
University : Maharashtra University of Health Sciences Nashik

ABSTRACT :**Objective :**

To assess the effect of Yoga therapy in diabetes mellitus among nursing staff working in Sassoon general Hospital Pune

Method :

Cross-sectional study was carried out in 27 diabetic nurses (Average age 49.37 years.) . Group was randomized to receive both diabetes treatment and yoga therapy daily for 1 hr for 3 months by qualified Yoga teachers. The primary outcome measure was to observe effect of yoga therapy to control diabetes mellitus.

Results :

Yoga therapy resulted in a statistically significant in controlling blood sugar GHB, FBSL $p < 0.05$, PBSL $p < 0.01$, cholesterol, LDL, HDL and TG $p = < 0.05$, systolic and diastolic blood pressure and weight reductions $p = < 0.05$, W/ H ratio < 0.02 parameters. Ophthalmic changes -although there is no regression, deterioration was not observed

Conclusions :

Yoga therapy is an effective therapy in the management of diabetes mellitus. Significantly controls glycemc, lipid values, blood pressure and weight reduction. Yoga therapy addresses whole person considering emotional, mental, intellectual and spiritual needs and brings several wonderful systemic effects. Thus yoga therapy is useful to treat and prevent complications in diabetic patients. (12)

Key words :

Diabetes mellitus, Yoga therapy

Introduction :

Diabetes Mellitus usually follows systemic complications if blood sugar, lipid parameters, weight reduction is not under control and significant clinical morbidity is observed. Diabetes

is a major health problem. The World Health Organisation (WHO) estimates that nearly 200 million people all over the world suffer from diabetes and this number is likely to be doubled by 2030.¹ India leads the world with largest number of diabetic subjects earning the dubious distinction of being termed the “diabetes capital of the world”. According to the Diabetes Atlas 2006 published by the International Diabetes Federation, the number of people with diabetes in India currently around 40.9 million is expected to rise to 69.9 million by 2025 unless urgent preventive steps are taken.² Rising trend is due to sedentary lifestyle & mental stress & strain, changing food habits.³ To reduce the disease burden that diabetes creates in India, appropriate government interventions and combined efforts from all the stakeholders of the society are required.⁴ Yogacharya Patanjali gave a scientific path of realization to Yoga.⁵ Yoga exercises gently tone & shape the body, improve posture & flexibility, & contribute feeling of well-being. Yoga exercises gently press on the body’s glands & organs, resulting in positive effects for digestive, endocrine & reproductive system. This increases blood supply & oxygen supply to the organs increasing efficiency of the endocrine system.⁶ Yoga therapy addresses whole person considering emotional, mental, intellectual, & spiritual needs. Hence Yoga may be a positive option in treating diabetes mellitus. Hence the present study was planned to determine whether yoga therapy is useful to control diabetes and its related complications.

METHODS :

Cross-sectional study was carried out in 27 diabetic nurses working in Sassoon General Hospital after ethical committee approval. An informed consent was obtained from all the 27 subjects.

Procedure :

Inclusion criteria were fasting B.S.L. > 126 mg/dl & P.P.B.S.L > 140 mg/dl. Weight, body mass index, waist/hip ratio, blood pressure, fasting P.P. B.S.L, Glycosylated hemoglobin & lipid parameters were checked prior & after 3 months of yoga therapy.

Yoga training was given to nurses daily for 1 hr for 3 months by qualified Yoga teachers. Diabetic nurses also underwent different cleansing processes for e.g.. Jal-neti, vaman & master cleansing shankhprakashana. Subjects were undergone detail check up by physician and ophthalmologist prior, during and after yoga therapy

Data Analysis :

Data was analyzed by inferential statistics.

RESULTS :

Majority of cases that develop their diabetes after the age of 40 years⁸ Average age was 49.37 years. Weight, B.M.I. and waist hip ratio reduction was highly significant in this study. Mean systolic blood pressure was decreased from 131.33 to 126.96 and mean diastolic blood pressure was reduced from 8.59 to 77 which is statistically significant. Mean cholesterol level was decreased from 209mg/dl to 191mg/dl. Triglyceride was reduced from 182mg /dl

to 109 mg/dl all these parameters are statistically significant. Yoga therapy resulted in a statistically significant in controlling blood sugar GHB, F BSL $p = < 0.05$, PBSL $p = < 0.01$, cholesterol, LDL, HDL and TG $p = < 0.05$, systolic and diastolic blood pressure and weight reductions $p = < 0.05$, W/ H ratio < 0.02 parameters. Ophthalmic changes -although there is no regression, deterioration was not observed Average Cost on Medicines – Before : Rs 378 /- (within 3 months) After : Rs 325 /- Average cost reduction – Rs. 53 /- for 3 months per nurse. Therefore Rs 212 /- will be reduced for each nurse per year.

DISCUSSION :

Many studies have reported the beneficial effect if the practice of yoga on diabetes. Some studies have mentioned up to 65% beneficial effect of yogic therapy for diabetes^{9,10} Number of receptors decreased with obesity³. The level of serum insulin increases with exercise, weight loss, keep better glycaemic and lipid control which helps to reverse heart disease³. Weight, B.M.I. and waist hip ratio reduction was highly significant in this study. Mean systolic blood pressure was decreased from 131.33 to 126.96 and mean diastolic blood pressure was reduced from 8.59 to 77 which was statistically significant. Yoga exercises helps to keep the blood vessels elastic and yoga exercises combined with relaxation training i.e. Yoga nidra , omkar chanting helps to alleviate the stress and has very good effects in reducing blood pressure.¹¹ It also helps to increase concentration, decision making and reduce thoughts in our mind with breathing technique¹¹. Nadishodhan pranayam or alternate nostril breathing has calming effect on mind which reduces stress levels helping to reduce hypertension and diabetic treatment^{11,12}. Bharamari and bhasrika pranayam has calming effect on mind, brain and nervous system^{12,13}

In 2005 study patients with type 2 diabetes were put on a 40 day yoga routine taught by an expert yoga teacher. The postures performed were: Surya namaskara (sun salutation), Trikonasana (triangle pose), Tadasana (Mountain pose), Sukhasana, Padmasana (lotus pose). Bhastrika pranayama (breathing exercise, Pashchimottanasana (Posterior stretch). Ardhamatsyendrasa (Half spinal twist), pawan muktasana, Bhujangasana (cobra pose). Shavasana. At the end of the 40 days of performing the asanas, on average the study participants had a decrease in fasting glucose levels, a significant decrease in waist-hip ratio and beneficial changes in insulin levels.¹³ At the end of 40 days of performing the asanas, on average the study participants had a decrease in fasting glucose level, a significant decrease in waist hip ratio and beneficial changes in insulin levels.¹⁴ Ocular observation and evaluation shows no further deterioration will definitely encourage all of us to prevent further complications in diabetes. Yoga therapy addresses whole person considering emotional, mental, intellectual and spiritual needs and brings several wonderful systemic effects.

CONCLUSION :

Yoga therapy is an effective therapy in the management of diabetes mellitus. It helps to control glycemic, lipid and weight control and prevents complications. It is a cost effective way of reducing the drug expenses.

ACKNOWLEDGEMENT :

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KEY MESSAGE :

- Yoga therapy is effective in controlling diabetes mellitus.
- It reduces the dose of drugs and thus has cost reduction in purchase of drugs.

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Purusharthas Past & Present

Lucia Tommasini Giannandrea



Lucia Tommasini

Purusharthas Past & Present

Lucia Tommasini Giannandrea

Certified Naturopath - Standard UNI 11491 - Law 4/2013 - Law 13/2013 - EFQ "European Qualifications Framework"

Psychodynamic holistic operator, self-employed according to the law 4/2013

President of the Popular University of Classical Biodynamic Naturopathy, Italy, associated with CNUPI

Ayurveda teacher, Discipline biodynamic teacher

Ayurveda Counselor, Ayurveda Free University, Pune, India

Member of the Scientific Committee of the S.I.N.A.P.E. FeISA CISL, Italy

Professional registered trainer AiProF.

Cell: + 39 347 3017352 Mail id. tommasini123@gmail.com

We are living the end of an era which at the same time, is the beginning of the new era.

Indeed, we have a certain number of responsibilities.

The negative point stressed at present is the belief that we have discovered almost everything and that science is a point of reference.

We neglect the past because all findings were obtained without the aid of machines and statistics. Really, no evidence was proved and instead was accepted at face value.

In modern medicine, which aspect can be proved, measured, which medical evidence can be proved only by the individual? Only pain.

There are four points in Ayurveda which are fading away: Artha, Kama, Dharma and Moksha, the four Purusharthas.

It is very difficult to treat pharmacologically the Purusharthas. Little by little they have become part of the past history of Ayurveda.

We treat the symptom/pain as a matter of reference because we indeed want to cure the illness.

In India, as a natural process of homologation and validation present in almost all sectors of sciences, an Ayurvedic Standard Treatment Guidelines has been established. This represents a major effort of the Ministry of Ayush of the Government of India.

This is an important social advance. However, it will not improve the knowledge and understanding of Ayurveda.

Healing remedies will be standardized all over the country. We cannot criticise this government initiative and at the same time recognize that the remedies prepared in the south were made for that population and their particular constitution and physical characteristics of the people of that region only.

There are certain ayurvedic remedies (willingly the writer wants to be vague) that are effective

for Italian people, others do not cause any positive effect. In Homeopathy, there are remedies effective in the north of Italy and others are effective in the south related to the same illness.

We do trials, produce statistics: interestingly the statistics have shown that pitta constitution supports physical and muscular stress much more easily. The writer imagines, as happens in the western school, that boys with the pitta constitution will now be selected to start a sporting career, football for example.

Everywhere pain is suppressed, science disregards the cause of the pain and treats all pain with painkillers.

Why does this happen? Why does science suppress the signs in order to establish an almost mechanical, standardized and automatic approach which can be easily directed?

The social wellbeing is the first aim of life.

Despite this, the four Purusharthas never leave the pages of the book and apparently are not connected to the expression of pain and illness.

Nowadays, a central nervous system illness, Parkinsons disease, is widespread. The incapacity of the brain to produce dopamine generates a number of symptoms that the most recent research shows is connected to the bowels.

Parkinsons highlights the imbalance of Vata, Pitta and Kapha. When the three doshas are involved we know that the case is difficult and at least in the west, a number of medications are used to 'support' excess and deficiency.

We have discovered and proved that bowel functions are linked with this illness. Of course bowels and Vata should be treated accordingly.

Mind triguna is a development which is neglected while the illness caused by the imbalance of Vata, Pitta and Kapha takes precedence.

The mental aspect of human life and the wonderful support Ayurveda can give for the realization of Purusharthas is neglected because it cannot be transformed into a medicine. In this context, Vaidyas shall not prescribe and should become examples in order to have the strength to teach. Quantic physics says that we are what we think, that our thinking can modify events, that our behaviour can generate 'waves' spreading from the chromosomes of the DNA.

Bowels are governed by Vata and we should select and modify the vatic psychological attitude in order to balance the bowel functions.

At the same time, we shall do the same with the kaphic psychological attitude in order to cancel its activities and reduce the cerebral tensions. We cannot forget pitta. Pitta psychological attitude can be the cause of the alteration of vata and kapha or instead, the symbolical fire of pitta has been turned off by vata and congested by kapha.

Sattva, Rajas, Tamas, the three psychological functions of the 'I am', have to be considered the first cause of immune deficiency.

The imbalance or deficiency of this system is really the base element of the terrain in which the cause or the pathological element of the disease resides.

We originate from Spirit or Cosmic Energy and passing through matter, we are now returning to that Cosmic Energy.

In a booklet of the Vasant Nature Cure Hospital in Ahmedabad there is a poem written by an American medical doctor and writer, Dr C.J. Buell.

Let me share it with you as a sign of scientific kinship.

PAIN SOLILOQUY

I am pain, most people hate me, / Think me cruel, call me heartless, / Study ways to bribe and fool me, / Try by every means to slay me, / Dope themselves with anaesthetics, / Fill themselves with patent nostrums, / Call the doctor with his poisons, / Seek a Homeopath or a Vaidya, / Not to cure the ills within them, / Not to cleanse and purify them, / Just to kill the guide that warns them. / Pain am I, but when you know me, / When you once have learned my secret, / How I come to help and bless you, / Warn you, guide you, teach and lead you, / When you know my loving nature, / how at first I gently twinge you, / Lightly twinge you as a warning, / Hoping thus, by kind reminder, / You will hear my voice and listen- / Sure am I that when you know me, / you will gladly then embrace me, / Call me friend and give me welcome, / When you learn to live as Nature, / In her great and boundless mercy, / In her tender, loving kindness, / In her wisdom and her goodness, / Meant that man should live and labour, / When you learn to shun the by-ways, /

Leading off to vicious habits, / When you learn to keep your body, / Healthy and clean, mind pure and active, / I will not come and hurt you, / Give it work in right proportion. / Give it air, and food, and water, / Fit to build its every cell, / Fit to nourish every function, / When you teach your mind and spirit, / Pure and noble thoughts to harbour, / Drive out fear, and hate, and malice, / Cherish love and kindly motive, / This is, then, the truth I bring you, / Not to harm you but to heal you, / That I come to guide and teach you.

PITTAJ DAHA - A SINGLE CASE STUDY

Yashashri Arun Vitonde, A. K. Burley,



Yashashri Vitonde



A. K. Burley

PITTAJ DAHA- A SINGLE CASE STUDY

1. Dr. Yashashri Arun Vitonde,

Assistant Professor, Department of Kayachikitsa,
CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad.
Email ID – yashashri15aug@gmail.com Mobile no.- 9423649578

2. Dr. A. K. Burley,

Professor, Department of Kayachikitsa,
CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad.
Email ID – Dr.anilkburley@gmail Mob no.- 9921550199

ABSTRACT : Daha is a condition where in internal burnig sensation occurs not because of external causes like exposure to Sun, Fire etc but due to endogenous ie internal factors. Factors which causes pitta prakop and under the influence of vata, it spreads in the internal system and produces daha¹. Most of the symptoms resembles like Pittaj Jwar ie. high temperature, lack of sleep, vomiting sensation, dryness of throat delirium and bitter taste sensation in the mouth etc. Burning syndrome , though it is not mentioned in Ayurveda. In this study, the aim of our treatment is to reduce pitta by giving Anuloman after taking Snehapan, Ksheerbasti and Pitta-shamak Aushadhi, Aahar-vihar. In this study, a patient 30 yrs. Female diagnosed as Pittaj daha was given above treatment for 2 months and successfully get relief without remission.

KEYWORDS : Pittaj daha, Sarvang daha, Atisweda, Ksheerbasti.

INTRODUCTION : Daha means burning sensation. In this disease, there is burning of whole body². Agreevation of pitta due to Pittaj Prakriti, Ushna-tikshna Aahar Vihaar and Atikrodhadi Manas bhav are the main causes of this disease. There are many types of daha ie. Pittaj, Raktaj, Trishnanirodhaj, Madyaja, Raktapunakoshthaj, Dhatukshayaj, Kshataj and Marmabhighataj. According to Yogratanakar, this is caused by agreevation of pitta , which then vitiates rakta and spreads through out the body . And finally gets localized in the skin , hence burning is caused⁴. While according to Harit, agreevation of saman vayu and pitta vitiates rakta and then gets localized in to the skin causing burning sensation⁵. In above case, symptoms are similar to Pittaj daha ie. Pittaj Jwar with Ati trishna, Atiswedapravrutti, Mukhapak, Shirashool, Atirajpravrutti, perspiration, vertigo and fainting. Hence the main treatment is to reduce pitta. For this Snehapan, anuloman, Ksheerbasti as well as all the Pittashamak chikitsa are important. Herbs of choice are Chandan, kamal, Usheer, Priyangu, Lodhra, Sugandhivala, Nagkeshar, Ela, Musta etc. used⁶.

CASE STUDY : A 30 yrs female patient, housewife, came to hospital with symptoms like profuse sweat, foul odour of body and mouth, burning sensation of hands as well as legs, Stomatitis, burning micturation etc. By nature patient was anxious and short tempered (Krodhi). Due to which her marriage get spoiled. Patient was suffering with above complaints since 1 year. Treatment started first with with counseling and daily Anuloma-vilom Pranayamafor 10 min. As a routine patient was examined and diagnosed by Ayurvedic

Approch. Ashtavidha pariksha had been done.

Patient Name : ABC 30 yrs/ Female

Religion : Hindu

Occupation : Housewife

OPD No : 2524

IPD No. : A- 18

D.O.A. : 12/06/2018

Chief complaints :

1. Sarvanga daha
2. Atiswedapravrutti
3. Shirashool
4. Netra daha
5. Mukhapak- Mukhadurgandhi
6. Tiktaamlodgar
7. Atirajpravrutti
8. Malavashtambha.

(All the symptoms was from near about 1 year.)

Past History : There is no any past H/O HTN, DM, TB, Peptic ulcers or any Endocrine disorder **except** Hyperacidity and Short-tempered by nature.

On Examination:

G.C. – Good, Afebrile.

Temperature – 99° F

P.R. – 88/min.

B.P. – 120/80 mm Hg.

CVS – S1 & S2 Normal

RS – Chest clear AEBE

CNS – Consious, well oriented.

P/A – Soft , non tender

Jivha – Saam

Mala – Malavashtambha.

TREATMENT PROTOCOL :

Samanya chikitsa³ – All the Pitta alleviating procedures, diet and behavior has been followed. The patient has been kept in cool atmosphere, she was anointed with paste of cool herbs like Chandan and Usheer⁴. Shatdhaut Ghrut was also applied at the palm and soal. As well as application of Durva swaras to all over the body⁵. She was also advised to apply krushna mruittika lepa on abdomen. Patient had been given cool water and fruit juices to drink.

Vishesh Chikitsa –

Shodan Chikitsa –

- A. First of all, Aampachan done. Then Aabhyanter Snehpana was given for 3 days with Shatavarisiddha Ghrut (30 ml/60ml/90ml/120ml) .

- B. After Snehapana, Sarvang Snehan and Swedan done for 3 days. On 4th day Virechan given with Avipattikar churna 20 gm. with proper Sansarjan krama³.
- C. Then in next week, again Sarvang Snehan and Swedan done with Shirodhara for 7 days. Chandanbalalakshadi tail was used for Shirodhara.
- D. Now in next week, Sarvang Snehan (Shatavari taila) and Sweadan done with Ksheerbasti for next 7 days. Shatavarisidhha dugdha was used for Ksheerbasti.
- E. Within all Panchkarma procedures, patient had taken chandanasav 20 ml BD after meal.

Shaman Chikitsa –

In second month, only Abhyantar Aushadhi was given to Patient for 1 month.

1. Mouktik Kamdudha vati 100 mg BD after meal.
2. Audumbaravaleha 20 ml BD after meal⁷.
3. Avipattikar churna 5 gm at night with lukewarm water.

Throughout the treatment plan, proper Pathya had been followed by patient. In Aahar, old rice, old ghee, Green gram, milk, coconut water to drink, fruit juices like Pomegranate, Pinapple, Grapes and Phalasa etc. as well as Saktu had been taken by patient. Also some Apathya was advised to her ie. Avoid prakruti and kal virudhha food and drinks like tea, coffee, smoking, Alcohole, oily and spicey food, Fasting, late night sleep, mobile games, Mental stress, tension, Anger, withholding of urges, riding on animals or vehicles, heavy exercise, exposure to heat, Sex etc⁸.

Follow up was taken by 1 month and Observations was carried out. No new complaints raised during the follow up period related to study.

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

Sr. No.	OBSERVATIONS	BEFORE T/T	AFTER T/T
A.	Chief Complaints	Day 1	Day 60
1.	Sarvanga daha	Severe	Absent
2.	Atiswedapravrutti	Severe	Mild
3.	Mukhapak- Mukhdurganghi	Severe	Absent
4.	Tikta-amla aasyata	Severe	Absent
5.	Ati-Rajpravrutti	Severe	Mild
B.	Pathological	Day 1	Day 60
1.	Hb	9 gm%	12.5 gm%
2.	ESR	37	10
3.	Urine Routine- Pus cells	8-10	00

DISCUSSION : According to Ayurveda, Daha is disorder involving Pitta, Vata with Raktavaha Strotas and Trimala ie. Mutra, Purish and Sweda. The above given treatment works to reduce Saam Pitta in the body and improve the Jathargni as well as Dhatvagni by its immunomodulating effect. The given treatment were having Pittashamak properties. The present research work was mainly based on the clinical assessment of above sign and symptoms. Effect of therapy was assessed on the basis of scoring chief complaints with Blood routine examination mainly Hb%, ESR, Urine (R) examination before and after treatment. It is observed that patients depression is also decreased upto 60 % and now there is regular menstrual cycle.

CONCLUSION : In this case, complaints of patient are very much diminished. All the complaints like Sarvang daha, Atiswedapravrutti, Tikta- amlaasyta, Mukhapak-mukhadurgandhi, Malavashtambha, Ati- rajapravrutti are markedly diminished in the 2 months study. In conclusion, Pittaj daha can be diagnosed as Urdhvag Amlapitta and symptoms can be controlled up to higher extent by using Ayurveda treatment regimen for long period of time and by following proper Pathya in Aahar as well as Niyamit Snehan, Anuloman, Ksheerbasti at regular basis. In this context, it is suggested that treatment should be followed regularly.

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Concept of Dosha - apprehension and assessment

Mrs. Indapurkar Kavita



Kavita Indapurkar

Concept of Dosha - apprehension and assessment

Dr. Mrs. Indapurkar Kavita

M. D., Ph. D., Professor and Head, Department of Kriya Sharir
Bharati vidyapeeth college of Ayurved Katraj Dhankawadi Pune 43
Cell no – 989079168 - Mail id - kavitainapurkar@gmail.com

It is time to justify scientifically the existence and functions of Doshas.

Vata Pitta and Kapha are three important Doshas according to Ayurved and when we want to discuss about them always the first query arises that whether these are structural or functional. Tridoshas are structural and we can observe their functions. They are Dravyas.

According to Charak Samhita, Dravyas are always associated with Gunas and karmas. So they are not only functional but also structural. Cha.Su.1/51.

Dravyas are of two typesKarya Dravyas and Karan Dravyas.

Parmanu of Panchamahabhutas, Kal, Disha Atma, and Manas are nine Karya dravyas. They are Nitya.

Doshas are Karya Dravyas. They are Anitya. They are formed from the Karandravayas. Dosha Dhatu Malas are Panch Bhautik..and so also Aushadhi dravyas. That's why they can be used to treat the disease. Doshas are no doubt Dravyas. They are Karya Dravyas having specific properties and functions.

Dravya are always with Gunas. (Vaisheshik Darshan) So assessment of any Dravya can be done by the assessment of particular Karma of that Guna.

Assessment of Dosha Dhatu or Malas can be done as follows

- 1..Quantitative assessment
- 2...Qualitative assessment
- 3....Functional assessment.

And this assessment can be done with the help of. Pratyaksha or Anuman praman

Most of the time we have to take the help of Anuman praman.

In some cases direct evaluation of that Dravya or Guna is possible but most of the time we have to assess the Karma of that particular Guna, and with Anuman Praman we have to do the assessment of that particular Dosha.

For example assessment of Kapha Dosha can be done with the help of assessment of Karmas of its Gunas. Panchabhautik Dravyas contain twenty pairs of Gunas which show opposite actions. In disease conditions the treatment should be done accordingly.

Manda Guna is one of the important Guna of Kapha Dosha.

So if we want to assess Kapha Dosha ..we have to assess with its Guna and if we want to assess Manda Guna we have to assess its function..which is Yatrakaraha...

Yatrakaraha means responsible for the journey. Journey of Sharir Parmanu. Manda Guna is responsible for controlling the speed ...controlling the Gati ...controlling the conversion. And so decaying process of Dhatuparmanu will be slower down.

Tikshna Guna is exactly opposite to Manda Guna ..which is responsible for fast metabolism. Pachan Parivartan Dahan.

As compared to that Shaman is the main function of Manda Guna.

All Kapha Vruddhikar Dravyas due to their Manda Guna increase the durability of Dhatus . For Assessment of Dosh ,Prakruti assessment is the most important concept in Ayurveda. Examination of Prakruti is very important in diagnosis prognosis treatment and prevention of disease.

Assessment of Kapha Dosh can be done with the help of assessment of Kapha Prakruti individuals. Due to the predominance of Kapha Dosh specific characteristics are found in that particular individual.

These characteristics are explained in detail in Samhita Granthas.

Regarding Manda Guna it is clearly mentioned that Manda Guna is responsible for the slow movements .slow activities slow speech slow conversation ...in that person.

The person shows slow and stable reactions. Food requirements are also less .

When we want to develop assessment criteria for Manda Guna we have to consider these characteristics of Kapha Prakruti person .

We can ask different questions regarding his daily activities .

This will be a subjective criteria. But questionnaire is also a very important tool for assessment.

The most important thing is the validity and reliability of the questionnaire must be done.

Objective parameter for assessment of Manda Guna can be done with the help of assessment of its effect on body.

It is very essential in this era to develop objective parameters for Ayurvedic concepts. But while developing parameters one must remember that what to assess and how to assess.

Because when we want to assess any particular entity...we must remember that each and every Ayurvedic entity can't be translated and assessed on modern parameters.

Ayurveda is a science. And every science is based on its own principles. If we want to assess the entities explained in Ayurveda we must assess them in a proper way.

Objective parameters should be used properly, so that they can assess the function, with the help of which assessment of that Dravya can be done. Because every time it is not possible to assess the Dravya directly with the help of modern objective parameter.

Further more whatever objective parameter we are using must be reliable and valid.

Research is very important and effective way for globalization Concepts of Ayurveda are very important and must be explained in a proper scientific way.

Reliability is the degree to which an assessment tool produces stable and consistent results. Validity. refers to how well it reflects the reality it claims to represent.

Objective parameter for assessment of Manda Guna can be done with the help of assessment of its effect on body.

After studying the effects of Manda Guna on body ,it is observed that Manda Guna slows down the body functions and body activities .

According to modern science the concept of metabolism can be studied and correlated here. It seems that Manda Guna shows direct effect on Metabolism , it slows down the metabolic rate. According to modern science, Metabolism comprises the processes that the body needs to function.

The word 'metabolism' can also refer to digestion and the transport of substances into and between different cells. Everybody requires a minimum number of calories to live. This minimum number is called the basal metabolic rate

Basal Metabolic Rate is the number of calories required to keep our body functioning at rest The overall number of calories our body uses on a daily basis is referred to as our "total daily energy expenditure" (TDEE). It's determined based on our BMR as well as our activity level throughout the day.

The term BMR is sometimes used synonymously with RMR, which stands for "resting metabolic rate." The difference is that while BMR only measures basic processes of breathing, blood circulation, and temperature regulation in a completely resting state, RMR also includes energy expended by digestion and non-exercise daily movements, like getting dressed and lifting your fork to your mouth.

BMR ...that is Basal metabolic rate can be considered as an objective parameter to assess the effect of Manda Guna of Kapha on our body. RMR and TDEE should also be studied from that point of view.

BMR is neither good nor bad. It's merely our Basal Metabolic Rate, namely the average calories per day we need as a base line.

Basal Metabolic Rate is calculated by the Harris-Benedict equation (created in 1919, but still applicable today). There are various things that affect BMR according to modern science. Keeping this information in mind we should reduce the bias and do the comparative study. Study of BMR and its association with Sharir Prakruti was done in our department ,and it was found that Kapha Pradhan individuals show less requirement of calories than Pitta pradhan individuals....Rather Pitta pradhan individuals show maximum BMR.

Here it can be noted that ..

This result was may be due to the effect of Manda Guna of Kapha Dosha.

This study was done on only 100 individuals. Further study must be done with the help of more sample size. This is very important and essential in this era to develop objective parameters to explain the functions of Doshas in a scientific way.

Guidelines for submission of articles.

- 1) Left top corner of article write one of following :
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- 2) Title , 3) Authors' name, e mail id, phone no. college/institute, university,
- 3) Abstract not more than 200 words.
- 4) Mention no.of references for the article in the bracket.
- 5) Keywords in alphabetical order.
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 - 2) Book : Kulkarni P.H., Hosurkar Geetanjali, 'Obesity & Holistic Medicine', Publisher - Deerghayu Intenational Pune, 1st edition, 2014, pages 42-44
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The Dubai Fountain is a dancing fountain show next to the Dubai Mall and Burj ... music and illuminated by over 6,000 powerful lights and 50 colour projectors. Is spectacular and was designed by the world's leading fountain designer. Each and every building in Dubai.....is different.....artistically well planned....superb.....amazing... I think in Dubai there is a lot of scope for those who have different vision.....And creativity



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With a total height of 829.8 m (2,722 ft) and a roof height (excluding antenna) of 828 m (2,717 ft), the Burj Khalifa has been the tallest structure and building in the world since its topping out in late 2008.

The prestigious 'Life time achievement award'



The prestigious 'Life time achievement award' was conferred upon DI founder editor

Ayurveda Lokguru our beloved Prof. Dr. P. H. Kulkarni and veteran surgeon Dr. S. R. Joshi by 'Rashtriya Shikshan Mandal' (RSM)- the parent organisation of Ayurveda Rasashala, Sheth Tarachand Hospital, Tilak Ayurveda College, Nanal Hospital and sister concerns.

At the ceremony, Oncologist Dr. Shailesh Puntambekar, Dr. V. V. Doiphode, Dr. Dilip Puranik, Dr. Suhas Parchure, Dr. B. G. Dhadphale, Dr. Rajendra Huprikar, Dr. M. R. Satpute, Dr. R. N. Gangal, Dr. B. K. Bhagwat, Dr. Sanjay Gavhane and Adv. Shrikant Patil and Dr. Sadanand Deshpande were present at the dias.

Dignitaries from various fields were present in the auditorium.

This is where Prof. Kulkarni has devoted his life and contributed to the Ayurveda fraternity like never before.

This award indeed is special because it comes from RSM.

Every one of us remembers the glorious years of his tenure as RSM chief. Series of pioneer Ayurveda conferences, Ayurveda Research Institute, NIMA, Pune University, our publications... The list is ever growing. PH had envisioned Ayurveda's global presence much before anyone. Some awards are special. We all know that Prof. Kulkarni has stopped receiving any awards or felicitations for over a decade. He has humbly denied numerous such awards. His philosophy is simple. He says, "I have received many awards. None of them could have been achieved without the colleagues, students and family: It is the responsibility of seniors of all fields to make space for the new generation. The affection I have received keeps me working even today!"

This award is just another feather in his hat. But it's indeed special as it comes from the 'mother' as a blessing!

We, the members of IAA, authors and readers of over 350 books, alumni and students across the globe wish PH a happy and healthy life ahead.

We congratulate you for the award and feel proud and lucky to be your students.

Take a bow!

- Dr. Atul Rakshe



SUTIKA PARICHARYA - A SCIENTIFIC STEP

***Dr. Yennawar S. M.¹, Dr. Sangode N. P.² and Dr. Thote A. S.³**

¹Associate Professor, Department of Prasuti Tantra and Streerog, CSMSS Ayurved

Mahavidyalaya, Kanchanwadi, Aurangabad.

²Assistant Professor, Department of Rachana Sharir,

³Assistant Professor, Department of Kayachikitsa,

CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad.

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***Corresponding Author**

Dr. Yennawar Sandhya M.

Assistant Professor,

Department of Rachana

Sharir, CSMSS Ayurved

Mahavidyalaya,

Kanchanwadi, Aurangabad.

ABSTRACT

According to Ayurveda, a women who has recently delivered [i.e. after expulsion of foetus and apara (placenta)] is called as Sutika. Women during postnatal period (Sutikakal) becomes weak and emaciated due to excretion of moisture (kleda) and blood. Due to appearance of languidness in the body as a result of severe labour pain and exhaustion by constant bearing down effect, sudden unurge in Vata activity during and after parturition leading to metabolic vacuum in physiology.

KEYWORDS: Sutika, Sutika paricharya, Vata dosha, Snehapan, Abhyanga, Udarpattabandhan.

Mostly Saman, Vyan and Apan Vata are vitiated due to pravhan (bearing down) and Rasa-Rakta dhatu kshya. It results into Agnimandya. Agni is the main responsible factor for all metabolic process in the body. Sutika will be deprived of Agni and Bala due to atirasa-rakta nisruti and dhatu shaithilya. If proper care and nourishment is not given it leads to various puperial diseases.

The post-partum care (i.e. Sutika paricharya) is generally designed to purify Vata and promote the function of both Pitta and Kapha simultaneously.

The unique procedure explained in Sutika paricharya (i.e. Deepan, Pachan, Anuloman) Snehapan (Ghruta/Taila), Abhyanga, Parisheka, Snana, Sukhoshna Jalpan,

Udarpattabandhan, Yavagupan, Mansa rasapan, diet and yoga can bring equilibrium in Jatharagni, Dhatwagni, vitiate Vata, Pitta and Kapha which in turn will help for the proper nourishment of Dhatus to bring them to the pre pregnant status.

Synonyms

Sutika – suta + upeta = woman with born child.

Prasuta – pra + suta = woman who delivered child.

Prajata – pra + jaata = woman who gave birth to a child.

Puerperium – puer = child.

Pario = bring forth.

Paricharya = Care of sutika/ Puerperium.

Care of woman who detach “bandha” of suta inside.

AIMS AND OBJECTIVES

LuÉç ÌWû aÉpÉüÉxÍ®αÉìmÉiÉÍzÉÍjÉSÉxÉuÉizÉUÏUkÉÉiÉÑmÉëuÉÉWûhÉuÉâSIÉÉ
YsÉâSUËüìÉxÉxìÉ ìuÉzÉâwÉ zÉÔlrÉzÉUÏUÉ´cÉ mÉÑIÉIÉüÉÏ pÉuÉìiÉ Ì

A. xÉ. zÉÉ. 3/39

- ❖ Advancement in sciences have made researchers to look back into the root i.e. Ayurveda.^[1]
- ❖ To restore the health of the mother and baby in the form of 3R – Repair, Rejuvenation and Reconstruction.
- ❖ Care of newborn and early infancy.
- ❖ Initiation and importance of Breast feeding.
- ❖ To enhance the process of involution of uterus.
- ❖ To prevent Sutika vyapadas.
- ❖ To enhance the practice of post natal exercises.
- ❖ Sexual life.
- ❖ Family planning.

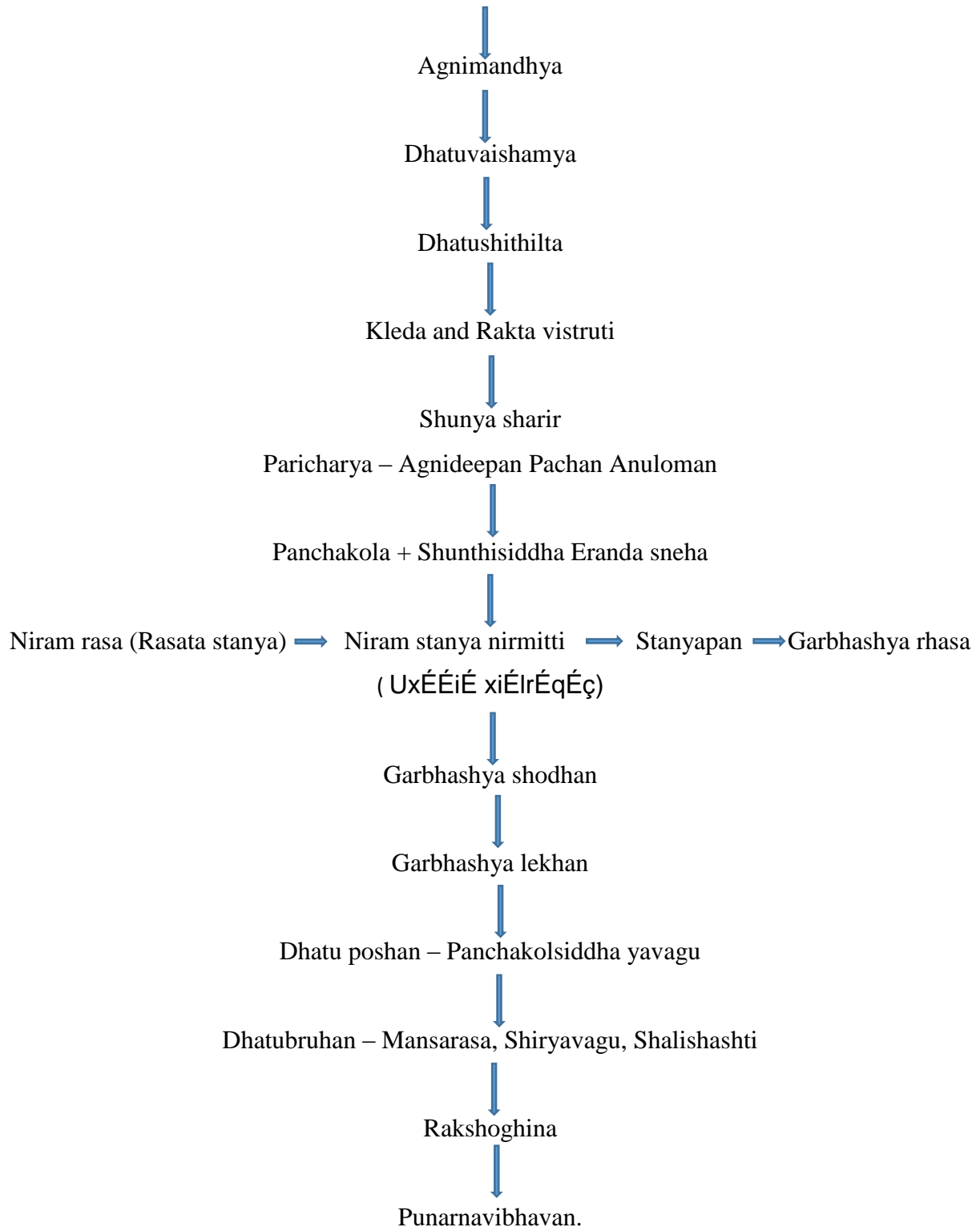
METHODOLOGY

Sutika kala and care based on changes taken place in the body and genital tract after delivery.

1. First 1 to 10 days – Vrani kshati avastha.
2. 11 to 45 days – Stanastanya pravartan.
3. 46 upto 6 months or Restart of Menses.

Concept

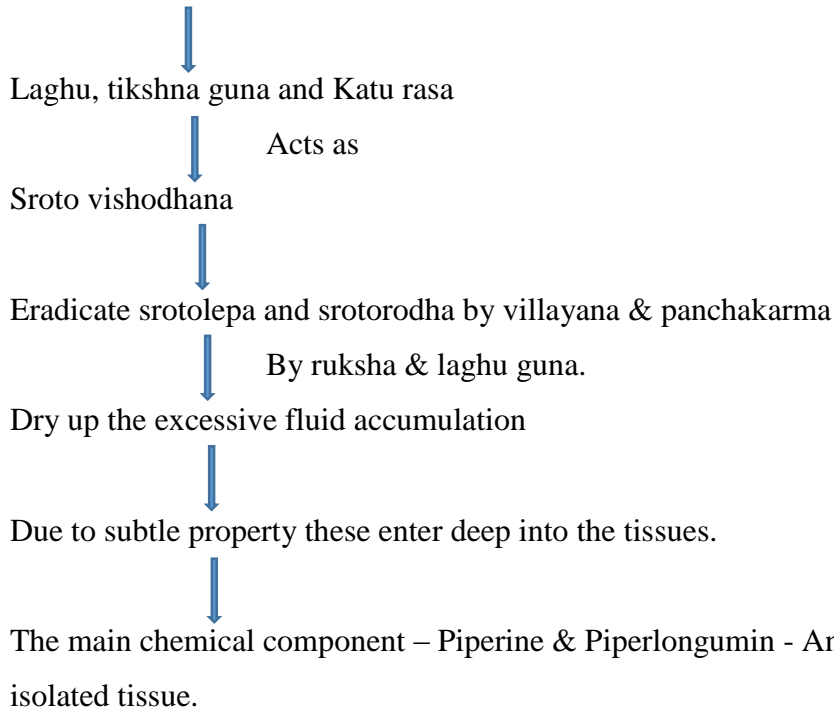
Pravahanjanya and dhatushayajanya vataprakop (Saman, Vyan, Apan)

**STEPS**

1. Ashwasan: Reassurance by ICEing for physical & psychological relaxation (Information, Communication, Education).^[2]

2. Agnideepan- pachan- Anuloman to pacify vitiated Vata dosha (Saman, Vyan, Apan specially) with snehapan(Ghruta/ Taila).

Panchakola churna with Goghрут



- a) Increases the serum levels & lengthen the serum half-lives of some nutritional substances such as coenzyme Q10 & beta carotene.
- b) Acts as a thermo nutrient and increase the absorption of certain nutritional substances from gastrointestinal tract by producing a local thermogenic action.
- c) Marked central stimulant activity & anti-inflammatory action.
- d) Pippali is known for its immunostimulatory effect.
- e) Pippali & Shunthi have rejuvenating property & therefore restore the cellular integrity (Bioavailability enhancer property).
- f) Chitrak root helps to increase in the locomotor behavior & central dopaminergic activity of the patients in their voluntary activity, it helps in relieving pain.
- g) It helps in uterine involution in 3 steps i.e.(contraction, autolysis, regeneration) by efficacy of enzymatic action & relative anoxia induced by effective contraction & retraction of the uterus.

Snehan – A) Bahya**B) Abhyantar**

A) **Bahya snehan** with Bala taila/Vatashamak tail in the form of Abhyanga, Udavartana, Samvahana, especially abdomen, back and buttocks.

Abhyanga – The heat produced through abhyanga and ushna jala parishek allows the blood vessels to become dilated and increase circulation of the blood around the body resulting in more oxygen being allowed to get to the parts of the body.^[3]

- ❖ Abhyanga releases the endorphins from the cells into the blood circulation thus gives pain relief, stress relief, relaxation, hasten the reduction of fluid retention and helps the uterus to shrink to original size (involution), helps to regain the tone and strength of abdomen.
- ❖ Heat generated during the massage burns the adipose tissue. Increases the phagocytosis/ autolysis of the dead cells.
- ❖ Rhythmically massaging the abdomen increases circulation and tone to the internal organs to encourage waste elimination, reduces the gas and bloating.
- ❖ Stimulation of sensory receptors in the peripheral nervous system creates a positive change in all nervous system, thereby restoring haemostasis.
- ❖ Increases the availability of serotonin which regulates behavior allowing us to do the appropriate thing at the appropriate time.
- ❖ Increases the level of Dopamine which influence fine motor activity. It affects intuition, inspiration, joy and enthusiasm.
- ❖ Increased oxytocin is a neurohormone that affects both couple and parental bonding by supporting feeling of attachment and care taking.
- ❖ Reduces the cortisol, a stress related neurohormone produced by adrenal glands.

B) Snehan Abhyantar^[4]

Any one of the Mahasneha along with Panchakola churna depending upon her satmyata, agnibala by the action of Vatahara, srotoshodhana, shulahara, vatanuloman property, it helps for cleansing the uterine cavity. This helps for the proper extraction of uterus, thereby reduces the risk of postpartal hemorrhage and makkalshula.

Goghrita has vital capacity to elevate the weakened agni. Elevation of agni nourishes cell dhatus and increases metabolic rate. Sarpi is effective in all 3 doshas. It alleviates Vata dosha by virtue of its snigdha (unctuous) quality. It pacifies pitta dosha due to its madhura and shitta qualities. It also treats kapha dosha by virtue of sanskara anuvartana. It is good bio

enhancer of accompanying drugs as well as good ojokara (immunity enhance). Ghruta is a rich source of vitamin A, vitamin E and carotenoids.

Yavagu pan^[5] – After digestion of sneha, yavagu is given. It is light carminative, nutritious and liquid diet. It improves abhyavarana and jarana Shakti which helps for absorption of essential nutrients required for the replenishment of fluid and blood.

Panchakola siddha yavagu shows improvement in the vishamagni as well as mandagni. It is laghu, depniya, tarpan, grahi, hrudya and anuloma. They are considered to act as Prana Dharan.

After 7 days

- a) Brahaman yavagu- i.e. yavagu prepared with vidarigandhyadi aushadi as it increases in agnibala and help her to regain strength & energy.
- b) Vatahar yavagu – yavagu with dashmularishta, honey or puran guda.

After 12 days

Mansarasa with shalioodan^[6]

Mansarasa – it is ruchikar. it helps in relieving tiredness, exertion, dyspnea and emaciation. It is ruchikar, nutritive, vattapittahara and useful in dhatukshaya. It is rich source of vitamins, organic iron and calcium.

Udarpattabandhan/ Udarveshtana^[7]

After massaging the uterus with Yamaksneha (Ghruta and Taila) abdominal binding is done with thick cotton cloth, which prevents free accumulation of vayu in the enlarged uterus thereby reduces the occurrence of Vataja disorders. It also helps to retain the abdominal tonicity of abdominal muscles which are very much lax after delivery. It also helps in increase the rate of uterine involution and indirectly helps to control the PPH.

Ushnodaka snana^[8] – Morning and Evening It acts as shramahara, vatahara, oorjaskara. It also relieves pain, stress, strain of the delivery and feels fresh and happy. It also help to pacify the aggravated vayu.

Vishrantee^[9] - as the body is tired after delivery, she is advised to take rest after bath.

Garbhashaya shodhan with Krishna bala, Dashmularishtha or Gud is given. As Dashmularishtha is Vatahara, shramahar, vedanahar. Pure Guda is madhur rasatmak, has preenan karma. Due to its ushna virya, it helps as Kledanashak. It is a rich source of Iron and helps in Rakta dhatu vriddhi.

Garbhashya lekhan with Pippali mula churna and Latakaranja churna by autolysis of uterine muscle fibers.

Yoniabhyanga^[10]

It helps to bring the vagina to the pre pregnant state. It also helps the women to have a sound sexual life further in the future, which is an essential part of harmony and which can save many marriages.

Yonidhupan^[11]

It acts as antiseptic antimicrobial agent. It helps to prevent the vaginal infection. It increases the local blood supply, thus helping for the early healing of the episiotomy and the lacerations (Vrani and Kshati avastha) which again helps for the speedy reconstruction of the muscle fibres thus bringing the tightness in the vaginal muscle and pelvic floor.

Vyayama- any sort of exercise or work done during sutika aggravates vata dosha leading to vataja disorders. i.e. Yoni sansra, Yoni bhransha, Mahayoni, etc. and increases the intraabdominal pressure may lead to genital prolapse in later life. To overcome this problem. Yoga plays an important role to regain the pregnant anatomical structure.

- a) Improving digestive power – Vajraasan, padmasana, pachimottasan, pavanmuktasana, mastendrasan.
- b) To relieve backache – bhujangasan, tadasana, uttanpadasan, trikonasan, ushtrasan, paschimottasan, pavanmuktasan, shalabhasan, shashankasan.
- c) Reducing the belly fat & toning up abdominal organs- suryanamaskar, tadasan, padhastana, pavanmuktasan, bhujangasan, uttanpadasan, dhanurasun, ushtrasan.
- d) Increasing perineal strength – mulabandha, udhyaan bandh, vajrasana, tadasan, paschimottasan.

CONCLUSION

The postpartum is a time of incredible exhaustion. In less than a year, women conceives, develops & delivers a beautiful living creature, a performance that used every ounce of her

body's resources & her body must take on the rigorous new role of readjusting to its pre pregnant state.

The rationality behind using the word "punernaveebhavati" which means completely reconstructing the body of women like a virgin.

Ayurveda the science of life could contribute significantly in improving mother's and newborn's health. The holistic regimen advised during sutika kala, sustain the overall health, nutrition & well being of both the women and baby. The measures are simple, easy to follow by women & families at the household level since the emphasis is on the use of locally available resources.

According to ayurvedic medicine choices made for the first 45 days after birth influence a women's health & ability to become a good mother and a satisfying partner for the next 45 years.

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Role of yoga in polycystic ovarian syndrome

Salunke Ashvini Prakash¹, Yennawar Sandhya M.², Deshmukh Jayashri S.³

1. PG scholar.
2. PG Guide & Associate Professor
3. HOD & Professor

Prasuti tantra & Stree roga Department.

CSMSS Ayurved College Kanchanwadi Aurangabad, Maharashtra

***Corresponding author:**
ashvinisalunke08@gmail.com

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Abstract:

Polycystic ovary syndrome (PCOS) is common endocrine system disorder among women of reproductive age most women with PCOS have many small cyst on their ovaries hence it is called PCOS. The cysts are not harmful but leads to hormone imbalance. One hormone changes triggers another, which changes another forming a various cycle. The incidence of PCOS appears to rising in India day by day it is seen as many as 5% to 10% of women in their reproductive age the incident is increasing may be due to change in life style to more sedentary existence overtime, lack of physical exercise, stress, strain, high caloric food & indiscriminate dietary habit result in metabolic, endocrinal, reproductive disturbances. Therefore women faces various problem related to reproductive disorder like irregular menstrual cycle, ovarian cyst, miscarriage, irritability, abdominal bloating, hair loss, acne, blemishes, hair growth in face, increase weight etc . To overcome through this problem the people are looking forward to *Ayurveda* & allied branches of successful option.

Yoga can play important role in the prevention & management of PCOS. *Yoga* can maintain the Physiology of H-P-O axis. *Yoga* is one of the important refreshing and rejuvenating modalities which can content and even root out stress completely. Since stress is playing important factor in exaggerating PCOS, some of the important *asana* (posture) *Nadishodhan* (anulom), *Bhramri*, *Pranayama*, *Suryanamaskar*, *Bhujangasana*, *Nau-kasana*, *Dhanurasana*, *Padmasana*, *Shavasana*, *Kapalbharti*. *Yoga* help to regulate the endocrine glands in body there by beneficial in balancing of hormones *Yoga* is effective in keeping your ovary & Uterus healthy. *Yoga* is precious gift which can enrich human life.

Introduction:

A woman is symbol of beauty. 'Beauty must not be skin deep, it should be maintained internally also there are many physiological changes take place in women's body which markedly seen in reproductive life. The God has blessed the female with the most valuable gift of motherhood. The preparation of motherhood starts with puberty and end with menopause.

Polycystic ovary Syndrome, widely known as PCOS, is an endocrine system disorder that Affects women in their reproductive years. Where the women experience reproductive, it is characterized by polycystic ovaries, chronic anovulation and hyperandrogenism leading to symptoms of menstrual irregularity, infertility and hirsutism. In *Ayurveda* no direct reference of PCOS is available but it may be correlated with *Aratavakshaya* or with *Pushphaghni Jataharani*. *Ayurveda* advocates that sedentary lifestyle, overweight and increased stress lead to *kapha-vridhi* and *medho-vridhi*, which in turn cause *srotavrodha* or blocking of *Vata* and *pitta* in minute body channel of the body, thereby disturbing the normal physiology. The hypothalamus- pituitary-ovarian axis gets disturbed resulting in the formation of small cyst in spite of formation of a mature ovum & finally leads to amenorrhoea. *Ayurveda* consider involment of four basic etiological factor i.e. unhealthy lifestyle, menstrual disorder, genetic defect, and cytogenic factors in the establishment of female genital disorder (*yoni vyapad*). The symptoms of *Pushphaghni Jataharani* is *Vyarth Pushpa-darshana* (anovular - menstruation), *Shtulaganda pradesha* (cheeks are corpulent) and *Lomayukta*

(hirsutism). According to *Ayurveda*, *Artava kshaya* is a disorder involving *Vata & kapha dosha, Medas Rasa, Artavaha dhatu*. PCOS can be also described with same involment of *Dosha, Dhatu, & Updhatu*.

Kapha Predominance of manifest as increased weight, subfertility, hirsutism, feel of coldness. *Pitta* Predominance of manifests as acne, hair loss, menses with burning problems. *Vata* Predominance manifests with Painful menses, scanty & irregular menstrual bleeding. The pathology is an obstruction (*sanga*) in the pelvic cavity (*Apan Kshetra*) causing disorder in flow of *vata*. This in turn leads to an accumulation of *Kapha* and *Pitta*.

Concept of Yoga:

YOGA means 'Union'.

Union of mind with super natural power having separated from the disharmonious worldly objects. Mind is a battle field of *satva* (the trasquil) *Rajas* (the Passinate) and *Tamas* (the inert) qualities of nature. *Yogik* processes greatly help the development of mental Potentialities and powers. In *Ayurveda charak sharis sthan* Indicate that yoga is highly essential for the human being, so he has indicate that isolation of mind from its object leads to *moksha*, which is ultimate end of human life.

Maharshi patanjali describes *Asthang yoga* as follows.

- 1) *Yama* - Abstention
- 2) *Niyama*- Strict observance
- 3) *Asana* – Easy posture
- 4) *Pranayama*- control Breath
- 5) *Pratyahara*- withdrawal of sense
- 6) *Dharana*- Concentration
- 7) *Dhyana*- Meditation

8) *Samadhi*- Contemplation

According to *Patanjali ashtang yoga* first two that is *Yama, Niyama* are mainly concerned with person's behaviour towards outer world especially with regard to ethics and morality.

Rest are i.e. *Asana, Pranayama, Pratyahara, Dhyana* and *Samadhi* mainly concerned with regulation of activities of mind. These are very useful to correct the various disorder of women life as follows.

1) *Asana (posture)*

- The steady and comfortable Posture brings about better co-ordination of muscular system with nervous system.
- Increase in correcting excessive or insufficient secretion of endocrine gland so that their optimal integration is achieved.
- Hormones go to shake our emotional making their taming produces emotionally balance and mentally poised personality and building a strong will.
- There are many *yoga* postures, which are good for PCOD.

a) To improve blood circulation and also the muscle tone of blood

vessels help in removal of accumulated toxin and metabolic waste from body.

b) To activate the pituitary and thyroid gland hypothalamus, adrenal gland. (Maintain the H-P-O axis)

Hypothalamus (GnRh)



Pituitary → a) Ant- FSH, LH, PROLACT

b) Post- OXYTOCIN

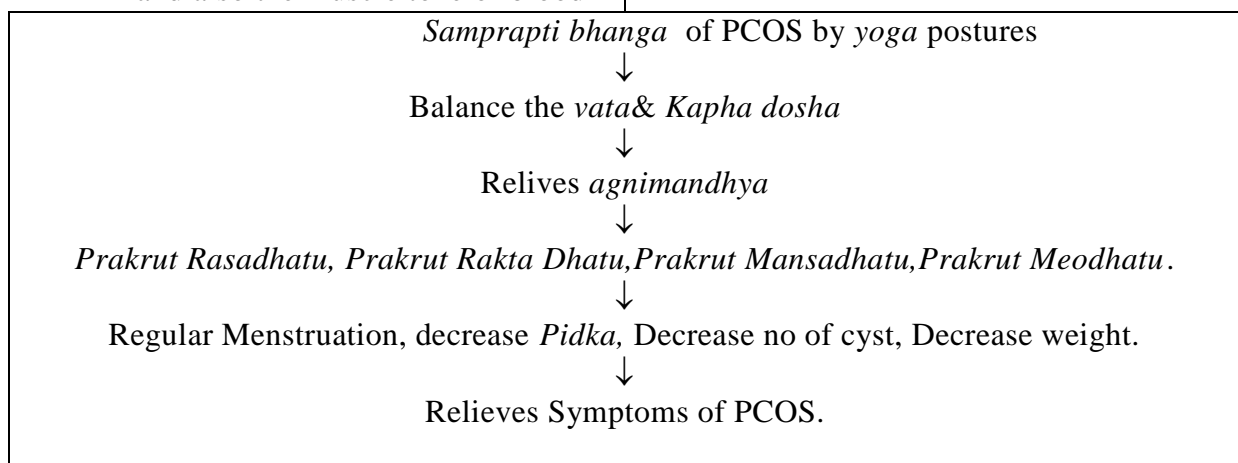


Ovary → OESTROGEN

PROGESTERON

Three Month (daily 10 to 15 minutes) practice noticed that the normal development of secondary sexual character, regularities and correction of PCOD, infertility, removal of inferiority complex, physical and mental stress, unhappiness, which is most important for future a healthy progeny.

Yoga helps to regulate the endocrine glands in the body thereby beneficial in the balancing hormones. *Yoga* helps to balance *tridoshas*.



Some important *Yoga Postures* are given below.

A) Bhadrasana (Butterfly Pose) :

This is an effective *asana* for those who are experiencing PCOD. Butterfly should be practiced coolly and calmly. It helps to open up the pelvic area and Promote relaxation. It beats stress and relieves menstrual discomfort.

B) Surya Namaskar (Sun Salutation):

The twelve *yoga* poses in the sun salutation is good to enhance flexibility in the body as well as effective in controlling hormonal imbalance. *Surya Namaskar* is also helpful in controlling of weight. Sun salutation helps to de- toxify and distress the entire system.

C) Bhujangasana (Cobra pose):

Bhujangasana exerts pressure on the stomach and helps to stimulate ovarian function. it has many advantages like

During *Pranayama* process

Purak (Inhalation of breath)
Kumbhak (Retention of breath)
Rechak (exhalation of breath)

improves digestion, bust stress, good for chest, lungs, and shoulder.

D) Naukasana (Boat Pose):

Naukasana is good in case of PCOS as the boat pose but excess pressure on the abdominal region.

E) Padmasana:

Helps to stretch the pelvic region and good to control hormonal imbalance.

F) Sukhasana:

Improve blood supply to Uterus and Pelvic organ.

H) Chakki chalanasana (moving the grinding wheel):

Help to modify the endocrine glandular function thus enhance the Efficiency of hormonal secretion.

2) Pranayama (Breath):

The vital force of life, is controlled positively by *Pranayama* to ensure homeostasis and wellbeing in humans.

Trains are body to stand in high CO₂ Pressure.

A) Nadisodhan Pranayama:

Nadishodhan Pranayama is also called *Anulom Vilom*, which helps to soothe your mind refresh your brain nerves thereby helpful in de-stressing the body. It brings peace and comfort to your body thus cures the PCOS naturally.

B) Bhamri Pranayama:

It is only *Pranayama* which control all the negative domains such as stress, strain, anxiety, tension, depression etc so, helpful in contending your mood swings.

3) Mudras (finger Posture):

It stabilizes the union of *pran*(inhalation) and *Apan*(exhalation)



Directly action upon *kundalini shakti*



This shines and illuminates the whole body

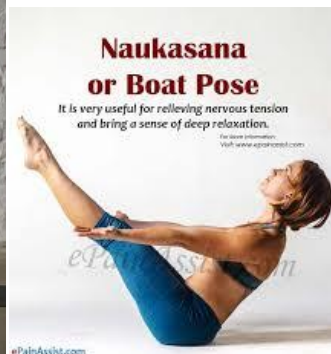
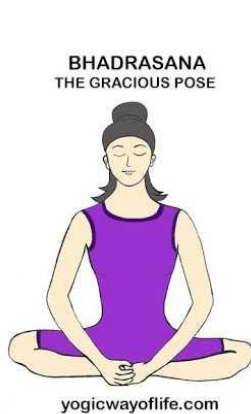


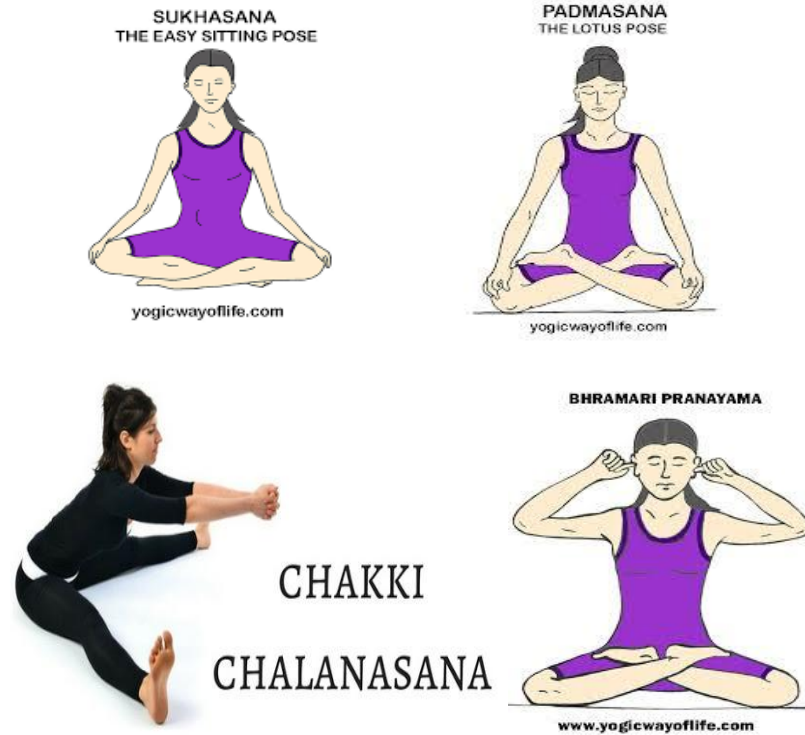
Apart from these days are numerous physiological, cultural and therapeutic benefits of *yogic* exercise, to maintain the health of women.

Conclusion:

Yoga affects every cell of the body. It brings better muscular relaxation, improves strength of the body and increases optimum functioning of all

organ system. *Yoga* can help to Regular menstruation, reduce the body weight & reduce the symptoms of PCOS.





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End of article



ORIGINAL RESEARCH PAPER

Ayurveda

ROLE OF PATHYADI KALPANA IN SOOTIKA

KEY WORDS: Pathyadi Kalpana, Sootika, Ayurved

Yennawar S. M.*	Associate Professor, Stree-Rog Prasuti Tantra CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra. *Corresponding Author
Bawankar R. J.	Associate Professor, Ras-Shastra Bhaishajya Kalpana CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra.
Thote A. S.	Assistant Professor, Kayachikitsa CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra.

ABSTRACT The sootika period which starts from the time of expulsion of placenta stretches up to six weeks according to all Acharyas & even seconded by the modern obstetrician. Generally the woman after delivery is exhausted due to utilization of her nutrition for nourishment of fetus during pregnancy, stress, & strain of delivery. She is considered as having "Shunya sharir" & is prone for disease, so she should be protected from puerperal infection by providing restricted diet & regimen for a period of 1 month. Ahara encourages a good circulation & more specifically restores the muscle tone of the abdominal wall & pelvic floor, so it mainly helps in involution of genital organ. After digestion of food, the niram rasa is formed, sweet essence part of this rasa circulating through entire body by the vyanavayu, reaches stomach & then stanya utpatti takes place.

INTRODUCTION:-

The sootika period which starts from the time of expulsion of placenta stretches up to six weeks according to all Acharyas & even seconded by the modern obstetrician. In special cases of moodgarbhanishkraman, it extends to 4 months & Kashyapa also opined that till the resumption of her menstruation which suggests the "Dhatu-samparipurnata". Lady is to be considered as "Sootika", during this crucial period the enormous changes & adaptations which have taken place in maternal body to accomplish the smooth growth & expulsion of the body. Synonymous word "Punarनावेभवति" which means completely reconstructing the body of woman like virgin.

Generally the woman after delivery is exhausted due to utilization of her nutrition for nourishment of fetus during pregnancy, stress, & strain of delivery. She is considered as having "Shunya sharir" & is prone for disease, so she should be protected from puerperal infection by providing restricted diet & regimen for a period of 1 month.

Though sootika is not a stage of illness, but there is an increase need of supplementation for food & special nutrition. It is realized that after child birth the digestive power the women is weak at the same time her nutritional need increase to meet the dual purpose of regaining her strength & to breast feed the child. Therefore a light carminative, nutritious & liquid diet is suggested in contrast to the sweet, oily, & heavy diet during pregnancy.

The dietary regimen allows time for the body to recuperate as well as protect the digestive functions of the women's body therefore reducing morbidities related to the digestive system in her ensuring normal life cycle.

Ahara encourages a good circulation & more specifically restores the muscle tone of the abdominal wall & pelvic floor, so it mainly helps in involution of genital organ. After digestion of food, the niram rasa is formed, sweet essence part of this rasa circulating through entire body by the vyanavayu, reaches stomach & then stanya utpatti takes place.

AIM & OBJECTIVES:

एवं हि गर्भवृद्धिक्षिपितशिशिल सर्व शरीरधानु प्रवाहण वेदना क्लेद रक्तनिसृति विशेष शून्यशरीराश्च पुनर्नवी भवति ।¹
अ. सं. शा. ३ / ३९

- To restore the health of the mother & baby in the form of three R—Repair, Rejuvenation, and Reconstruction.
- To enhance the process of involution of uterus.
- To enhance niram stanyanirmiti.
- To prevent sootika vyapads.

MATERIALS & METHODS:---

Sootika paricharya according to different Samhitas:--

1)Aacharya Harita²:-

- 1st day:--Fast
- 2nd day:--Nagar, Haritaki, guda at morning, Ushna kullatha yush at afternoon
- 3rd day:--Panchakola siddha yavagu
- 4th day:--Chaturjatak mishrit yavagu
- 5th day:--Shashti Odan upto 10-15 days.

2)Aacharya Kashaypa³:-

- 1-3rd day :--Upvasa(Fast)
- 3-5th day:--Manda according to agnibala.
- 8th day:--After snehapanajirna pipali ,shunthiyukta lavana virahit ,alpa sneha yukta yavagu .
- Aamlayukta kullatha yusha /jungal mansa/kushmanda and mulak kand with ghruta .
- Yonipuran:--- Priyangadi siddha krushra.
- Krushra:-- Tandul+Dal+Lavan+ Aadra+Hinga.

3)Aacharya Charak⁴:-

- 5th-7th day:--Snehapan with panchkola and Yavagupan.
- 8th day :--Bruhana.

4)Aacharya Sushruta⁵:-

- 3rd day:--Vidarigandha siddha yavagu .
- 7th day :--Yava,kola kullatha siddha mamsarasawith snehasiddha odan.
- 12th day:--Mamsarasa.

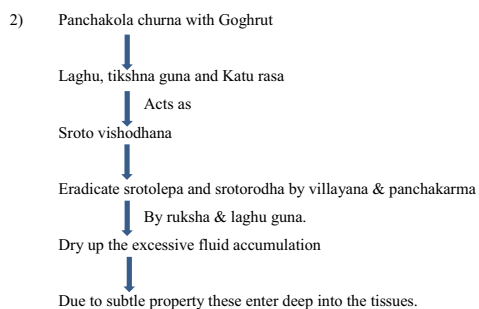
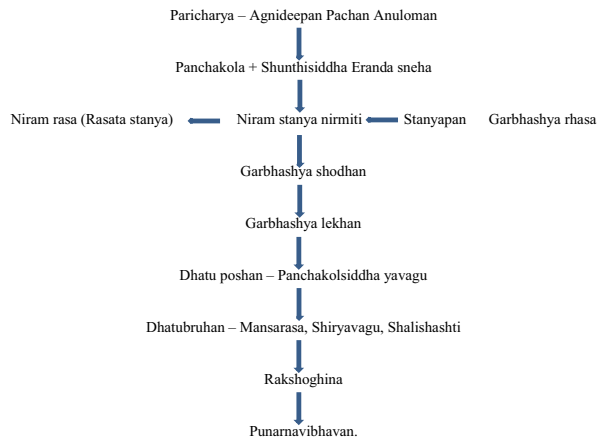
5)Aacharya Vaghabhat⁶:-

- 5th-7th day:--Sneha with panchkola.
- 8th day:-- Yava,kola kullatha siddha yusha with laghu aanapana.
- 12th day:--Mamsarasa.

METHODOLOGY:

Pravahanjanya and dhatushajanya vataprakop (Saman, Vyan, Apan)





Snehan – A) Bahya, B) Abhyantar

A)Bahya snehan with Bala taila/Vatashamak tail in the form of Abhyanga, Udavartana, Samvahana, especially abdomen, back and buttocks.

Abhyanga – The heat produced through abhyanga and ushna jala parishek allows the blood vessels to become dilated and increase circulation of the blood around the body resulting in more oxygen being allowed to get to the parts of the body.

- Abhyanga releases the endorphins from the cells into the blood circulation thus gives pain relief, stress relief, relaxation, hasten the reduction of fluid retention and helps the uterus to shrink to original size (involution), helps to regain the tone and strength of abdomen.
- Heat generated during the massage burns the adipose tissue. Increases the phagocytosis/ autolysis of the dead cells.
- Rhythmically massaging the abdomen increases circulation and tone to the internal organs to encourage waste elimination, reduces the gas and bloating.
- Stimulation of sensory receptors in the peripheral nervous system creates a positive change in all nervous system, thereby restoring haemostasis.
- Increases the availability of serotonin which regulates behavior allowing us to do the appropriate thing at the appropriate time.
- Increases the level of Dopamine which influence fine motor activity. It affects intuition, inspiration, joy and enthusiasm.
- Increased oxytocin is a neurohormone that affects both couple and parental bonding by supporting feeling of attachment and care taking.
- Reduces the cortisol, a stress related neurohormone produced by adrenal glands.

B)Snehapan Abhyantar –

Any one of the Mahasneha along with Panchakola churna depending upon her satmyata, agnibala by the action of Vatahara, srotoshodhana, shulahara, vatanuloman property, it helps for cleansing the uterine cavity. This helps for the proper extraction of uterus, thereby reduces the risk of postpartal hemorrhage and makkalshula.

Goghrt has vital capacity to elevate the weakened agni. Elevation of agni nourishes cell dhatus and increases metabolic

rate. Sarpi is effective in all 3 doshas. It alleviates Vata dosha by virtue of its snigdha (unctuous) quality. It pacifies pitta dosha due to its madhura and shitta qualities. It also treats kapha dosha by virtue of sanskara anuvartana. It is good bio enhancer of accompanying drugs as well as good ojokara (immunity enhance). Ghruta is a rich source of vitamin A, vitamin E and carotenoids.

Yavagu pan – After digestion of sneha, yavagu is given. It is light carminative, nutritious and liquid diet. It improves abhyavara and jarana Shakti which helps for absorption of essential nutrients required for the replenishment of fluid and blood.

Panchakola siddha yavagu shows improvement in the vishamagni as well as mandagni. It is laghu, depniya, tarpan, grahi, hrudya and anuloma. They are considered to act as Prana Dharan.

Brahman yavagu---

Yavagu prepared with vidarigandhadi aashadhi as it increases in agnibala & help her to regain strength and energy.

Vatahar yavagu –

Yavagu with dashmularishta ,honey or puran guda.

Shalioodan—

Snigdha,grahi,laghu,guna helps in agnideepan, bruhan, stabilization.

Manda—

It is agnideepak,vatanuloman,swada janak,so increases digestive power,& nourishes body very quickly & softens the strotos.

Kulattha yusha—

It is semisolid preparation obtained by boiling kullatha. It is Dipak, rochak, swarya, varnya, balakara & agnivardhaka. It increase swadan & give a feeling of contentment & nourish the body.

Priyangadi krushra & krushara—

It is balyakar,buddhiprada,malamutra vardhaka.

Mansarasa with shalioodan

Mansarasa – It is ruchikar. It helps in relieving tiredness, exertion, dyspnea and emaciation. It is ruchikar, nutritive, vattapittahara and useful in dhatukshaya. It is rich source of vitamins, organic iron and calcium.

DISCUSSION:--

Acharya Charaka says to administer “Acchasneha” with Panchkaola choorna when the lady feels hungry after delivery,taking care of her agnibala.

By the action ofvatahara, strotoshodhan, shulhara,vatanuloman, property, it helps for cleansing the uterine cavity by,expelling any bits of placental membranes & retained blood clots in the uterine cavity. This helps in the proper extraction of uterus ,thereby reduces the risk of post partal hemorrhage & makkalshula.

After the digestion “Snehayukta yavagu” is to be administered .The liquid based diet easy to digestion nutrition,gives strength & energy to her very quickly.This is continued for five to seven days and then gradually Apyanana or Brihamana is given to help her to regain her strength and energy.

According to Acharya Sushruta initially abhayanga with Balataila and vataharushnakwathaupa chara is given followed by pana of panchkala choorna with guaodaka for agnideepana. After 2 to 3 days of this upachara ,vidarigandhadigannasiddha sneha or ksheeryavagu is given for three days ,followed by sidha Jangala mansarasa & shalyadana.

Acharya Vagbhata advocated sneha with panchkola choorna & yavani, Upakunchika, saindhava, followed by vidarigandadi gannasiddha ksheera & sneha yavagu.

Kashyapa has given priyangukrishara for abhyanga & swedan followed by ushna ambu snana & Dhoopan.

Kashyapa's concept of samanya sootikaparicharya and vishesh sootikaparicharya according to Desha and kula of the patient seems more practical where as Charak's Acchasnehapan seems to be suitable only for the patients of Jangaladesha as there is vatapradhanta and not for the females of Anupadesha due to kledadikyata and kapha dominance in their body.

Acharya Sushruta's concept of gudodaka with panchkola is appropriate for the anupadeshaj women where dhupana, langhana and kledanirharan should be given prime importance before starting Brihana chikitsa.

The traditional practices of sootikaparicharya of various parts of India, the difference in their diets and customs are strictly different. In the northern part of Rajasthan, Delhi which are relatively dry lands or Jangaladesha, the paricharya starts with kesaribhat (A sweet dish with lot of ghee and rava.) and halwa (A sweet dish with wheat flour and ghee.) & dry coconut scrapings, for the purpose of Agnideepan, Ajmoda is used lavishly and lashuna is used for vatashamana.

In Southern part or coastal belts the initial few days kledanirharan is given prime importance, hence restricted water intake, food without much sneha & laghu anna is advised along with preparation of shunthi followed by ksheeryavagu especially the coconut milk.

CONCLUSION:--

Ayurveda the science of life could contribute significantly in improving Mother's and newborn's health. The holistic regimens advised during sootika kala sustain the overall health, nutrition and well-being of both the women and baby. The measures are simple, easy to follow by women and family at the household level since the emphasis is on the use of locally available resources.

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**Effect Of Madhur Aushadh Siddha Tail Matra Basti (Anuvasan Basti)
For Sukhaprasav - A Single Case Study**

Preeti Ghonge¹ Sandhya Yennawar² Jayshree Deshmukh³

1.MS Scholar , 2. Senior Associate Professor 3.HOD

Department of Prasutitantra avum Streerog,
CSMSS Ayurved Mahavidyalaya.

Abstract:

Pregnancy is physiological event occurring in every woman’s life. Delivery is the end of this stage .Normal Vaginal Delivery is always considered as safe for both fetus & Mother to avoid Post partum complications. Nowadays, LSCS occurrence rate is seen comparatively more than Normal Vaginal Delivery. Hence, to avoid LSCS , proper procedure should be accepted unless & until there are any absolute indications. In Ayurveda ,Maasanumasik Garbhini Paricharya given. Sushrutacharaya has advised Anuvasan Basti for ease of Sukhaprasav .It not only helps in oletion of Apatyapatha but also gives strength to pelvic organs by Vaatashaman. This is achieved when ,regimen adopted from 9th Month of pregnancy up to delivery.

Key words - Normal Vaginal Delivery ,Maasanumasik Garbhini Paricharya ,Anuvasan Basti.

Introduction -

Gestation phase begins from embryogenesis up to development of viable fetus. This ends up after expulsion of this fetus by delivery process ,which is endless joyful moment for female. Throughout complete antenatal duration ,ANC care should be taken, to achieve this. When expulsion of viable fetus occurs via vaginal route , its Normal Labor unless & untill it is cephalic presentation excluding any risk factors.

Because of adoption western culture ,changing lifestyle, sedentary habits etc factors add-on to undergo Caesarian Section .Anxiety ,fear of fetal distress enables Obstetrician to take for Section though ,favorable cervical & uterine conditions..

Ayurveda has elaborated Maasanumasik Paricharya for Garbhini keeping an aim in mind to ease in labor .For Sukhaprasava ,Acharayas have been advised Anuvasan Basti siddha with Madhur Skand drugs.

Out of Madhur Skand Aushadhis, only 5 drugs are chosen for case study,

As follows -

- 1) Shatavari
- 2) Bala
- 3) Guduchi
- 4) Yashtimadhu
- 5) Gokshur

Drug Review -

Na me Of Dru gs	Shat avari	Bala	Gudu chi	Yashti mad hu	Goks hur	T i l
Lat i n na me	Aspa ragus race mosu s	Sida cordifolia	Tinos pora cordif olia	Gly cerr hiza glab ra	Tribul us terrest ris	Sesa mum indic um
Fa mil y na me	Liliac eae	Malvacea	Menis permi acea	Leg umi nos ae ,Pap ilio nata e	Zygo-phylla c-eae	pedal iacea e
Ras a	Madh ur,	Madhur	Tikta. Katu, Madh ur	Ma dhu r,		Mad hur, Kahs ay, T i k t a
Viry a	Sheet ,	Madhur	Madh ur	Ma dhu r		Mad hura
Vip ak	Madh ur	Shit	Usha n	Shit		Ushn a
Dos hag hna ta	Vaat- Pittag hna	Vata- pittaghna	Trido shngh a	Vaa t- kap hag na	Vaatg hna	Vata ghna

Kar ma	.Vaat pittas hama k, Amla pitta - grah ani- arsha nash ak, Hrud ya, Shukr al, Styan yajana , Moo tral, Rasa yan ,	Jivaniya, Sandhani ya, Varny a, Kandhug hna, Mutravir ajniyaSh onitsthapa n,	Aayas thapa n, Daah prash aman, Trush nanig rahan , Stany ashod han, Trupt ighna ,	Vaa tanu - lom an, Mru du- vire cha n Sho nit- stha pan , jiva niya , a Ras aya n, Bal ya	Mootr avirec haniy a , Krum ighna , Shoth ahar , Anuv asnop ag	Vaat ghna, Bala- Varn akar, lekha n, twac hya,k eshy a
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Classical Review of Anuvasan Basti During Pregnancy-

In Sushruta Samhita ,Acharya Sushruta,has indicated Anuvasan Basti in 8th month of pregnancy during Garbhini Paricharya, in Sharir - sthan Adhyay No.10

While ,Acharaya Charaka has indicated Anuvasan Basti in 9th month of pregnancy in Garbhini Paricharyain Sharirsthan Adhyaya No.8.

According to Sushrut , the dose of Matra Basti is equal to half of of the dose of Sneha Basti i.e. Anuvasan Basti.

Clinical Study -

22yrs,female patients with primigravida with 36 wks pregnancy fulfilling following criteras is selected for study.

- Engaged & Cephalic presentation
- Placenta other than low lying position
- Single ton pregnancy
- No any pathological state like PIH or Cephalo-Pelvic Disproportion

Preparation of drug:

Madhur Dravya Siddha Tail was prepared by Sharangdhar Samhita.

1 part: *kalk Of Madhur Dravya* as described above.

4 parts: *tila tail*

Firstly *Tila tail* was heated till *fenodbhava* then *Kalk of Madhur dravays* added to it.This was

heated on slow flame. Heating was stopped after presence of *Siddhilakshanas* of tail.

Administration Criteria -

From 1st day of 9th month up to till delivery, twice a week.

Matra - 60ml

Follow up: after 1 week till start of labor pain

Action Of Basti-:

Acharya Sushruta has mentioned that the action of *Basti* is mainly due to it *Virya*.The *Bastidravyas* spread all over the body ,as the water poured at the root of the trees reaches up to leaves.

He has further explained that even though *Bastidravyas* comes out quickly along with fecal matter ,their *Virya* acts over the whole organism by action of *Apaan* & other *Vayu*. This example has similar with Sun withdraws moisture from earth.

As *Anuvasan Basti* is *Sneha Basti* , its half quantity used practically ,also *varnit* in *Samhita* as *Matra Basti*, giving same results of it.

Conclusion -

Matra Basti is half quantity of *Anuvasan Basti* ,which is used for facility of administration in 9 maas *Garbhini* upto *Prasav*.As *Matra Basti* is *Sneha Basti* ,due to *Snehana* property, the abdomen, flanks, sacrum and all the genital organs becomes *Snigdha*. The *Snigdha* property not only removes the *Rukshta* of *Vaayu* & controls exaggerated symptoms , but also , helps for expulsion of fetus.

Madhur Dravya Siddha Matra Basti strengthens pelvic floor & ligaments as it gets stretched during labor & gives nourishment to it by avoiding vitiation of *Vaata*.

Results -

Use of *MadhutrDravya Sidha Tail Matra Basti* is found effective for *Sukhaprasav*. So , by adopting *Ayurvedic Garbhini Paricharya* in this era too , facilitates in *Sukhaprasava* by enhancing *Garbhini's* physiological & psychological state.

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AN AYURVEDIC PERSPECTIVE OF POLYCYSTIC OVARIAN SYNDROME (PCOS)

Yennawar S. M.*	Associate Professor, Department of Stree-Rog Prasuti Tantra *Corresponding Author
Utkar S. R.	Assistant Professor, Department of Dravyaguna
Sangode N. P.	Assistant Professor, Department of Rachana Sharir
Thote A. S.	Assistant Professor, Department of Kayachikitsa

ABSTRACT The polycystic ovarian syndrome is a common endocrine disorder affecting women in their reproductive age group. It was first time described by Stein and Leventhal in 1935 so called Stein and Leventhal syndrome. It is characterised by a combination of hyperandrogenism either clinical or biochemical, chronic anovulation and polycystic ovaries. It is frequently associated with insulin resistance and obesity. It is the best known and most extensively studied cause of an ovulatory infertility in the reproductive age women. In present era of globalization there has been a transient change in the life style to a more sedentary exercise over time, lack of physical exercise, stress, high caloric food and indiscriminate dietary habits. A medical intervention of polycystic ovarian syndrome includes hormonal therapies which have long term health consequences. Hence, researchers are looking for the Ayurvedic (Herbal) medicine for the treatment of PCOS in alternative medicine which do not causes any side effects.

KEYWORDS : Polycystic Ovarian Syndrome, Hyperandrogenism, Ayurveda

INTRODUCTION

The women is said to be three times more responsible in the procreation. She has to bear the responsibilities of reproduction and bringing up of children for which there is a need for disease free mind, body and in particular the healthy reproductive system.

Owing to complex structure and function of the female reproductive system, women are subject to large number complaints connected with menstruation and also fertility. Among that polycystic ovarian syndrome is one of the major burning issues which reflect as irregular menstruation, oligomenorrhoea, amenorrhoea, infertility, obesity, hirsutism, acne vulgaris.

The polycystic ovarian syndrome is a common endocrine disorder affecting women in their reproductive age group. It was first time described by Stein and Leventhal in 1935 so called Stein and Leventhal syndrome. It is characterised by a combination of hyperandrogenism either clinical or biochemical, chronic anovulation and polycystic ovaries. It is frequently associated with insulin resistance and obesity. It is the best known and most extensively studied cause of an ovulatory infertility in the reproductive age women.

In present era of globalization these has been a transient change in the life style to a more sedentary exercise over time, lack of physical exercise, stress, high caloric food and indiscriminate dietary habits.

A medical intervention of polycystic ovarian syndrome includes hormonal therapies which have long term health consequences. Hence, researchers are looking for the ayurvedic (Herbal) medicine for the treatment of PCOS in alternative medicine which do not causes any side effects.

Ayurveda with the main objective of स्वस्थस्य स्वास्थ्य रक्षणं आतुरस्य विकार प्रशमनम् | has to evolve as a main stream of medicine in combating such emerging health problems like PCOS without any adverse effect by competing with allied branches of evidence based medicines.

As per description in Charaka Samhita which states that whatever the knowledge of medicine that is available else where is included in Ayurveda and whatever that is not available in Ayurveda cannot be found elsewhere.

This verse conveys that, Ayurveda understands a disease based on the *Doshas* and *Dushyas* involved in disease manifestation but the specific nomenclature of the emerging diseases as such in not available as the other streams of medicine. This indicates that there is a description of emerging disorders in Ayurveda which are explained under various contexts which needs to be analysed based on the symptoms. It depends upon the *Yukti* of the physician to derive an exact correlation of the disease PCOS as per Ayurved parlance and arrive at a correct conclusion.

The conditions which are mentioned in various contexts in ayurvedic classics under various headings as *Artavkshaya*, *Anartava*,

Nastrartava, *Vyandya yonivyapad*, *Pushpaghni Jataharini*, *Shushkarevati Jataharini*, *Sthoulya*, *Prameha*, *Strotodushiti*, and *Santarpamothavyadhi* can be to some extent compared with the symptoms of PCOS which needs to be analysed as per ayurvedic parlance.

PCOS – Poly Cystic Ovarian Syndrome Summary According to Modern Science⁽¹⁾

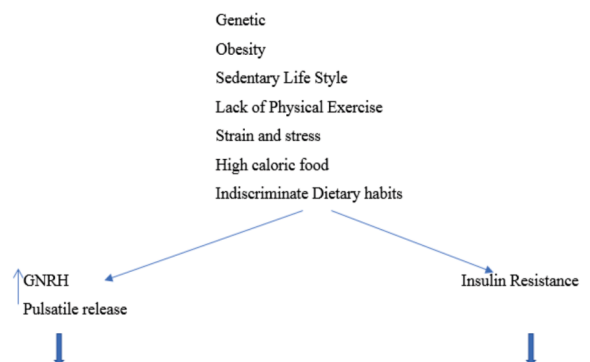
- Most common Gynaecological disorder.
- Prevalence 6-10%.
- One of the leading causes of female infertility.
- One of the leading reproductive, endocrine and metabolic disorder in the world.
- First time described by Stein and Leventhal in 1935 so called Stein and Leventhal syndrome.
- Poly means many/ multiple, cystic- abnormal sac containing fluid, Ovary- female gonads, Syndrome- group of multiple symptoms.
- Characterised by hyperandrogenism, anovulation, and polycystic ovaries.
- Frequently associated with insulin resistance and obesity.

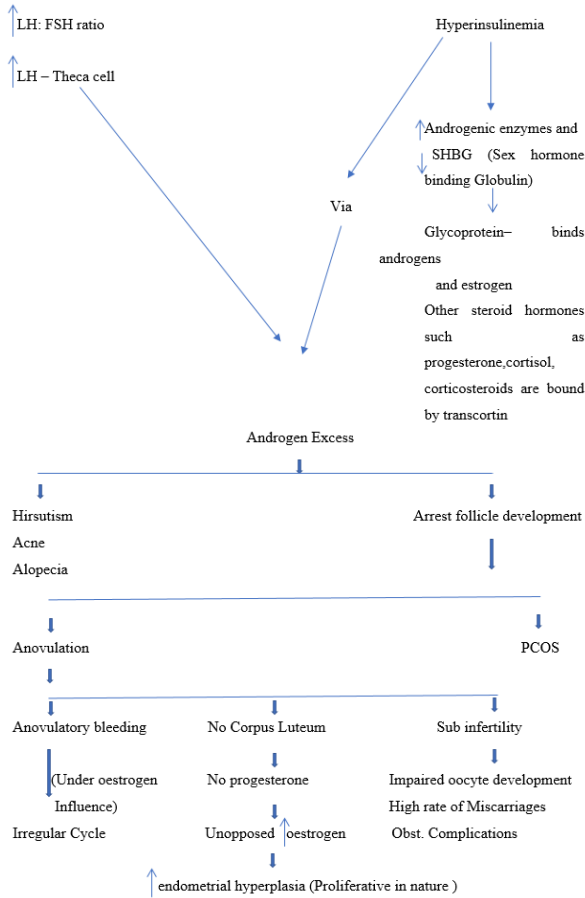
Diagnostic Criteria:-

- Increase in ovarian size
- No of cyst- 12 or more
- Size of cyst- 2 to 9 mm in diameter
- Ovarian volume 10 ml (10 cm³)
- Endometrium thickness 12 mm

Management PCOS:-

- Hormonal and Surgical Intervention (Laparoscopic ovarian diathermy LOD)
- Lowering of insulin level
- Restoration of fertility
- Treatment of Hirsutism and acne
- Restoration of regular menstruation
- Prevention of endometrial hyperplasia





Possible diseases which up to some extent compared to PCOS

1) Vandhya Yonivyapat

वंध्या नष्टार्तवा विद्यात । सु. उ. ३८/१०
 नष्टार्तवा- destruction of artavam
 भवत्यनिलवेदना- causing vatika types of pain

वंध्या निरार्तवा ज्ञेया । भा. प्र. चि. ७०/६, ७
 निरार्तव - Absence of artava

यदा हि यस्याः शोणिते गर्भाशय बीजभागः प्रदोषम आपद्यते, तदा वंध्या जनयति । च. शा. ४/३०

According to Charaka, while describing the beejanshudshti, there is a description that if a part of the beej responsible for the development of uterus and artava is defective, then the born child would be vyandhya.

Here Artava mean Antahpushpa/ streebeeja (ovum) and Nashtartava means Anovulation
 आर्तवं तु द्वित्री बिद्धात्मकं ऋतौर्भवं आर्तवं ।
 मातृद्वित्रिबिंदुकावस्थं शोणितं ॥ अ. ह. सु. १/८
 आर्तवं तु चतुरस्रजली प्रमाणं । सु. शा. ३/५
 Here Artava mean Bahupushpa/ Raja/ Menstrual flow

नष्टार्तवः दौषैरावृत्तमार्गत्वात् । सु. शा. २/२३
 Nashtartava means- Amenorrhoea (It is secondary amenorrhoea which may revert back with medication or by reducing the predisposing factor)

Kaphadosha in an association of vata dosha causing margavrodha (i.e. obstruction in strotas). Hence, Anovulation and secondary amenorrhoea can be taken as one of the symptoms of PCOS (not merely the disease as such)

2) Artavakshaya

आर्तवक्षये यथोचितकालदर्शनमल्पता वा योनिवेदना च । सु. सु. १५/१२
 आर्तव- Menstrual flow

क्षय- Cease or to get reduced

The artavkshaya is a condition where in the menstruation does not appear in its appropriate time (यथोचितकालदर्शन) or is delayed or intermenstrual period is prolonged as well as (अल्पता) the quantity of menstrual flow is reduced or scanty and (योनिवेदना) menstruation is associated with pain.

Irregular and scanty menses is one of the symptom of PCOS.

3) Pushpaghni Jataharini

व्था पुष्पं तु या नारी यथाकालं प्रणश्यति ।
 स्थूललोमशगण्डा वा पुष्पघ्नी साऽपि रेवति ॥
 का. कल्पस्थान रेवती कल्याध्याय ६

पुष्प- Artava (ovum)
 घ्नी- Destruction
 जात- Born
 हारीणी- Destruction
 व्था पुष्पं- Destruction of pushpa (anovulatory cycles)
 यथाकालं प्रणश्यति- menstrual occur regularly
 स्थूल- obesity
 लोमशगण्डा- Hairy chin and cheek (Hirsutism)

so pushpaghni jataharini clarifies both hormonal imbalance and metabolic disturbances.

4) Granthi

सग्रन्थिः ग्रथनात्समृतः। अ. ह. उ. १/३

वातादयो मांसमसूक च दुष्टाः सन्दुष्य मेदश्च कफानुविद्धम ।
 वृत्तोनतं विग्रथितं तु शोफं कुर्वन्त्यतो ग्रन्थिरिति प्रदिष्टः॥ सु. नि. ९/१३

Granthi is considered as round swelling or enlargement in any part of the body. It has been taken in due consideration basically because of the appearance of the cyst in the ovaries, which increase the volume of the ovary and gives it a swollen appearance.

Due to tridosha prakopaka ahara vihara which vitiates all the tridoshas, which in turn vitiates the Asruk, manas and medadhatu, with predominance of kapha dosha causing Khavaigunya at any particular part leads to the formation of vrutta, unnata, vigrathita shopha called Granthi.

Multiple cysts with a typical appearance of a “String of Pearls” or “Pearl Necklace”. These cysts are fluid filled sacs in the ovary which increases the volume of the ovary giving it a swollen appearance. These are the Hallmarks of PCOS.

5) Sthoulya (Santarpanotha Vyadhi)

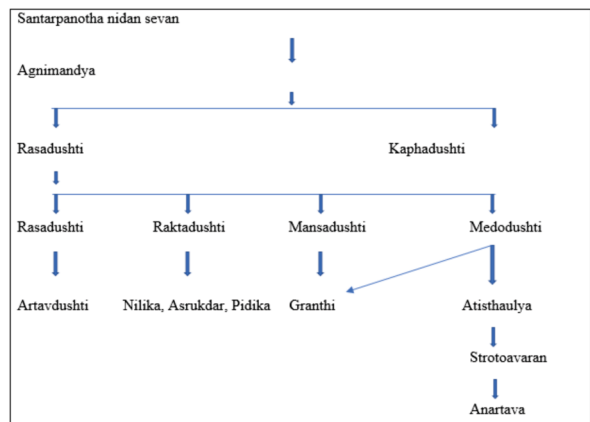
The cause and symptoms of polycystic ovarian syndrome finds its similarity with most of the santarpanotha vikaras Ch. Su. 23/4 It involves excessive indulgence in snigdha, madhura, guru, picchila ahara, navanna, nava madya, Anup and varija mamsa, gorasa, gudika, paistika preparation, chesta dveshi- lack of physical exercise, Diwaswapna- indulgence in excessive day sleep, shayyasanasukha-comfortable bed and seats suffers from diseases caused by over saturation.

Some of the santarpanotha vikaras include, prameha, pidaka, atisthoulya, gurugatrata, indriya strotasam lepa, aampradosha, buddhemoha and shopha, have relevance with some of the symptoms of PCOS.

Samprapti

Santarpanotha nidana sevana leads to Agnimandya (leads) → Agnimandya (leading) to ama annarasa → Dhatvagnimandya → Formation of dushit Rasa dhatu (which circulates through the whole body) → due to madhurata and ati snigdha property of rasa dhatu, having close affinity to medadhatu → leading to ati sthoulya and

avarana to other strotas caused by kapha dosha → results into improper formation of dhatu.

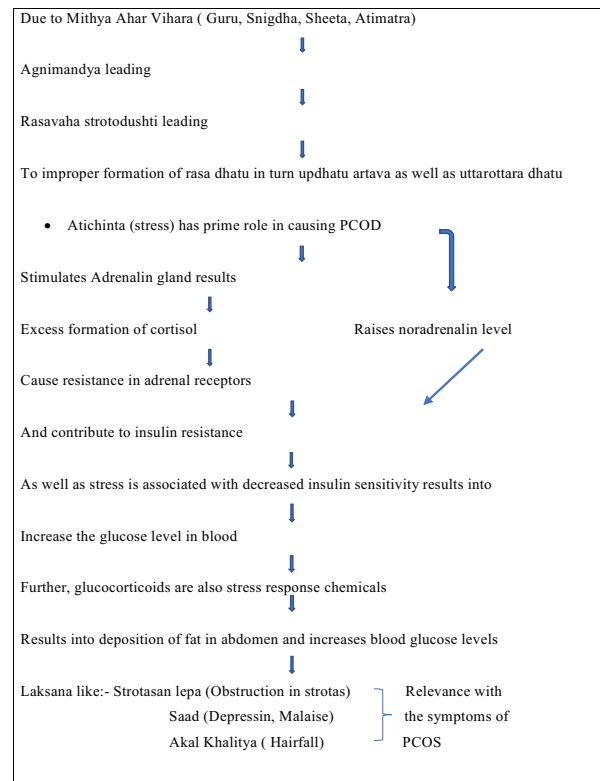


Samprapti Ghatakas

- Agni-** Jatharagni and Dhatvagni
 - Dosha-** Kapha and Vatta
 - Dushya-** Rasa, Rakta, Mamsa, Meda, Asthi, Artavavaha, Rajovaha
 - Strotas-** Rasavaha, Raktavaha, Mamsavaha, Medovaha, Asthivaha, Artavavaha
 - Rogamarga-Adhithana-** Abhyantara
 - Vyaktasthana-Udbhavasthana-** Sarvasharir
 - Dushtiprakar-** Amapakvashaya
- Sanga (obstruction), Atipravrutti (enhanced flow), Granthi (formation of nodules), Vimargagamana (flow of content in wrong direction)

1) Rasavaha strotodushti Lakshana

चित्यानां च अतिचितनात रसवाहिनी दुष्यन्ति । च. वि. ५/२३



2) Raktavaha strotodushti Lakshana

Hetu- Those who indulge in food and drinks which are vidahi, snigdha, Ushana, liquids and also exposure to atapa and anil suffers from morbidity of Raktavaha strotasa.

Lakshanas- are mentioned in Cha. Vi. 5/14, Cha. Su. 28/8-15, Su. Su.

24/9-12 like

- Asrugdar- Menorrhagia
- Neelika- Acanthosis Nigricans (discolouration, Hyperpigmentation)
- Pidika – Acne, pustular eruption

Above lakshana have relevance with the symptoms of PCOS

3) Mamsavaha strotodushti Lakshana

Hetu- Abhishyandi, Guruahara, Daysleep

Lakshana- Granthi i.e. appearance of cyst in USG is one among the main manifestation of PCOS.

4) Medovaha strotodushti Lakshana

Hetu- Lack of physical exercise, day sleep, excessive intake of fatty food and Alcoholic drinks - Cha. Vi. 5/16

Lakshana- Prameha purva roopa i.e. premonitory sign and symptoms of Prameha, Granthi (cyst) and Atisthauilya (obesity) have relevance with the symptoms of PCOS.

5) Asthivaha strotodushti Lakshana

Hetu- who indulges in food and drinks which cause the vitiation of vata constant suffer from asthivaha strotas.

Lakshana- keshlomasmashru dosha i.e. abnormality in hair, bodily hair, beard and moustache which indicates that it can be compared to hirsutism in PCOS.

6) Artavavaha strotodushti Lakshana

आर्तववहे द्वे तयोर्मूलं गर्भाशय आर्तववाहिन्यश्च धमन्यः।

तत्र विध्दायां वन्ध्यत्वं मैथुनासहिष्णुत्वमार्तवनाशश्च। सु. शा. १/२२

when the strotas is pierced at its moola it produces the symptoms as follows

- अल्पावर्तव – Oligomenorrhoea
- कष्टावर्तव – Dysmenorrhoea
- वन्ध्यता – Infertility
- मैथुनसहिष्णुता – Dyspareunia
- आर्तवनाश – Amenorrhoea

मिथ्याचरेण ताः स्त्रीणां प्रदुष्टेनार्तवेन च ।

जायन्ते बीजदोषात च दैवात च शृणुः ता पृथक्॥ च चि ३०/८

Mithyachara – Mithyaahara vihara

- Sedentary life style
 - Unhealthy food habits
 - Seal packed food
- Impaired metabolism

Pradushta Artava-Ashtartav Dushti

Beeja dosha- Shukra and Streebeej Dushti

Daiva- unetiological cause/ it implies the effects of the sinful acts of the previous life.

Beej Dushti- If a mother or father taking dosha prakopaka ahar vihara, there will be vitiation of shukra or shonita, leading to Dushta lakshana which may be carried to the offspring.

Also, the defect in garbhoptadaka bhava i.e. matruja, pitruja, rasaja, satwaja, satmyaja etc can also be carried on to the child and hence the same manifestation as in the parents.

Meda, mamsa, rakta, Hrudaya, yakruta, garbhashaya etc all of which are derived from matruja bhavas can be considered to be vitiated in this disease and the same is carried to the foetus which manifests in later life.

Also keshha, shmashru, shukra etc factors obtained from the parental side have have also been involved. This shows the possibility of genetic predisposition or the hereditary transfer of the disease.

The genetic predisposition acts as a utpadak nidana, where it may require the vyanjaka nidanas like kapha doshamedo dhatu pradohaka ahara and vihara to have a full blown up picture of a disease.

Role of Tridosha in Ovulation and Menstruation

A) Vata (Apana vayu, Vyana vayu)

Apana vayu is responsible for the evacuation of mala, mutra, shukra/ artava, garbha through adhomarga (Anulomana)

Vyan vayu is present all over the body and is responsible for the rakta stambhana, sweda and asruka stravana.

Contraction and relaxation of the uterus is also under the influence of apana and vyan vayu. Vata is also responsible for the movement of follicles, rupture of follicles, release of ovum and movement towards fimbriae.

B) Pitta

Responsible for the action of hormones which results into various stages of M.C. i.e. ovarian cycle.

C) Kapha

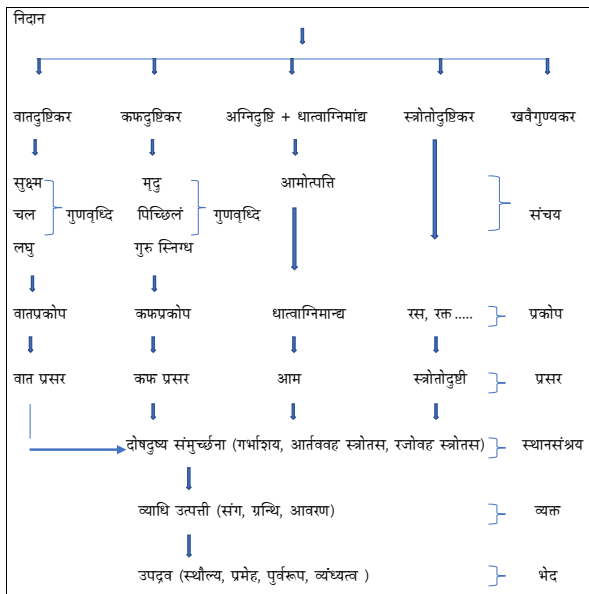
Responsible for the nourishment and development of the tissues that form and support the reproductive system including the growth of the follicles during ovarian cycles

Nidan-

Purvaroopo- irregular menstrual cycle, weight gain, mild ache, appearance of cystic ovaries

Samprapti- sanchay, prakopa, prasara, sthansamshraya, vyakti, Bhed.

Samprapti of PCOS from Ayurvedic view



Lakshana of PCOS from an Ayurvedic Perspective

- Includes Strotodushti lakshanas, Santarpanotha Nidan, Beeja Dushti
- 1) Prameha purvaroopo - kapha medo dushti- hyper insulinemia
 - 2) Strotasam lepa- the kapha and vatadosha causes avaranato the artavavaha strotas leading to obstruction which results in Amenorrhoea, oligomenorrhoea, Irregular menstrual cycle, under the influence of only oestrogen.
 - 3) Akala Khalitya- premature balding (higher level of androgens)
 - 4) Neelika (raktavaha stroto dushti lakshana) Darkening and thickening of the skin around the neck, groin, underarms or skin folds called Aconthosis Nigricans.
 - 5) Atyartava- long running amenorrhoea due to unopposed oestrogen which result in endometrial hyperplasia and occasionally when there is a menses it will be heavy and prolonged anovulatory bleeding.
 - 6) Keshlomasmashru dosha- this is the result of beejaa dushti

Pitruja factor being transferred to the foetus in abnormal proportions leading to abnormal distribution of the loma or the smashru (usually not seen in females).

Excess insulin stimulates the ovary to produce large amount of the androgen which is taken to blood stream which result into reduction in SHBG (sex hormone binding globulin/ sex steroid binding globulin)

and increase in free testosterone which stimulates the hair follicle for excess hair growth.

Ayurvedic Approach of Treatment

Tridoshas represent a broad based generalization of the vital functions of the body, classified under three main headings i.e. vata, pitta and kapha. The equilibrium of doshas are mainly responsible for health, any derangement to this will lead to imbalance state disease.

Charaka has told that every disease can't be named so, vaidyas should know the disease condition according to the involvement of doshas, dhatus, and strotas etc. (cha. Su. 18/44)

Hence even if there is no direct mentioning of a disease in Ayurveda which is having direct correlation of a disease to modern disease, a detailed analysis of the lakshanas, the state of doshas, dhatus, agni, strotas etc will guide to formulate an ayurvedic management by understanding its symptoms or pathogenesis.

PCOS, the term itself indicates more than one symptoms and hence possibility for multisystem involvement with ovarian dysfunction.

According to doshic involvement, the treatment should be aimed at pacifying the vitiated kapha, making the vata anulomana and raise the guna of pitta. Bahudosha avastha is evident in PCOS, symptoms are multiple, so treatment include more than one as shodhan followed by shaman (as the absorption rate of drugs are increase after shodhana, thus shaman aushadhi are to be used later).

A) Samshodhan Chikitsa:-

Measure by which the waste products are thrown out is known as samshodhan.

Vaman- as kapha is the main dominating dosha Basti- for the anulomana of associated vata i.e. lekhan basti, madhutailik basti

सर्वा व्यापन्नयोनिं तु कर्मभिर्वमनादिभिः ॥४५॥

मृदुभिः पञ्चभिर्नारी स्निग्धस्विन्नामुपाचरेद । सर्वः सुविशुद्धायाः शेषं कर्म विधीयते ॥४६॥

नहि वातादृते योनिनारिणां संप्रदुष्यति ॥११५॥ शमयित्वा तं अन्यस्य कुर्यात् दोषस्य भैषजं ॥११६॥ च. चि. ३०/११५, ११६

Vata is the main causative factor in manifestation of all types of yonivyapadas, so, it should be treated first.

Nidan parivarjan, Agni dipan, Pachan, Anuloman, use of Agneya dravya, Kaphaghna Dravya, Vataghna dravya, Artavajanana, Medohar, Shoothar, Pramehaghna, Kushthaghna, Vrushya, granthivilayan, Rasayan, Daivavyapashraya.

स्नेहस्वेदोपपन्न..... स प्रकृपितः प्रलापोन्मादहिक्का ।

बिजोपघाततिमिर पुष्पोपघाताय संपदयते ॥ का. सि. ३/२०

अल्पपुष्पनष्ट पुष्पनष्टबीजाकर्मण्यबीजपरीता अनुवास्या इति ॥ का. सि. ७/११

प्रतिदोषं तु साध्यासु स्नेहादिक्रम इष्यते । दद्यादुत्तर्बस्तींश्च विशेषेण यथोदितान ॥२१॥

शुक्रार्तवाद्यो दोषाः स्तनरोगाश्च कीर्तितः । क्लेब्यस्थानानि मुदस्य गर्भस्य विधिरेव च ॥३११॥

गर्भिणी प्रतिरोगेषु चिकित्सा चाप्युदाहता । सर्वथा तां प्रयुंजीत योनिव्यापस्तु बुद्धिमान ॥३२॥ सु. उ. ३८

बस्तभ्यंङ्गपरीषेक प्रलेप पिचुधारणम ॥४०॥ अ. स. उ. ३९

मृदुभिरतीक्ष्णीर्वमनादिभिर्वमनविरेचन स्थापनस्त्रस्त्रावनस्यैः पञ्चभिः कर्मभिः ॥ अ. स. उ. ३९/४६, ४७ इंदुटीका

B) Shaman Chikitsa:- It includes

- 1) Deepan - the drug which stimulates, strengthen jatharaagni and do not digest ama. Deepan drugs are agneya mahabhuta Pradhan, katu amla lavana rasatmak, laghu and tikshna gunatmaka, ushnaviryatmaka.
- 2) Pachan - the drugs which digest the ama by their ushna virya but do not stimulate jatharaagni. i.e. Mishreya, Shtpushpa, Nagkeshar, Hingvashtak churna.
- 3) Vatanuloman - the drugs which apakva mala, correct vitiated vatta dosha, facilitate easy evacuation of mala through anus. i.e. Haritaki, Aragwadha, chavya, Gandharvharitaki, etc.
- 4) Use of Agneya dravya-

आर्तवं तु आग्नेयम् ।

सु. शा. ३/३

आग्नेयानां च द्रव्यानां विधिवत् उपयोगः ।

दोषैरावृत्तमार्गत्वादातं नश्यति स्त्रियाः ॥२॥

तत्र मत्स्यकुलत्थाम्लतिलमाषसुरा हिताः ।

सु. शा. २/२१

Ushna virya, katu tikta rasa, katu vipaka, ushna ruksha tikshna guna, stimulates Agni there by clearing Ama dosha caused by kapha. Thus by initiating the proper function of Ahar rasa and updhatu artava. This also clears the Apanavayu aavarana and strotoshodhan, thus chala guna of apanavayu will be triggered which helps to inhibition of artava and help in regularization of menstruation.

- 5) Kaphaghna dravya- It acts by katu rasa (subside both pichchila and guruta qualities), tikta rasa (reduces kapha), Kashaya rasa (removes the Sneha of kapha) e.g. Dhanvayas, Vasa, Sahachar, Musta, etc.
- 6) Vatahar dravyas- it acts by Lavana rasa, Amla rasa, Madhura rasa. Lavana - it reduces Vimbadhatwa, sheetalatva, and Laghutwa of vata Amla- Anulomana gati to vata Madhur- vatashaman.
- 7) Atravajanan
- 8) Medohar/ lekhaniya- Guggulu, Erand Dhanvayaas, etc are useful to reduce overweight and also cut on Granthi (ovarian cyst)
- 9) Shothahar- Rasna, Erand, Punarnava, Devdaru, etc are useful for reducing obesity and BMI
- 10) Pramehaghna- Vasa, Haritaki, Guduchi, Gokshur, Devdaru, Pippali, Guggul, etc. are useful to reduce obesity and hyperinsulinemia.
- 11) Kushthaghna- Vasa, Haritaki, Guduchi, Pippali, Guggulu, etc. acts by its katu, tikta rasa, Ushna Veerya to decrease the sign like Aconthosis Nigricans.
- 12) Rasayana (Rejuvenation)- revitalizes the cells and tissues of the body. i.e. Amalaki, Haritaki, Guduchi, Ashwagandha, Shatavari, Pippali, Guggulu, Bhallataka.
- 13) Vrushya/ Artavjanan- increases shukra in male and Artav in female. i.e. Ashwagandha, shatavari, Bala, Gokshur, which increases quantity and quality so useful in hypo, oligo, anovulation.
- 14) Daivavyapashraya chikitsa- Pushpaghni Jataharini considering as a aagantuj vyadhi, prime importance is given to the Daivavyapashraya chikitsa like varanbandhan (Kashyap Revati Kalpadhyay), Mantrachikitsa etc.

C) Sthanik Chikitsa- Uttar Basti, Yoni Pichu Dharan, Lepa

D) Kalpa-

- Maharasnadi Guggul/ Kwath
- Mahayograj Guggul
- Lashunadivati
- Shatapushpa- shatavari churna
- Kuberaksha Vati
- Rajapravartani vati

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A REVIEW STUDY ON ETHICS AND LAWS RELATED TO GYNAECOLOGY AND OBSTETRICS

Dr. Sushmita A. Ghegade^{1*}, Dr. Sandhya M. Yennawar² and Dr. Jayashri S. Deshmukh³

¹P. G. Scholar, ²Guide and Associate Professor, ³Head of Department,
Department of Streeroga and Prasutitantra, CSMSS Ayurved Mahavidyalaya, Kanchanwadi,
Paithan Road, Aurangabad.

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*Corresponding Author

Dr. Sushmita A. Ghegade

P. G. Scholar, Department
of Streeroga and
Prasutitantra, CSMSS
Ayurved Mahavidyalaya,
Kanchanwadi, Paithan
Road, Aurangabad.

ABSTRACT

Ethics laws and acts related to gynaecology and obstetrics include two important aspects Abortion and Adoption. Regarding abortion, being a legal matter as its comes to be a social issue of female feticide, government has made laws. There has been various amendments in these laws since 1960. Abortion is a highly charged controversial issue and hence needs to be controlled by legislation. Adoption also is matter of social concern and it is also governed by various laws set by the government of India considering the religious versatility in India. These laws make adoption safer for the needed and help to avoid malpractices. Both Abortion and Adoption related laws should be known in context to Gynaecology and Obstetrics. This article includes a review of Ethics and Laws related to Abortion and Adoption.

KEYWORDS: Ethics, Laws, Abortion, Adoption.

INTRODUCTION

Abortions, be it spontaneous or induced, are most common adverse outcome of pregnancy, yet its prevalence and underlying causes are subjected to continuing investigation and understanding.

Among issues related to reproductive health, none has more controversial connotations than abortion nor carries a heavier burden of stigmatization. Abortion, is a universal phenomenon and is defined as and has existed throughout recorded history, yet it continues to be a highly charged, controversial issue, raising extreme passions among lay people, as well as politicians, religious leaders, and health and rights advocates. Although abortion services in

India were liberalized more than three decades ago, access to safe services remains limited for majority of women. For this purpose Government has laid down certain laws related to abortion like the MTP Act, PCPNDT Act.

Adoption is also a matter of legal concern because child placed for adoption have no one to speak accept Adoption laws and procedure framed. Despite of a possible longer wait, approved legal way for adoption in India ultimately guarantees peace of mind.

This paper include a review of Ethics and Laws related to Abortion and Adoption.

Ethics and Laws related to Abortion

Induction of Abortion – Deliberate Termination of pregnancy either by medical or by surgical method before the viability of fetus is called abortion.^[1]

Induced abortion can be legal or illegal (unsafe).

Law before 1971 –

The Indian Penal Code, enacted in 1860 and written in accordance with contemporaneous British law declared induced abortion illegal.

Induced abortion was defined as purposely causing miscarriage.

Penalty (Section 312 – 316)

- 1) Abortion Practitioners - 3 years prison / Fine / Both.
- 2) Woman available for abortion - 7 years prison / Fine / Both.

The only exception was when the abortion was induced in order to save the life of the woman.^[2,3]

The liberalisation of abortion law in India began in 1964 in the context of high maternal mortality due to unsafe abortion. Doctors frequently came across gravely ill or dying women who had taken recourse to unsafe abortions carried out by unskilled practitioners. They realized that the majority of women seeking abortions were married and under no socio-cultural pressure to conceal their pregnancies and that decriminalizing abortion would encourage women to seek abortion services in legal and safe settings.^[4] Hence,

- 1) Prevalence of illegal abortions
- 2) The idea that abortions could be a mode of population control caused the government to reconsider the law.

In 1964 the Central Family Planning Board of Government of India Formed a committee to examine the subject of abortion from

- Medical
- Legal
- Social
- Moral standpoints

Their study suggested that Penal Code was too restrictive.

They recommended that the exemptions under which Abortion was permissible be increased and liberalized.

1971 & Beyond

In India Abortion Laws fall under the Medical Termination Of Pregnancy Act.^[5]

It was enacted by the Indian parliament in the year 1971 with intention of

- 1) Reducing incidence of Illegal Abortion
- 2) Consequent Maternal Mortality & Morbidity.

The MTP Act came into effect from 1st April 1972 and was amended in years 1975 – 2002.

Since legislation of Abortion in India, deliberate induction of abortion by a registered medical practitioner in interest of mother health & life is protected under MTP Act.

Provisions under MTP Act

- 1) The continuation of pregnancy would involve serious risk of life or grave injury to the physical and mental health of pregnant woman.
- 2) There is substantial risk of the child being born with serious physical and mental abnormalities so as to be handicapped in life.
- 3) When pregnancy is caused by rape, both in cases of major and minor girl and in mentally imbalanced woman.
- 4) Pregnancy caused as a result of failure of a contraceptive.

Indications

- 1) To save the life of mother –
 - Cardiac Diseases (Grade 3 & 4) with history of decompensation in previous pregnancy or in between pregnancies.

- Chronic Glomerulonephritis
 - Malignant Hypertension
 - Intractable hyperemesis gravidarum
 - Cervical and breast malignancy
 - Diabetes mellitus and Retinopathy
 - Epilepsy or Psychiatric illness.
- 2) Social indications –
- Parous women having unplanned pregnancies with low socio economic status
 - Pregnancy caused by rape
 - Unwanted pregnancy caused due to failure of any contraceptive device.
- 3) Eugenic – This is done under the second provision and the indications are
- Structural – Anencephaly
Chromosomal – Down's Syndrome
Genetic – Hemophilia
 - When the fetus is likely to be deformed due to action of teratogenic drugs like Warfarin / Radiation exposure >10 rads in early pregnancy.
 - Rubella – A Viral infection in first trimester

Recommendations^[6]

- 1) In revised rules, A Registered Medical Practitioner is qualified to perform an MTP provided
 - a) One has assisted in at least 25 MTP in an authorized center and having a certificate
 - b) One has got 6 months house surgeon training in obstetrics and gynaecology
 - c) One has got diploma or degree in obstetrics and gynaecology.
- 2) Termination can be performed in hospitals established and maintained by government or places approved by the government.
- 3) Pregnancy can be terminated only on written consent of woman
- 4) Pregnancy in minor girl below 18 years or lunatic cannot be terminated without legal consent of parents or legal guardian
- 5) Termination is permitted upto 20 weeks of pregnancy
 - Till 12 weeks – 1 medical practitioner
 - Exceeds 12 weeks – 2 medical practitioners

- 6) The abortion has to be performed confidentially and to be reported to the director of health services of the state in the prescribed form.

Sex Selective Abortion

Prenatal diagnostic techniques like medical ultrasonography are capable of determining sex of the fetus.

In parts of India daughters are not preferred and hence sex selective abortion is commonly practiced.

The act PC & PNDT is enforced to prohibit sex selection before or after conception to prevent the miss use that leads to female feticide.^[7]

THE PRECONCEPTIONAL AND PRENATAL DIAGNOSTIC TECHNIQUES 1994^[7,8]

Amended up to Feb 2003

It covers the regulation of

- 1) Genetic counselling centers
- 2) Genetic Laboratories
- 3) Genetic Clinics

The act permits such procedures to detect any of the following abnormalities –

- Chromosomal abnormalities
- Haemoglobinopathies
- Sex linked genetic diseases
- Genetic metabolic diseases
- Congenital anomalies
- Any other abnormalities / diseases as may be specified by central supervisory board.

The person qualified to do the procedure must be satisfied for reasons to fulfill the following condition in writing –

- 1) Age of pregnant woman more than 35 years
- 2) Pregnant woman has undergone 2 or more spontaneous abortions / fetal loss
- 3) Pregnant woman exposed to potentially teratogenic agents like drugs, radiations, infections, chemicals

- 4) Pregnant woman / spouse has family history of mental retardation / physical deformities / any other genetic disease.

Written consent of pregnant woman is obtained and there is prohibition of communicating sex of the fetus.

According to the act the following are Cognizable, Non Bail able, Non Compoundable Offences

- 1) Conducting or associating or helping to conduct pre-natal diagnostic tests for determining the sex of the fetus
- 2) Sex selection as a woman or a man or both, on any tissue, embryo, conceptus fluid or gametes derived from either or both of them.
- 3) Advertisement / Communication in the form of print, electronic media or interned by medical professionals or companies on the availability of sex determination and sex selection in the form of medicines or any kind of techniques.

PUNISHMENT

	Attempt	Fine	Imprisonment
Provider	1st	10,000	3 years
	2nd	50,000	5 years
Those who seek the aid	1st	50,000	3 years
	2nd	1,00,000	5 years

ADOPTION

Children placed for adoption have no one to speak except adoption laws and procedure framed.

Despite of a possible longer wait, approved legal path for adoption in India ultimately guarantees peace of mind.

HINDU ADOPTION AND MAINTAINANCE ACT – 1956

Part of Hindu Court Bills^[9]

It extends the whole India except the state of Jammu & Kashmir.

Applications of act

- 1) To any person who is Hindu by religion in any of its forms or developments, including virashaiva, a lingayat or follower of the Bramha Prarthana or the Arya samaj.

- 2) To any person who is a Buddhist, Jain or Sikh by religion.

Requisites of a valid adoption – No adoption should be valid unless

- 1) The person adopting has the capacity and the right to take in adoption.
- 2) The person giving in adoption has the capacity to do so.
- 3) The person adopted is capable of being taken in adoption.
- 4) The adoption is made in compliance with the other conditions needed for adoption.

• **Capacity of a Male Hindu to take in adoption**

Any male Hindu who is of sound mind and is not minor has the capacity to take a son or a daughter in adoption.

Provided that he has a wife living, he shall not adopt except with the consent of the wife unless the wife has completely and finally renounced the competent jurisdiction to be of unsound mind.

• **Capacity of a female Hindu to take in adoption**

Any female Hindu who is of sound mind and is not a minor, to take a son or a daughter in adoption.

Provided that if she has a husband living, she shall not adopt a son or a daughter except with the consent of her husband or unless the husband has completely and finally renounced the world or has ceases to be a Hindu or has been declared by a court of competent jurisdiction to be of unsound mind.

✓ **WHO CAN ADOPT?**

- 1) Adopter has the legal right to adopt under this act i.e he is Hindu.
- 2) Has the capacity to provide for the adopted
- 3) Man can adopt only with the consent of his wife
- 4) Unmarried men can adopt only if not minor. If man has to adopt a daughter has to be above 21 years
- 5) If the man has more than one wives then elder one is considered as the legal mother.

✓ **WHO CAN BE ADOPTED?**

- 1) Must be Hindu male or female

- 2) Adoptee needs to be unmarried, however the particular custom or usage is applicable to the involved parties, then the adoptee can be married.
- 3) Child cannot be age of 15 or more
- 4) Adoption can only occur if there is not a child of same sex of the adopted child still residing in home.

- **Legal Implications For An Adopted child**

- 1) From the date of adoption the child is under legal guardianship of new parents and thus should enjoy all benefits (property, inheritance etc.)
- 2) Which means child is cut from legal benefits from family who had given him or her for adoption.

Guardians And Wards Act – 1890^[10]

Minor- Means a person who, under the provisions of Indian Majority Act 1875 is to be deemed not to have attained his majority.

Guardian – Means minor for whose person or property there is a guardian.

Under the Guardian and Wards Act 1890 people belonging to communities such as **Muslim, Christian, Parsi or Jews** and who wish to adopt can only take guardianship of the child. This child like the biological child would not be provided with the same status.

Christian & Parsi's can take a child under the said act only under foster care. Once a child under foster care becomes major, he is free to break away all his connections. Besides such a child does not have the right of legal inheritance.

Foreigner's, who want to adopt Indian child have to approach the court under the foresaid act.

In case the court has given permission for the child to be taken out of the country, adoption according to foreign law, that is law applicable to guardian takes place outside the country.

➤ **Eligibility Criteria According To**

CENTRAL ADOPTION RESOURCE AUTHORITY (CARA)^[11]

Parents should be **Physically, Mentally & Emotionally stable, Financially capable and shall not have any life threatening condition.**

Central Adoption Resource Authority (CARA) is a statutory body of Ministry of Women & Child Development, Government of India. It functions as the nodal body for adoption of

Indian children and is mandated to monitor and regulate in-country and inter-country adoptions. CARA is designated as the Central Authority to deal with inter-country adoptions in accordance with the provisions of the Hague Convention on Inter-country Adoption, 1993. It was ratified by government of India in 2003.

CARA primarily deals with adoption of orphan, abandoned and surrendered children through its associated /recognized adoption agencies.

CONCLUSION

The article includes a review of the Ethics And Laws Related to Obstetrics And Gynaecology mainly including Abortion And Adoption.

Several amendments have been made by the government throughout the years considering various aspects and still though require certain changes and improvisation accordingly. These laws help to create transparency and govern the important aspects related to Abortion and Adoption.

Both being a social issue and responsibility these laws should be in knowledge of medical professionals as well as the society.

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A review study of analgesia and anesthesia in obstetrics and gynecology

Manisha B. Dhote*¹, S.M. Yennawar², J.S. Deshmukh³

1. P.G. Scholar,
2. Guide And Associate Professor,
3. HOD and Professor,

Department of Streeroga and Prasutitantra,
 C.S.M.S.S. Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra

*Corresponding author: Email- manishapatil705@gmail.com

Abstract-

Analgesia and Anaesthesia have very importance in operative field and they both have some different meanings. Analgesia means the inability to sense pain without loss of consciousness. While Anaesthesia is a state of controlled, temporary loss of sensation or awareness that is induced for medical purposes. It may include Analgesia (relief from or prevention of pain), paralysis (muscle relaxation), amnesia (loss of memory) or unconsciousness. Thus according to the definition of Anaesthesia, Analgesia is the term which itself included in Anaesthesia. Relief of pain during labour and delivery is an essential part in Obstetrics and Gynaecology. Choice of Anaesthesia depends upon the patient's

condition and the associate disorders. Anaesthetic complications may cause maternal death also. So the knowledge of Analgesia and Anaesthesia is very necessary in Obstetrical and Gynaecological field.

Keywords: Gynaecological, Analgesia, Anaesthesia, Obstetrics

Introduction-

The beginning of the history of Anaesthesia were largely attributed to the pain management. Various procedures for pain relief and experimentations with different medicines are described in Ayurveda.

There are various processes and solutions for pain relief everywhere in the world. Scholars from all over the world have acknowledged that Acharya

Sushruta is the father of Surgery and during his period Surgery was well developed and advanced. The knowledge of Anaesthesia is of special importance in the development of Surgery and without this it is impossible to perform any type of Surgery.

From this, it is clear that the precise knowledge of the process of Anaesthesia must be known at that time. But unfortunately such references are not available today. So people have a false belief that Anaesthesia was not mentioned in Ayurveda and which is not true.

According to Acharya Sushruta¹-
 प्राक्शस्त्रकर्मणश्चेष्टं भोजयेदातुरं भिषक्। मद्यं
 पाययेन्मध्यं तीक्ष्णं यो वेदना सहः ॥
 (सु.सू.17/16)

i.e. Sushruta described the Tikshna Sura in the process of Anaesthesia. Also he described various processes and fluids for pain relief like use of 'Vidha chikitsa', Aphu, Bhang etc.

In the time of Sushruta, patient was proven for Anaesthesia through the preoperative process. There is a reference available in Bhojaprabhandha of performing Surgery when the patient is in an unconscious state. During the Surgery on Raja Bhoja he was seduced by using hypnosis.

In this way, the reference of Anaesthesia related to Obstetrics and

Gynecology was taken from Charak Samhita also²-

व्यपगतगर्भशल्यां तु स्त्रियमामगर्भा
 सुरासीध्वारिष्टमधुमदिरा- सवानामन्यतमग्रे
 सामर्थ्यतः पायमेदः ----- प्रहर्षणार्थं च ॥
 (च.शा.८/३१)

Thus Acharya Charak prescribed 'Madira Sevan' for relief of labour pain and for extraction of Mudhagarbha. Thus from these examples it is proved that Ayurveda is the origin of Analgesia and Anaesthesia. But in this article Analgesia and Anaesthesia and Analgesics and Anaesthetic agents are studied according to modern science and its importance in Obstetrics and Gynecology.

Aim-

To study the review of Analgesia and Anaesthesia in Obstetrics and Gynecology

Materials and Method-

Data related with Analgesia and Anaesthesia was collected from modern texts, Journals, Articles and Internet sources and classified according to their types.

❖ SEDATIVES AND ANALGESICS³-

In labour and delivery:

-The pain during labour results from a combination of uterine contractions and cervical dilatation.

-The intensity of labour pain depends on the intensity and duration of uterine contractions, degree of dilatation of cervix, distension of perineal tissue, parity and the pain threshold of the subject.

-The most distressing time during the whole labour is just prior to full dilatation of cervix.

-For the purpose of selecting a general analgesic drug, labour has been divided arbitrarily into two phases. The first phase is controlled by sedatives and analgesics and the second phase is controlled by inhalation agents.

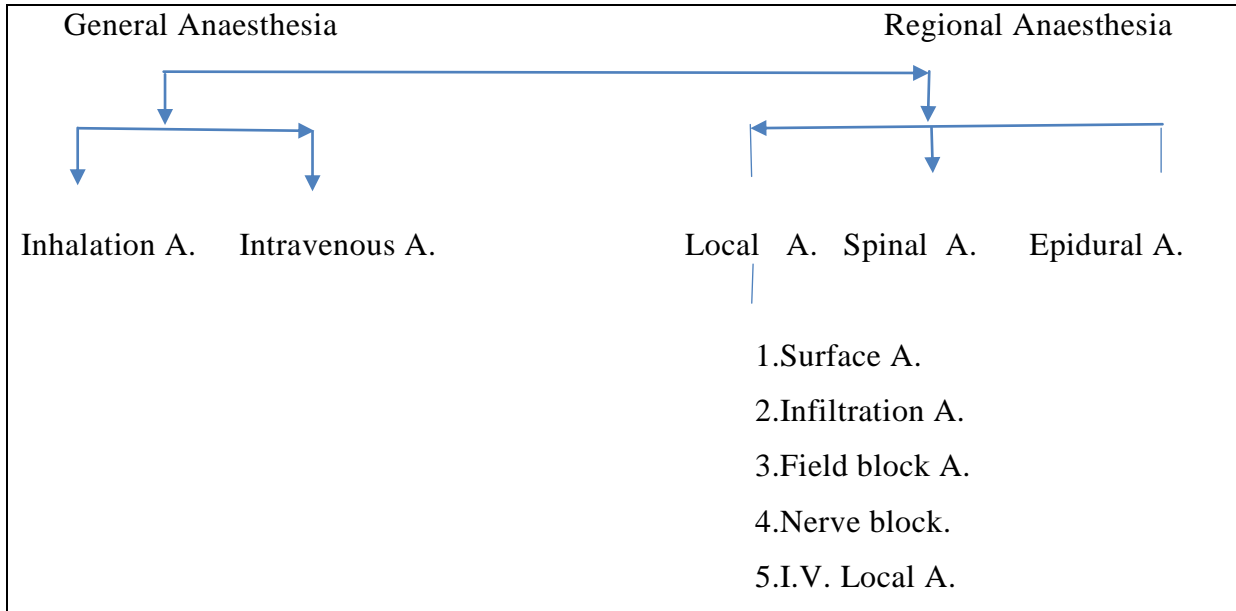
▪ **Commonly used sedatives and analgesics-**

In 1st phase of labour

DRUGS	USES
Pethidine	- Generally used in the first phase of labour and indicated when the discomfort of labour merges into regular, frequent, and painful contractions. -Initial dose 100mg(1.5mg/kg body wt) IM
Fentanyl	-Short acting synthetic opioid and is equipotent to Pethidine. -It has less neonatal effects and less maternal nausea and vomiting and needs frequent dosing.
Phenothiazines	-Commonly used in labour in combination with an opioid -Weak antiemetic drug and causes sedation in the mother.
Narcotic antagonists- Naloxone	-These are used to reverse the respiratory depression induced of opioid narcotics. -Naloxone is given to the mother 0.4mg IV in labour. It may have to be repeated.
Benzodiazepines (Diazepam)	-It is well tolerated by the patient. It does not produce vomiting and helps in the dilatation of cervix. -The usual dose is 5-10mg. -It may be used in larger doses in the management of pre-eclampsia. However, Diazepam is avoided in labour. - Flumazenil: Specific benzodiazepine antagonist. It can reverse the respiratory depression effect of benzodiazepines.

In 2nd phase of labour

- Inhalation methods- premixed nitrous oxide and oxygen
- Used from 8cm dilatation of cervix to delivery
- Self administered



-Entonox is most commonly used inhalation agent during labour in the UK.

❖ **ANAESTHESIA AND ITS TYPES^{4,5}**

A] GENERAL ANAESTHESIA⁶

It means abolition of all sensations, i.e. touch, pain, posture, and temp with a state of reversible loss of consciousness.

It has got three components:

- 1. Analgesia

- 2. Hypnosis

- 3. Muscle relaxation

- Muscle relaxants⁷-

- 1. Depolarising muscle relaxants
- 2. Non-depolarising muscle relaxants

Depolarising muscle relaxants-

(Succinyl choline): It is the only depolarising muscle relaxant in clinical use. Commonly used immediately after the induction drug to facilitate intubation. It is a short acting muscle relaxant with rapid onset of action.

- **General anaesthetic agents and its effects⁸**

INHALATION AGENTS		INTRAVENOUS AGENTS	
Drugs	Effects	Drugs	Effects
1) Halothane	Decreases uterine muscle tone	1) Thiopentone Sodium	-Ultra short acting barbiturate. -It is a standard induction agent - There is little effect on resting uterine tone

			-It crosses placenta rapidly, although foetal blood concentration is far less than that observed in the mother.
2) Isoflurane	Decreases uterine muscle tone but less than Halothane	2) Propofol	Widely used induction agent which has got predictable onset and recovery
3) Sevoflurane	Decreases uterine muscle tone like Isoflurane	3) Ketamine Hydrochloride	It readily crosses the placental barrier and hence should be given in lower doses in pregnant patient
4)) Nitrous oxide	Used to provide Labour Analgesia	4) Fentanyl ⁹	-It is neuroleptanalgesic. -Preferred in asthmatics

B] REGIONAL ANAESTHESIA-

▪ Commonly used anaesthetic agents¹⁰-

Drugs	Uses
Lignocaine	-Used for local/Pudendal block and also for epidural or spinal Anaesthesia for cesarean delivery
Bupivacaine	-Used for Epidural or Spinal for cesarean delivery
Ropivacaine ¹¹	-Available as 0.2% for providing post operative Analgesia, labour Analgesia and as 0.75% for spinal and epidural Anaesthesia and nerve blocks.

▪ Types of regional Anaesthesia and its uses¹²:

1. Continuous lumbar epidural block

-When complete relief of pain is needed throughout labour, epidural Analgesia is

the safest and simplest method for procuring it.

-It should be given when labour is well established.

-For complete Analgesia a block from T10 to S5 dermatomes needed. For cesarean delivery a block from T4 to S1 is needed . Repeated doses of 4 to 5ml of 0.5% bupivacaine or 1% lignocaine are used to maintain Analgesia.

-It is beneficial in cases like PIH, breech presentation, twin pregnancy, and preterm labour.

-Previous cesarean section is not a contraindication. Epidural Analgesia when used there is no change in duration of 1st stage of labour, but 2nd stage of labour appears to be prolonged. This might lead to frequent need of instrumental delivery like forceps or ventouse.

-Vitals should be monitored

-The woman is kept in semilateral position to avoid aortocaval compression.

2. Paracervical nerve block

-It is useful for pain relief during the 1st stage of labour

-5 to 10ml of 1% lignocaine with adrenaline is used. Bupivacaine is avoided due to its cardiotoxicity

-Paracervical block should not be used where placental insufficiency is present

6. Infiltration Analgesia

-It can only relieve the pain of uterine contraction

3. Pudendal nerve block

-It is a safe and simple method of Analgesia during delivery

-Pudendal nerve block does not relieve the pain of labour but affords perineal Analgesia and relaxation

-It is mostly used for forceps and vaginal breech delivery

-It is less danger, both for mother and for the baby than G.A.

4. Spinal Anaesthesia

-It is obtained by inj. of local anaesthetic agent into the subarachnoid space

-S.A. can be employed to alleviate the pain of delivery and during the 3rd stage of labour

-Also used for normal delivery/ for outlet forceps with episiotomy, ventouse delivery and for cesarean delivery.

-Addition of Fentanyl (to enhance the onset of block) or Morphine(to improve pain control) may be done

5. Combined spinal-epidural Analgesia

-A single bolus of 1ml 0.25% bupivacaine with 2.5ug Fentanyl is injected into the subarachnoid space

-The method gives rapid and effective Analgesia during labour and cesarean delivery

Perineal infiltration		Local abdominal for cesarean delivery
-For episiotomy	-For outlet forceps or ventouse (Perineal and labial infiltration)	-This method is rarely used where regional block is patchy or inadequate.
-It is extensively used prior to episiotomy. -A 10ml syringe, with a fine needle and about 8-10ml 1% lignocaine hydrochloride (Xylocaine) are required.	-The combined perineal and labial infiltration is effective in outlet forceps operation or ventouse traction. -A 20ml syringe, a long fine needle and about 20ml of 1% lignocaine hydrochloride are required.	-The skin is infiltrated along the line of incision with diluted solution of lignocaine 2% with normal saline. The subcutaneous fatty layer, muscle, rectus sheath layers are infiltrated as the layers are seen during operation. The operation should be done slowly for the drug to become effective.

Discussion-

In modern science, for the management of every disease, different types of treatment modalities are mentioned and researches are going on for development of different types of medicines also. For the treatment of every disease, conservative and surgical management is necessary. And from this two types of management, Analgesia, Anaesthesia and anaesthetic drugs become very important tool in surgical management of any disease.

Whole discussion is about Analgesia, Anaesthesia and its type, Anaesthetic agents in Obstetrics and Gynecology.

Conclusion-

The Obstetrician-Gynecologist is often solely responsible for Analgesia/Anaesthesia including general and regional blocks during IPD-based and outpatient procedures. This article shows how Analgesia and Anaesthesia plays an important role in the field of Obstetrics and Gynaecology.

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Manisha B. Dhote, S.M. Yennawar, J.S. Deshmukh

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GANDHAKA IN MEDICINE

¹*Dr. Swapnali Khabade, ²Dr. Jyotsna S. Gulhane, ³Dr. Sanjay Dahake and
⁴Dr. Shubhada Joshi

¹Assistant Professor, Department of Rasashastra & Bhaishajya Kalpana, S.R.C. Ayurvedic Medical College Chikhali.

²Professor & HOD of Rasashastra and Bhaishajya Kalpana Dept., S.R.C. Ayurvedic Medical College, Chikhali.

³Professor & HOD of Rasashastra and Bhaishajya Kalpana Dept. CSMSS Ayurved College Kanchanvadi, Aurangabad.

⁴Assistant professor, Samhita Department, S.R.C. Ayurvedic Medical College Chikhali.

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***Corresponding Author**

Dr. Swapnali Khabade

Assistant Professor,
Department of Rasashastra
& Bhaishajya Kalpana,
S.R.C. Ayurvedic Medical
College Chikhali.

ABSTRACT

Gandhaka is being used as medicine not only in ayurveda but also in foreign countries since very long. In 1200 BC Charaka mentions of Sulphur being used in many diseases. Then in eighth century sulphur was being used along with Parada for medicine preparation as well as for Dhatushuddhi. In western countries sulphur was being used for diseases like Asthma and skin diseases. Now its uses have become clear. Now sulphur is used as antibiotic in modern medicine. Here this article is an attempt to expose the role of Sulphur, from ancient days till today. In modern medicine or in ancient medicine the purpose of using sulphur has not changed. Its properties are proving since long that how efficient and important medicine it is. Modern medicine and

ayurveda too, are showing same effects in curing diseases. Recently lot of studies also show its importance as medicine as well as a nutrient. From its availability as sulphur powder to organic sulphur methylsulfonylmethane, in every form it is essential to human being.

Sulphur in Ayurveda

Gandhaka – It is one of the important mineral. Tends first under the group of the Uparasas, mentioned in the Rasashastra. In Indian ayurvedic medicine, Gandhaka is being used from 1200 BC. But in the 8th century as the Rasashastra was at its peak level Gandhaka was used in greater extent in Dehavad as well as in Lohavad. Gandhaka is obtained from its ores from the

nature. This is in ashodhita [impure] form, & it is contraindicated for internal use. So Gandhaka which is purified by the proper processes of purifications mentioned in granthas, is having properties such as "Atirasayana Garavishara, Kshudra kushth nashaka, Kasa-swasa nashak, Dadru nashaka, Aama nashaka, Jatharagni vardhak (diptah), Sar, Rasayana, Pachak etc. Gandhaka assists in assimilating Parad into human body.

Sources

- 1) Jangama – Egg, Milk etc.
- 2) Udbhija – Garlic, Carrot, Onion, Mustard seeds Neem leaves etc.
- 3) Parthiva Padhartha – Suvarna makshika, Hingul, Haratal, Manahshil etc.

Synonyms

Kusthaghna, Kitaghna, Pamari, Gandhapashan, Atigandha, Shulbari etc.^[1] Gandhaka synonyms are classified in different headings such as Sentimental or Imotive (Bhavanatmaka), Comparative (Upamatmaka), as per its Nature (Swarupatmaka), as per its Functions (Karmatmaka), and as per its Characteristics (Gunatmaka).^[1]

Gouribijam means Ovum of Parvati.

Balivasa is one of the Upamatmaka synonym. It means Gandhaka is having enough potency so it is called as Bali. It is not decaying, kills bacterias and Gandhaka itself is capable of giving strength and maintaining it in a person.

As per its Nature it is called as Vaigandha (not having any specific smell), Gandhaka (It smells when broken), Atigandha (If liquefied, smell increases), Kruragandha (Smells bad when burnt), Putigandha (It smells very bad when it excreted through excretions such as sweat, urine & excreta) etc.

According to functions Gandhaka is called Dhaturvairi (enemy of Dhatu), Dhatuha meaning, it destroys dhatus (Metals, specially Tamra).

As per its characteristics Pamari, Kusthaghna, Krumighna etc. are synonyms which mean it is a remedy for skin diseases.

Shodhana of Gandhaka

Ashuddha Gandhaka liquefies in equal quantity of goghrit on slow flame. Then pour in the godugdha through thin cloth. The same procedure repeated three times removes the physical impurities. They remain on the cloth. And its toxic contents get dissolved in the milk. And thus obtained Gandhaka is called as shodhita gandhaka.^[2]

Characteristics of the Shodhita Gandhaka

Garavishara, Kshudra kusth nashaka, Kasa-swasa nashak, Dadru nashaka, manasik evam sharirik roga nashaka, Aama nashaka, Jatharagni vardhaka, Rasayana, Sara, vikrut evam ashudha parad & naag sevan vikar nashak.^[3]

Gandhaka along with Kantakari Kashaya gives relief in Swasa and Kasa roga. With pakwa Kadali phala it cures twagroga (Skin diseases). Gandhaka along with Chitrakamula Kwath gives relief in Durbalata (weakness). Along with Coconut oil as external application it cures Pama. In this way Gandhaka along with different anupanas cures different diseases. Gandhaka also plays main role for stabilizing Parada in herbomineral preparations in Rasashastra.^[4]

Introduction of Gandhaka

First, sulfur is an element of the earth. This element is essential to life and is widely used in biochemical processes. In metabolic reactions, sulfur compounds serve as both, fuels and respiratory (oxygen-replacing) material for simple organisms. Sulphur is the eighth most prevalent element in the human body. The primary placement of sulfur in the human body is in the sulfur-containing amino acids: methionine, cysteine, homocysteine (and related cystine, homocystine), and taurine. Sulfur is an important part of many enzymes and in antioxidant molecules like glutathione and thioredoxin. Sulfur is required for the proper structure and biological activity of enzymes.

Because sulfur is directly below oxygen in the periodic table, these elements have similar electron configurations. Sulfur forms many compounds that are analogs of oxygen compounds and it has a unique action on body tissues. It decreases the pressure inside the cell. In removing fluids and toxins, sulfur affects the cell membrane. Sulfur is present in all cells and forms sulfate compounds with sodium, potassium, magnesium, and selenium. Organic sulfur, in addition to eliminating heavy metals, regenerates repairs and rebuilds all the cells in the body.^[1]

The ultimate source of sulfur is volcanic rock, mainly basalt, spewed up from the earth's core during volcanic eruptions. Sulfur in soil exists in inorganic and organic form. Plants convert sulfur in the soil into a useable form and store it. The form of sulfur taken up by plants is sulfate. Sulfur from all sources must either be in the sulfate form or be converted to the sulfate form before it can be used by plants.

Sulfur is found in all plants and living things, including all cells of the human body. Plants can synthesize organic sulfur from sulfur in the soil but humans cannot.

MSM is important organic sulfur in new dietary supplements. Sulfur is a vital element for life and current research points to methylsulfonylmethane as the most important source of organic sulfur for the body. Fortunately, organic sulfur is found naturally in all plant foods that are grown on soils although depleted soils provide less sulfur.¹ Sulfur content is at its highest when food is fresh; but it is driven out of all foods, even with moderate processing. MSM is present in most green plant food stuffs and certain algae, meats, fish, a variety of fruits, vegetables, and grains in small amounts.^[2]

Sulfur Powder

This form of the element has many applications. It is a vital component in dyes, fungicides and production of agrochemicals. It is also required in mineral extraction and waste water processing. Powdered sulfur is found in lotions and skin cream ingredients. Burned sulfur helps preserve fruits and bleach paper. The element is part of many creams, lotions and bar soaps. Many of the skin treatment ointments in the market have this ingredient.^[3]

Biological Role

Sulfur is essential to all living things. It is taken up as sulfate from the soil (or seawater) by plants and algae. It is used to make two of the essential amino acids needed to make proteins. It is also needed in some co-enzymes. Sulfur is a macronutrient for both plants and animals. A macronutrient is an element needed in relatively large amounts to insure the good health of an organism. Sulfur is used to make proteins and nucleic acids, such as DNA. It also occurs in many essential enzymes. Enzymes are chemicals that make chemical reactions occur more quickly in cells. A person who does not get enough sulfur in his or her diet develops certain health problems. These include itchy and flaking skin and improper development of hair and nails. Humans usually have no problem getting enough sulfur in their diets. Eggs and meats

are especially rich in sulfur. The average human contains 140 grams and takes in about 1 gram a day, mainly through proteins.^[4]

Health Benefits

Sulfur has elements that can eliminate acne, so it is included in their treatments. Medications for dandruff, pityriasis versicolor, rosacea and warts have this ingredient. Seborrheic dermatitis and scabies can be treated with this element. Sulfur is effective because of its keratolytic, antibacterial and anti-fungal properties. Combination of alcohol and sulfur can be used to treat acne and other skin disorders.

Solutions with sulfur can be used to accelerate the healing of wounds. In ancient Greece it was used to cure wounds. Sulfur can be used to treat hemorrhoids, arthritis and homeopathy. The cleansing power of sulfur has been known for many centuries. At one time, ancient physicians burned sulfur in a house to cleanse it of impurities. Creams made with sulfur were used to treat infections and diseases. In fact, sulfur is still used to treat certain medical problems.

Sulfur and the Human Body

One of the most important uses of sulfur relates to the human body. It is not native to the body, but it is required. The element is available in food and dietary supplementation. Sulfur is integral to the human body. The element comprises 0.25% of the body. It is integral not just for humans but all living cells. With sufficient amounts, various disorders can be prevented.^[3]

Action of Sulphur

External

Sulphur itself has no action on the skin, but some of it is converted into hydrogen sulphide, and that is a mild vascular stimulant, causing slight dilatation of the vessels, and in some cases, eczema. It kills the *Sarcoptes scabiei*, and is therefore a parasiticide. When applied to raw surfaces it is converted into sulphurous and sulphuric acids, and is therefore a severe irritant.

Internal

Alimentary canal. - It has no effect on the stomach, and most that is taken is passed out in the faeces unaltered., In the intestine, a certain amount is converted into hydrogen sulphide and

other sulphides. These cause a mild laxative effect, increasing the secretion of intestinal juice, and slightly stimulating the muscular coat, producing soft semi-liquid stools, sometimes accompanied by flatus of hydrogen sulphide, which, if in sufficient quantity, makes sulphur an undesirable laxative.

Remote effects

Sulphur is absorbed as sulphides and hydrogen sulphide, which is a powerful poison, decomposing the blood, and thus producing symptoms of asphyxia. It also paralyzes the whole nervous and muscular systems, but sulphur is never given to man in sufficient doses to produce any remote effects. Patients taking sulphur get rid of some minute portion of it as hydrogen sulphide through the kidneys, the milk, the lungs and skin. The breath occasionally smells of it, and silver ornaments next to the skin may be discolored.

Sulphur has been administered internally for all sorts of skin diseases, generally without any good result, but occasionally chronic eczema associated with much itching appears to be benefited by it, so that the sulphur tablet is a suitable laxative for these cases. Sulphur has been also given for bronchitis, for chronic rheumatism, and rheumatic myalgia, but it is very doubtful whether in these diseases there is much relief from this treatment.^[5]

CONCLUSION

The universally accepted element Sulphur is an important uparasa in Rasashastra. In modern medicine it is used as sulpha drug as an antibiotic and in the ointments for external applications in skin diseases. In supplementary form required for body, sulphur is an element. It is also having versatile effects on body. This helps body to prevent diseases as well as maintains the proper functions of the human body. The same things we found in the ayurveda regarding the sulphur. Its functions are given in very brief words. We find much similarity in the uses of Gandhak in ayurvedic and allopathy medicines.

Shodhita Gandhaka along with different anupanas and the Gandhaka rasayana are few examples having same effects as mentioned in modern medicine. It is important because in ayurveda the sulphur powder is used after going through the process of purification. This removes its physical impurities and reduces its toxic material from sulphur. And we observe that the effects of purified Gandhaka in Ayurved and sulphuric substances in allopathy are comparable.

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IMPORTANCE OF "HUMAN ORGAN DONATION," TRANSPLANTATION AND ITS ACT

¹*Dr. Rajesh Kumar S. Upadhyay, ²Dr. Ujawala M. Divekar and ³Dr. Fulse Sanjiv D.

¹Professor and HOD Agad Tantra Avum Vidhivaidyak, C.S.M.S.S. Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra, India.

²Asso. Professor, Samhita Siddhant Dep. C.S.M.S.S. Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra, India.

³Professor and HOD, Dept. of Kriya Sharir C.S.M.S.S. Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra, India.

*Corresponding Author: Dr. Rajesh Kumar S. Upadhyay

Professor and HOD Agad Tantra Avum Vidhivaidyak, C.S.M.S.S. Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra, India.

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ABSTRACT

Transplantation of organs in the human body represents a notable advance in medical science and has tremendous life saving potential transplantation of Human organs Act 1994. It come into force in 1995 and deals with the regulation of removal storage and transplantation of human organs for therapeutic purpose and for the prevention of commercial trade in human organs. As per the Act the organs that can be donated include the Kidneys, heart, lungs, liver, Pancreas, eyes, eardrums and ear bones. Presently data of organ Transplantation sources from Indian express more than 10000 people in the country need organ transplant and every year around one thousand people die waiting one cadaver can save at least eight lives. There has been a gradual rise in transplantation in India. So we should create awareness by media, Rally, News Papers, Schools, Hording at crowded aria in all states. Recently uterus transplantation has been done successful in India at Pune first time in 18th May and second on 19th May 2017 and Jan. 2018. All organs are very important for donation because it gives now life. So we should promote this type of activities and create awareness for organ donation.

KEYWORDS: Organ, Human, Law, Act, Transplantation, Rules.

INTRODUCTION

Human organ and tissue transplantation was started in India in 1962 Initially, the organ transplant was unregulated, and organ trafficking was rampant. The act governing the transplantation was passed in 1994. This has been subsequently amended in 2011, and new rules came into force in 2014. Many of the students as well as practicing physician are not aware of the act as it is generally not a part of the curriculum. The main aim of this article is to create awareness among physician, students and General public about legal aspects of transplantation and about knowledge of organ Donation. And this is the requirement of organ to save the life of others.

So our aim is very clear "Save life of needy person with the help of organ.

LITERARY REVIEW

1. The transplantation of human organs act 1994 the act provides for the regulation of removal storage and transplantation of human organs for thereptic purposes and for the presentation of commercial

dealings in human organs and for connected matters. There are three main aspects of the Act¹¹ it aims at putting a stop to live unrelated transplants.

2. In the case of a live related transplant, It defines that the donor and recipient are genetically related with an exception it the transplant is done with prior approval of the Authorization committee in an application jointly made by the donor and recipient.
3. It accepts the brain stem death criterion. Certification of death by a panel of experts consisting of medical officer incharge of the Hospital, an independent medical specialist, a neurologist or neurosurgeon, and the doctor treating the patient is essential. The act defined human organ as any part of the human body consisting of a structured arrangement of tissue, which it wholly removed cannot be replicated by the body. Bone morrow transplant is outside the purview of the act. The organs that can be donated after death are Kidney, Heart, Liver, Lungs, Pancreas, Eyes eardrums, and ear bones.
4. The organ can be removed from the dead body of any donor at any place. Removed of the organs from

**A Conceptual study on malnutrition according to Ayurveda****Sumit D. Pawar*², Karuna S. Ratnaparkhi²**

1. P.G. Scholar,
2. H.O.D. and Guide,

Department of Kaumarbhritya, C.S.M.S.S. Ayurved Mahavidyalaya and rugnalaya,
Aurangabad, Maharashtra, India.

***Corresponding author:** sdpawar2612@gmail.com

ABSTRACT:

Malnutrition is the condition that develops when the body does not get the required amount of vitamins, minerals and other nutrients that are required to maintain normal health. Food is said to be a main source of energy, as it determines body conditions right from the womb to future growth phases. Nutrition is a major concern for mankind. Malnutrition is the condition, which results from abnormal nutrition. Malnutrition includes both under nutrition and over nutrition. It causes more than half of the nearly 11 million deaths each year among children less than 5 years of age. Malnutrition which is said to be a nutritional deficiency disorder is viewed under *Apatarpanjanya Vyadhis*. In Ayurveda the ancient Acharyas explained diseases related to Malnutrition *Karshya, Phakka, Parigarbhika, Shushkarevati, Balshosha*. This paper highlights the Ayurvedic approach to the malnourished child.

KEYWORD:

Malnutrition, *Apatarpanjanyavyadhi, Phakka, Karshya, Parigarbhika, Shushkarevati, Balshosha.*

INTRODUCTION:

Nutrition is having a major role in human's life. Malnutrition is a condition where children fail to maintain natural body capacities such as growth, learning and physical activities resisting power to infections as well as recovering from diseases. According to WHO poor feeding of infants and lack of nutrition in young children resulting in malnutrition is, The single most risk factor for disease."It has a major role in more than the half of the nearly 11 million deaths in each year among children under 5 years of age. Malnutrition is viewed under *Apatarpanjanya Vyadhis*. Depending upon severity and aetiology they may be considered as *Karshya, Parigarbhika, Phakka, Balshosha, Shushkarevati*. Treatment of *Karshya* according to Ayurveda are *Nidanparivarjan, Shodhan Chikitsa, Sanshman Chikitsa, Brihan Chikitsa and Rasayana Chikitsa*. Drugs which are useful in *Karshya* Are *Ashwagandha, Shatavari, Vidari, Bala, Krushmand* and Drugs which are present in *Jivaniya Gana*.

A) *Nidana* (Aetiology)-



The etiological factors that lead to Malnutrition can be classified into 3 headings.

1) *Aharaja*:

a) Qualitative-

Alpa Bhojana (inadequate food),
Ruksha Annapana (food that causes dryness) and
Excessive intake of *Katu*(spicy), *Tikta* (Bitter), and *Kashaya* (Astringent) Rasa.

b) Quantitative-

Anashana (no food intake),
Alpashana (less food intake),
Pramitashana(Intake of nutritionally deficient food),
Langhana (fasting).

2) *Vihara*:-

Sharirika Vatasevana(excessive exposure to wind),
Atapasevana (Excessive exposure to sunlight),
Atibhargamana (child labour),
Kriyaatiyoga(excessive purification therapies),
Malmutradvigavarodha (suppression of natural urges),
Ativyayam (excessive exercise)

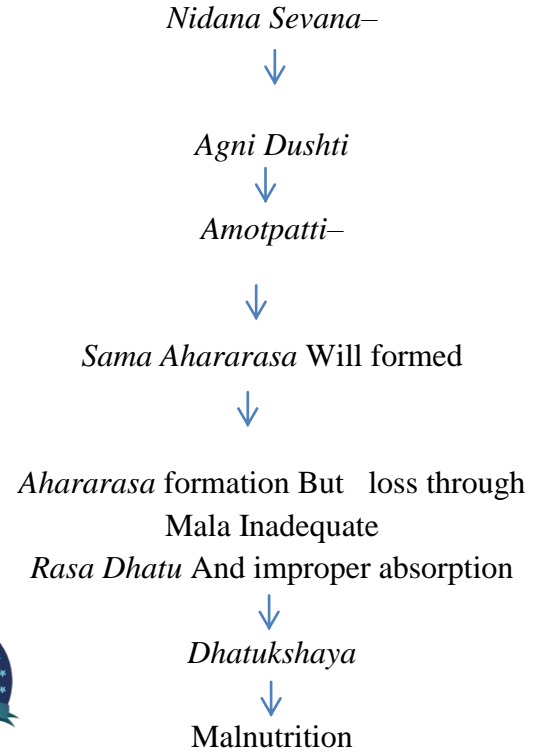
3) *Manasika*:

Atichinta (worry),
Atikrodha (anger),
Atibhaya (fear)

4) Others:

Grahani (Inflammatory Bowel Disease),
Visuchika (Infective Diarrhoea),
Krimi (Worm Infestation),
Ksheeralasaka (Lactose intolerance/milk protein allergy),
Jirnyadhi (Chronic debilitating diseases),

**B) SAMPRAPTI
(PATHOPHYSIOLOGY)-**



**1) *Balshosha* (Marasmus
Kwashiorkor):**

Two different authors mention the term *Balshosha* and *KshirajPhakka* that are nutritional deficiency disorders. The causative factors of *Balshosha* are *Shlaishmikaannasevana* (Excessive energy dense food), *Diva Swapa* (Excessive day sleep) and *Shitambu* (Cold liquid items). Intake of these causative factors for long period of time leads to impairment of *Agni* further leading to *Aruchi* (Reduced digestive capacity), *Jwara* (Fever), *Pratishyaya* (Running nose) and *Kasa* (Cough). If these conditions were not detected and treated early will may lead to *Shosha* (Emaciation) called *marasmus*



Kwashiorkor. As per *Kshiraj Phakka* is concern the intake of *Shlaishmikadughdha* will lead to *Agnidushti* results in *Bahuvyadhi* (Infectious diseases) and *Kshaya* (Failure to thrive)

2) *Parigarbhika/Garbhaja Phakka* (*Kwashiorkor*):

When the child is on feeding breast milk of pregnant women which has *Alpaposhakansha* (poor nutrients) and also abrupt stoppage of breast milk leads to *Parigarbhika/ Garbhaja Phakka*, The condition presents with symptoms of *Kasa* (cough), *Vaman* (vomiting), *Agnisada* (impaired digestive fire), *Tandra* (stupor), *Jwara* (fever), *Aruchi* (anorexia) and *Koshtavrudhhi* (pot belly).

3) *Karshya/Underweight*:

Karshya is a under nutrition condition which results from less intake of *Vatdushitstanya* or secondary to *Vatdushitstanya* or secondary to *Vatdushitstanya* debilitating disorder where child becomes malnourished.

4) *Vyadhi Sambhavaja Phakka* (*Diseases leading to Karshya*):

It is a severe form of malnutrition condition which is result of chronic diseases like *Prameha*, *Grahani*. Clinical symptoms shows *Shushkaspikha* (wasting of buttocks), *Shushkabahu* (wasting of upper limbs), *Shushkauru* (wasting of thighs), *Mahoshira* (big head appearance), and *Mahodara* (pot belly). Due to wasting in body parts, *Nischeshta* (inability to walk) of *Adhokaya* (lower limbs) etc. represents grades of *Marasmus*. *Prameha* is a metabolic disorder where *Dhatusara* (essential nutrients) is lost, as happens in *Glycosuria*, *Phenyl Ketone-Albumin urea* thus child develops life threatening

condition if not managed properly. In some cases diseases due to *Grah adushti* (debilitating infections), *Grahanivikaras* (diseases of Pancreas) shall also land up in malnutrition.

5) *Shushka Revati* (*Debilitating infections*):

Ancient *Acharyas* describes many *Grahas* (Demon) in Ayurveda literature. The *Graha* affects the child represents infectious spectrum of diseases that results into *Sarvangakshaya* (Emaciation). This child though feed with enough quantity of high quality of food ends up in malnutrition. When the condition becomes chronic the same child presents with *Annadweshha* (aversion to food), *Nanavidh Shakrita* (Different colour stools), *Vivarnata* (Loss of lustre), *Udaragranthi* (Abdominal nodular swelling), *Vivhanimnata* (Geographic tongue).

Upadrava (Complications):

Grahani leads to *Agnimandya*, *Shwasa* and *Kasa* With above discussed perspectives we can conclude that the Malnutrition is either due to *Agnimandya* or due to *Dhatukshaya*.

D) *Chikitsa*:-

Therefore the principle of treatment shall be the line of *Agnidipana*, *Dhatusartavardhan*, *Brimhana*. In case of malnutrition along with other complications like inability to speak, walk, irritability and others diseases the respective treatment should be adopted.

1) *Abhyantarachikitsa*

By oral use of various *Kalpas* (Medicine preparations)



Haritakichurna (powder of *Terminalia chebula*),

Trivruttakshira (roots of *Operculina turpethum* boiled in milk),

Draksha rasa (fruit juice of *Vitis vinifera*) can be used.

Rajanyadichurna,

Aravindasava,

Pippalyadighrita,

Kushmandaavaleha,

Kalyanakaghrita,

Chyavanprasha are used for *Dhatu saravardhan*.

2) **Bahyachikitsa-**

By external application therapy

Udavartana (dry powder massage),

Abhyang (oil massage),

Shirodhra (steadily fripping of medicated oil or liquids on forehead),

Shashtikashalipindsweda (sudation therapy with cocked rice),

Basti (medicated enema) to stimulate child and to rehabilitate

Care should be taken to avoid the factors which can aggravate the malnutrition.

E) **Pathya:**

1) **Aahara-**

Nutritional diet that includes all components like proteins, fats, Carbohydrates along with minerals.

2) **Vihara-**

It includes preventive as well as rehabilitative measures that are effective for both mind and body like playful

activities, peace of mind, music therapy, active and passive physical exercise.

Conclusion-

Malnutrition disorder is described in scattered manner in Ayurvedic text. A well-defined and systematic study of these conditions provides hazards of malnutrition disorder and represents different aspects and proper understanding of pathogenesis of the conditions that provides valuable key for the proper and effective management.

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**IMPORTANCE OF "COMMUNICATION SKILLS IN HEALTH CARE," ACCORDING
AYURVED AND MODERN SCIENCE**

¹*Dr. Rajesh Kumar S. Upadhyay and ²Dr. Ujawala M. Divekar

¹Professor and HOD Agad Tantra Avum Vidhivaidyak, C.S.M.S.S. Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra, India.

²Asso. Professor, Samhita Siddhant Dep. C.S.M.S.S. Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra, India.

***Corresponding Author: Dr. Rajesh Kumar S. Upadhyay**

Professor and HOD Agad Tantra Avum Vidhivaidyak, C.S.M.S.S. Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra, India.

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ABSTRACT

Communication skills are now widely acknowledged as having a central role in clinical practice. A good Practitioner must be a good communicator. He should be able to collect accurate information in an efficient manner, to demonstrate sufficient emotional support so as to relieve acute distress and facilitate to development of trust. He should be able to educate the patient about the illness and encourage adherence to treatment recommendations. Communication should be appropriate not only while interacting with patients, but also at the workplace, with colleagues and peers. Good communication skills during the training phase of doctors can build a strong foundation for good teams skills and professional behavior in the later years. A doctor must be able to collect necessary information from the patient in an efficient manner to make the right diagnosis, provide emotional support to relieve acute distress and communicate in manner that leads to development of trust and treatment compliance. Communication with patient is the core clinical skill for the practice of medicine. It can be defined as specific tasks and observable behaviors that include interviewing to obtain a medical history, explaining a diagnosis, and prognosis, giving therapeutic in instruction and information needed for informed consent to undergo diagnostic and therapeutic procedures and providing counseling to motivate participation in the therapy motivate participation in the therapy or to relieve symptoms. **Attitudinal Skills:-** While communication skills are the performance of specific tasks and behaviors by an individual attitudinal skills are the point of view of Individual towards a certain situation. Three main components of the attitudinal skills are,

1. **What the individual thinks:** What the individual does and what the individual feels. Attitudinal skills develop the inter personal relationship and thus are commonly called interpersonal skills.

Attitudinal skills build on basic communication skills

Patient- Professional communication is a fundamental skill of medical practice by understanding patient in a holistic manner, the doctor health care provider can draw a total care plan which is best suited for the patient communication is a two way process which has both verbal as well as nonverbal components. Health care professionals have to be aware of their own communication practices and need to undergo periodic appraisal of the same. Clinician's ability to explain listen and empathize can have a profound effect on biological and functional health out comes as well as patient satisfaction and experience of care.

KEYWORDS: Communication, Skills, Doctor, Patient relationship, Physician Ayurveda, Rugna, Chatusapad, Relatives Aushashi, Paricharak Medicine.

INTRODUCTION

Communication Skills are now widely acknowledged as having a central role in clinical practice. A good doctor must be a good communicator. For that physician should have following qualities.

Excellence in knowledge can be had by attending on preceptors and studying scriptures. Purity in physician helps the patient by dint of its spiritual force. Reputation as infallible in prescribing medicines is also one of the

qualities of a physician which included in the four qualities.

Abundance, suitability, multiple form and potency these are the four qualities of medicament. Knowledge of nursing, dexterity, affection and purity these are the four qualities of an attendant and good memory. Obedience, fearlessness and uninhibited expression these are the four qualities of a patient. Though a quadruped of therapeutics in all equipped with sixteen qualities are

responsible for success in treatment yet the physician by the virtue of his knowledge, administrative position by prescribing capacity, of copies the most important position. A physician duly engaged in the study of science of medicine in mastering their actual implications in the right application of the therapy and practical experience in known as the servior of life.

Doctor Patient Relation

मैत्री कारुण्य मार्तेषु शक्ये प्रीतिरुपेक्षणम्,
प्रकृतिस्थेषु भूतेषु वैद्यवृत्तिश्रुतिवर्तविधेति।

Doctor should be sympathetic and kind to all patient should be concerned with those who are likely to be cured and should feel detached with these who are towards death:

A physician who can distinguish between curable and incurable diseases and initiates treatment in time with full knowledge (about the various aspects of therapeutics) can certainly accomplish his object of curing the diseases on the other hand, a physician who undertakes the treatment of an incurable disease would undoubtedly subject himself to the loss of wealth, knowledge and fame and will also earn bad reputation and other royal sanctions or punishments.

In Ayurvedic literature a qualified physician is he who well acquainted with the principles of treatment who is wise, is well versed in classics and it prompt in action. According to Astanghritya the physician must be efficient having learnt the science in all its meaning (implication) from a preceptor, must have witnessed the therapies (gained) practical experiences and pure/clean (in body, mind and speech).

According to Sushrut samhita

Duty of physician or Medical officer (Practitioners since the prime object of medical profession is service to humanity.

ज्ञान बुद्धि प्रदीपेन योनाविशति तत्त्ववित्
आतुरस्य अन्तर रातनं स रोगांश्चिकित्सति
च.वि.4.12

This message to promote clinical sense in a physician and the need of transparency and will fullness in transaction of clinical responsibility medical profession is not an impersonal profiting professional rather is a superior science and art or humanism and healing saddled with diving grace. The nature and body mind spirit on continuum is the fundamental feature of Ayurvedic holistic.

Ayurvedic diagnostic while can calving two fold ROGI-ROG Pariksa. In this connection Astang hrdaya and charak described trividha pariksa.

1. Darsan pariksa (Visul of serration i.e. inspection)
2. Sparsana Pariksa (Observation of Touch i.e. palpation)

3. prasna Pariksa (Interrogation i.e. case History)

रोगाक्रान्त शरीरस्य स्थानान्यष्टो परिक्षेयेत

नाडी मूत्र मलं जिहवां शब्द स्पर्श दृगाकृति।

यो. र. (अष्टांग स्थानम् परीक्षा)

Examination of the patient, the Astavidha or Astasthana pariksa of the patient is described in Ayurved. These eight are classical points of examination of the patient described by Acharyas of Ayurved a like Saramghara, Bhava Prakasa and Yogratnakar. For physical examination of the patient following eight factors should be examined carefully.

1. Nadi(Pulse), 2. Mutra (Urine), 3. Mala (Stool), 4. Jivha (Tongue), 5. Shabda (Speech and Voice), 6. Sparsha (Skin), 7. Druk (Eyes and Eyes light), 8. Akrti (Faces and overall appearance)

Qualities of Physician can help to improve patient psychology and patients confidence. He should be efficient, posses perfect knowledge well trained in practice. He should be clean and neat.

अभेद्योऽनुधतः स्तब्धः सुनृतः प्रियदर्शनः।

बहुश्रुतः कालवेदी ज्ञातग्रन्थोऽर्थशास्त्रवित्

अनाथान् रोगिणो यश्च पुत्रवत् समुपाचरेत्।

गुरुणा समनुज्ञातः स भिषक्छब्दमश्नुते।अ.सु.

"Abhedya"

Anudwata – Thinking Deeply, or Gambheera

Stabdha – Acting after careful consideration

Sunruta – Speaking Truth

Priya Darshan – Appearing Pleasantly

Bahushruta – Known of many things

Kalvedhi – Well known about the significance of time factor

Grantha – Well Versed in Shastra

Arthashastra Vit – Well trained in practice "Clinical experience"

Putravat upcharet – Treating the patient like son

Guruna Sam nudnyal – Physician permitted by his teacher.

भिषग्द्रव्याण्युपस्थाता रोगी पादचतुष्टयम्

गुणवत् कारणज्ञेयं विकार व्युपशान्तये।

The four aspects of therapeutics are the physician, the medicament the attendant and the patient. They are responsible for the cure of diseases provided they have requisite qualities.

श्रुते पर्यवदातत्त्वं बहूशो दृष्टकर्मता।

दाक्ष्यं शौचमिति ज्ञेयं वैद्यगुणचतुष्टयम्।

Excellent in medical knowledge, an extensive practical experience dexterity and purity. These are four qualities of physician. All the qualities of physician enhance communication skill.

MATERIAL AND METHODS

On the basis of Ayurved Granthas and available literature of communication skill who described about duties of physician, skill and examination of patient and consent, risk factor at time of emergency bad news communication or telling bad news to relatives. The detail content of and references are analyzed from available texts.

METHODS

Descriptive and conceptual study.

CONCLUSION

1. After studying the all the aspect we came to conclusion that every physician or Vaidya should have good professional knowledge and excellent communication skill.
2. On the basis of communication physician can increase his relation between patient relatives and patient.
3. Good Communication skill enhance qualities of physician attitude.
4. Good communication skill reduces consequences in practice.
5. Eye contact should be with the patient at time of listening chief complain
6. Enhance capacity of listening by patient.
7. Ayurved physician should use all parameters which told in Ayurved Granthas about qualities of physicians, like Bahushruta, priya Dharshan putrvat upcharet and Sunruta.

ACKNOWLEDGEMENT

The relationship between good doctor-patient communication and improved health out comes is well established communication skills cannot be adequately learnt by mere observation of the experienced physician. Communication with the patients is the most powerful diagnostic tool of a clinician. The emotional aspect of patient interaction.

Savita Marathe and Payal Bansal Visiting, Former Assistant professor, Professor and HOD, Institute of medical Education Technology and Teacher Training, MUHS Nashik, Maharashtra India.

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MANAGEMENT OF VERNAL- KERATOCONJUNCTIVITIS (VKC) OR SPRING CATARRH WITH LEECH APPLICATION. ONE OF THE REMEDY OF RAKTAMOKSHANA. (CASE-STUDY)

Dr. Sarwade S.V.

Reader Dept. of Shalaky Tantra, CSMSS Ayu. College Aurangabad.

ABSTRACT : A 11 year child complaining of itching, watering, redness, photophobia, visual disturbances due to photophobia since last 2 years intermitantly in both EYES. He was diagnosed as allergic conjunctivitis (VKC) and treated with Raktamokshana principle. So Ubhaya Netra Apang Pradeshi Jalaukavcharana after Mahatikta ghrutpana and shows good reduction in symptom. The study needs to be further continued with larger samples to generalize results.

KEYWORDS : Allergic conjunctivitis(VKC),Leech application, Jalaukavcharana,Mahatikta ghrut

INTRODUCTION:

VERNAL- KERATOCONJUNCTIVITIS (VKC) or Spring catarrh is a recurrent ,bilateral,interstitial,self limiting ,allergic inflammation of conjunctiva having a periodic seasonal incidence.

Etiology:

It is considered a hypersensitivity reaction to some exogenous allergen in which IgE mediated mechanism play an important role .Such patients gives personal or family history of allergy and their peripheral blood shows eosinophilia and increased serum IgE levels

Pathology:

conjunctival epithelium undergoes hyperplasia .Adenoid layer shows marked cellular infiltration with conjunctival blood vessels .Fibrous layer shows proliferation.

Clinical Features:

Spring catarrh is characterised by marked burning and itching sensation along with photophobia,lacrimation ,strigy (ropy) dischargeand heaviness of lids bilaterally.

Case study and Treatment:

A 11 year child complaining of itching, watering, redness, photophobia, visual disturbances. Taking allopathic treatment for the same with local decongestant drops and steroid .The effect of treatment is very short and the disease shows recurrency.

So he was diagnosed as Netragat Raktadushti and treated with parasurgical method i.e. with Ubhaya Netra Apang Pradeshi Jalaukavcharana after mahatiktaghrut snehapana.

Dose:

- 1 Mahatiktaghrut 10ml with warm milk for 3 days
2. Ubhaya Netra Apang Pradeshi Jalaukavcharana After 7days Interval for 1 month.

Drugs:

Mahatikta ghrut- Saptaparna, Ativisha,Tiktrohini, Patha, Musta, Ushira, Triphala, Patola,Parpataka, Dhnavyasa,Chandana, Pippali, Gajpippali, Daruharidra,Uragandha,Vishakha, Shatavari, Sariva, Vasa, Murva, Amruta,Kirattikta, Yashtimadhu, Trayamana, cow ghrut, Amalaki swarasa. And ghrut is prepared

CONCLUSION:

As VKC is an allergic inflammation it shows recurrency with modern treatment .Recurrent use of steroid may shows adverse effect on eyes.According to ayurved it was taken as Netragata Raktadushti along with vata predominance.So Mahatikta ghrutpana and Jalaukavcharana is taken to recover netragata vataraktadushti. In this case patient get complete relief from all symptom with no recurrency during follow up of 6 month.

The results were observed needs to be evaluated with larger samples.

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CLINICAL EFFICACY OF TARPAN WITH SHATAVARI GHRIIT IN MANAGEMENT OF SHUSHKA-AKSHIPAK WITH SPECIAL REFERENCE TO DRY EYE

**Dr. Shelke
Madhavi
Rakhamaji**

Assistant professor CSMSS Ayu college, kanchanwadi. Aurangabad.

ABSTRACT

Now a days, every person is running after life's goal. Hence, does not have time to think and act for the healthy life and not able to follow the proper Dincharya, Ritucharya, Dietetic rules and Regulations. It may responsible to the aetiopathogenesis of visual disorders

5-6% individuals are affected by dry eye, the prevalence rises to 6-9.8 % in post menopausal women and as high as 34% in the elderly person. In modern aspect, dry eye is a group of disorder of tear film due to deficiency of lacrimal secretion or excessive tear evaporation which causes damage to interpalpebral ocular surface, it is associated with symptoms of ocular discomfort, so Tear substitutes are only treatment modality which provides symptomatic relief.

Ayurveda described a similar condition known as shushka – akshipaka which shows symptoms like gharsha, tod-bhedvatvedana, rukshata, kruchhronmilan etc. In Ayurveda many preventive topical and systemic treatment modalities are mentioned for netravayadhirsons. Patients were selected from OPD & IPD of shalakya dept of Eknath Ayurved Rungalaya, Shevgaon and were selected randomly divided into two groups. 30 patients of trial group were treated with Shatavari ghrit tarpan.

30 patients of control group were treated with Carboxy methyl cellulose eye drop. Duration of treatment was 10 days. Results-final assement was done at 28th day.

Both treatments are effective in shushka-akshipak

CONCLUSION- Tarpana with shatavari ghrit and carboxy methyl cellulose eye drop were found equally effective in Shushka-akshipak (Dry eye).

KEYWORDS : Dry eye, shushka-akshipak, shatavari ghrit tarpan, carboxy methyl cellulose eye drop.

INTRODUCTION

Ayurveda the ancient science of india, has describe the importance of eye, without which a life is miserable.

Diseases are classified according to its site. Involvement of most of eye considered as sarvagata vyadhi, numerated as 17, one of the common is shushkaakshipaka. Acharya sushruta described the shushkaakshipaka in Su.Ut. 6/26 also Acharya vagbhat describe it in As.Ut. 18/16.

The disease in which patients shows symptoms of gharsh, todvat vedana, rukshata, kruchhonamilan, shitaichha etc. at eye known as shushkaakshipaka Acharya sushruta consider vatprakop while Acharya vagbhat consider vat-pitt a prokop as its predisposing factor.

Based on similarities of sign and symptoms Shushka-akshipak can be co-related with dry eyes. 5-6% individuals are affected by dry eye, the prevalence rises to 6-9.8 % in post-menopausal women and as high as 34% in the elderly person.

Patients suffering from shushka-akshipak very commonly found in OPD. Hence it has been selected shushka-akshipak for the study can be co-relate with dry eye.

Various acharyas described systemic as well as topical treatment for shushkaakshipaka. As sushruta included shushka-akshipaka in vataroga and Acharya vagbhat described the treatment of shushka-akshipak as a tarpan by snigdhadravas.

So, I selected shatavari and goghrith both having chakshushya, rasayan, snigdha, guru properties both act as lubricant and vatghna.

AIM

Study the efficacy of Shatavarighrit tarpana in management of shushkaakshipaka with special reference to dry eye.

OBJECTIVES

- (1) To study the concept of shushkaakshipaka in Ayurvedic aspect.
- (2) To study the concept of dry eye in modern medicine.
- (3) To correlate the Shushkaakshipaka & dry eye.
- (4) To study the properties of shatavarighrit & corboxy methyl cellulose in detail
- (5) To access the lubricant vataghna effect of shatavarighrit (6) To compare effect of shatavari ghrit tarpan and carboxy methyl cellulose in group A and B.

MATERIAL AND METHODOLOGY

Inclusion criteria -

- 1] Patient willing for trial.
- 2] Patient of age group 15-60 years irrespective of sex, educational status, Marital status, caste etc
- 3] Patient having symptoms of shushkaakshipaka.

EXCLUSION CRITERIA-

- (1) Patient with known case of DM or any immune compromise symptoms or hypertension.
- (2) Patient with having any other ocular pathology.
- (3) Patient with other systemic drug which may alter the result of study.
- (4) Patient who is contraindicated in tarpan procedure
- (5) Sjorgen's syndrome

METHODOLOGY:

After history had been taken regarding sign and symptoms of patients, selected patients were drawn into 2 groups i.e. Group A and Group B

DRUG ADMINISTRATION

Group A: Patients was treated with shatavari ghrit tarpana Once in a day for 1000 matra (10 min) for 10 days.

Group-B : Patients was treated with topical carboxy methyl cellulose eye drop 1 drop 5 times a day for 10 days.

Assessment was done at last follow up i.e. 30th day.

FOLLOW UP:

Follow up of these patients were taken on 5th, 10th, 20th and 30th day. This observation were subjected to analysis. At first visit routine ophthalmological examination was done.

ASSEMENT CRITERIA

Table No.2 Gradation Of Sign And Symptoms

Parameter	0	1	2	3
Gharsh	No Irritation.	Mild, discontinue, tolerable. Grade d)	Moderate, continuous, tolerable.	Severe, continuous, intolerable.
		Grade +3:		

Todavat vedana	No foreign body sensation Grade +1 : Mild, discontinue, tolerable. Grade +2 : Moderate, continuous, tolerable. Grade +3 : Severe, continuous, intolerable	Mild, discontinue, tolerable.	Moderate, continuous, tolerable	Severe, continuous, intolerable.
Rukshata	No feeling of dryness. Grade +1 : Mild Grade +2 : Moderate Grade +3 : Severe.	Mild.	Moderate,	Severe
Kricchhona milan	No ocular discomfort.	Mild, episodic, occurs under stress.	Moderate, episodic or chronic, stress or no stress.	Severe, frequent or constant, without Stress.
Schirmer's test (Waiting of filter paper)	>15mm	10-15mm	5-10mm	<5mm

OBSERVATION AND RESULTS:

Statistical test used
Wilcoxon sign rank test for subjective criteria.
Unpaired t test.

Table No.3 Findings In Group A

	Mean	S.D.	S.E.	W	Z	Result
Gharsh	0.367	0.49	0.089	465	-4.78	Significant
Todavat vedana	0.267	0.52	0.095	435	-4.70	Significant
Rukshata	0.367	0.49	0.089	465	-4.7	Significant
Kricchhonamilan	0.4	0.498	0.09	231	-4.014	Significant
Schirmer's test	0.46	0.507	0.092	28	-1.36	Insignificant

Table No.4 Findings In Group B

	Mean	S.D.	S.E.	W	Z	Result
Gharsh	0.5	0.629	0.115	406	-4.78	Significant
Todavat vedana	0.433	0.727	0.132	406	-4.622	Significant
Rukshata	0.467	0.628	0.114	465	-4.78	Significant
Kricchhonamilan	0.567	0.626	0.114	276	-4.19	Significant
Schirmer's test	0.433	0.504	0.092	45	-1.66	Insignificant

DISCUSSION

It is the commonest defect affecting the eyes leading to functional disturbance and can even account to impairment of vision if cornea is involved. Local area being polluted, having hot and dry climate can be considered as Sadharan Desh (Charak Samhita).

So most of the patients attending the OPD of Shalakya department of our college are dry eye cases. Because of these reasons, the disease Shushkaakshipaka (dry eye) had been selected for present study.

According to Ayurveda treatment of any disease means its 'samprapti bhanga'. In this study shatavarighrit has been used for this purpose. Probable mode of action of shatavari ghrit tarpana- In the present study, shatavari ghrit has been used as a topical application in the form of Tarpana. Ghrita is effective in subsiding Vataja and Pittaja disorders.

Bhavaprakasha has also described Ghrita as Rasayana, Chakshushya, Balya and protects body from various diseases.

Shatavari are also having Chakshushya, balya, rasayana, snigdha properties. So, these drugs processed with Ghrita are beneficial for the strengthens the eyes.

The Garsha, Todvat vedana, Rukshata, Kricchhonmilan are the vata predominant conditions. While the all ingredients have vatashamaka properties like snigdha, guru, madhur veepaka, sheeta veerya and also

chakshushya property, must be responsible for relieving the symptoms of shushka-akshipaka.

CONCLUSION

Shatavarighrit tarpan and carboxy methyl cellulose eye drop can be considered as equally effective in treating Shushka-akshipaka.

Shatavari ghrit tarpan has not shown any side effect. Shatavari ghrit tarpan is safe, effective, easily available and applicable treatment for shushka-akshipaka.

Tarpana is the procedure of choice for treating shushka-akshipaka.

In future this may be valuable clue for further study

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Role of Jalaukavacharan (Leech Therapy) In The Management of Deep Vein Thrombosis**Dr. Shubhada Lonikar¹ and Dr. Bhagyashri Tathe²**

1. Professor and HOD. (Dept. of Shalyatantra) C.S.M.S.S Ayurveda Mahavidyalaya Aurangabad

2. P.G. scholar (Dept. of Shalyatantra) C.S.M.S.S Ayurveda Mahavidyalaya Aurangabad.

Abstract

Panchakarma is a therapeutic way of eliminating toxic elements from the body. According to Sushruta, Panchakarma include five Shodhana (purification) process or therapies in which Raktamokshana (bloodletting) is one among them. Jalaukaavcharana (Leech therapy) is Shodhana type of treatment under raktamokshana. In Ayurveda, raktamokshana has been mentioned mainstay of treatment for raktapradoshajavikara. Deep vein thrombosis, or deep venous thrombosis, (DVT) is the formation of a blood clot (thrombus) within a deep vein, predominantly in the legs. Non-specific signs may include pain, swelling, redness, warmth, engorged superficial veins. D.V.T. formation typically begins inside the valves of calf veins where the blood is relatively oxygen deprived which activates certain biochemical pathways. The lifestyle of an individual can increase the risk for venous diseases. If a person is obese, or smoker, drinks excessive amount of alcohol, or consume fatty foods, it can lead to blood thickening and obstruction of the vessels by fatty deposits or plaque formation. This is the case presentation of 38 years old male patient had a history of D.V.T., having complaints of pain and numbness in right leg since 8 months. A Colour Doppler Ultrasound was positive for D.V.T. The Jalaukaavcharana was done weekly along with oral medication for total duration of 30 days with continuation of the previous medication. The patient got relief in clinical sign and symptoms of D.V.T.

Keywords: Panchakarma, Raktamokshana, Deep vein thrombosis, Jalaukaavcharana

Introduction

Deep vein thrombosis (DVT) is the third most common vascular disease, after ischemic heart disease (IHD) and stroke and it is a silent killer. The mechanism underlying DVT, known as Virchow's triad, are venous stasis, hypercoagulability and endothelial injury. DVT may cause life threatening condition like pulmonary embolism due to dislodgement of thrombus [1]. DVT has an estimated annual incidence of 67 per 100 000 among the general population [2]. DVT commonly affects the leg veins like femoral vein, popliteal vein and the deep veins of the pelvis. Immobility, hypercoagulability and trauma to the vein are the common causes for development of DVT [3]. Increasing age and stroke/paralysis etc clinical conditions predispose to venous thrombo embolism (VTE) in adults [4]. Patients may complain of pain in the calf muscles and thighs and may present with swollen legs. There may be tenderness, palpable thick vein, distended veins, discoloration or cyanosis [5].

Treatment of DVT aimed at reduction the propagation of thrombus, to limit the damage to the venous valves and to prevent pulmonary embolism.

Management of DVT by western medicine consists of, bed rest, elevation of legs, elastic stockings, use of drugs like heparin, coumarine derivatives (warfarins), fibrinolytic drugs (streptokinase) and aspirin etc [1]; Various treatment modalities and drugs such as surgical interventions, urokinase, streptokinase or tissue plasminogen activators to dissolve the blood clots have their own limitations and side effects apart from being expensive [6]. DVT can be correlated with various conditions like, 'Raktavritavata', 'Siragatavata', 'Vatarakta' etc., mentioned in Ayurveda and procedures like, 'Raktamokshana' (bloodletting) / 'Jalookavacharna' (leech application) have been proved beneficial in the management of DVT [1,3]. The present report deals with a case of DVT with 'Stroke' & 'Hypothyroidism' diagnosed as 'Ekangashotha' [7] / 'Raktavritavata' [8] & 'Pakshaghata' [9] according to Ayurveda. Written informed consent was obtained from the patient for the publication of the present case report.

Case Report

Sex - male
Age - 38 yrs
Occupation - Barber
Desh - Sadharan
Religion - Hindu

A male patient of 38 years of vatapittajaprakruti, Hindu by religion, living in Aurangabad, Maharashtra, India approached OPD of CSMSS AYURVED RUGNALAYA and registered with Cr.NO.-2779/381 on jan 27th 2018. Patient was asymptomatic 8 months ago. 8 months back, he developed pain in the Right leg. He consulted a nearby physician but had no relief. Later, his condition got worsened and he was not able to bear weight on the Right leg and unable to walk for which he visited Private Hospital and he was suggested to go for colour Doppler study for both legs. The color Doppler suggestive of Ac. Thrombosis in left femoral vein and partial recanalization of thrombus in right femoral vein. Tab. Warfarin 2 mg 1BD, Tab. Monotrait 20 mg 1BD, Tab. Dolo-650 mg 1BD for 20 days was given to patient but he did not get any relief with this treatment. Hence, he approached to CSMSS AYURVED RUGNALAYA for better management. He come to us with complaints of Pain in Right leg since 8 months, Numbness in both legs since 8 months, not able to walk properly, Slight swelling over the Right lower leg. According to patient statement, it was found that pain was constant, severe aching in nature, not radiated to any other part, aggravated on standing for long time and relieved by elevation of Right leg. He had no history of Hypertension, diabetes mellitus, trauma, previous surgery. On examination, in upper thigh and calf region tenderness was present, in right lower leg redness and oedema was present. Homan's Sign (dorsiflexion of foot may cause pain in calf region) was positive. Moses' sign (when the calf muscle is compressed forwards against the tibia, but not when the calf muscle is compressed from side to side) was positive. All the laboratory investigations were normal excluding Prothrombin time-15 sec, Prothrombin Ratio-1.07, I.N.R.-1.16. In Urine examination, albumin was traceable. The patient was treated with both internal and external medications for four weeks. The details of treatment are given below

Internal medications was

- Ekangaveer Rasa 150 mg 1 Tab. BD,
- Mahayograjuggulu 325 mg 1 Tab. BD
- Maharasnaadi Kwatha 60 ml. B.

External medications was

- Abhyanga with Vishgarbh Tail.
- NadiSawedana with Rasanasaptak Kawath.
- Jalaukaavcharana- started on jan 27th 2018 and repeated after every 7th day.

Materials And Method**Method of Jalaukavacharana****Purva karma (pre-operative procedure):**

The patient who is curable by blood-letting treatment through the leeches should be made to sit or lie down, and if the site of the lesion is painless, it should be dried by rubbing with earth and powdered cow dung.

Pradhana karma (operative procedure):

The leeches should then be grasped and a mixture of mustard and turmeric paste in water should be applied upon them and then for a muhurta (48min) they should be kept in a vessel of water till they get rid of their exhaustion and there after they may be made to stick at the site of the lesion. They should be fully covered with a fine wet white cloth except for their mouth which should be left exposed. If they do not stick, a drop of milk or blood may be applied (at the site of application) or scratching may be done there. If they do not stick even then, another one may be tried. When its mouth gets suck (to the site) and middle portion gets elevated assuming the shape of a horse shoe it should be known it is sucking well. The sucking leeches should be held covered by wet cloth.

Withdrawal of leeches:-When pricking pain or itching is produced at the site of application it should be inferred that the leech is now sucking pure blood (after having sucked the vitiated blood) and then the leech can be removed. If it does not withdraw due to the smell of blood, common salt powder should be sprinkled upon its mouth.

Paschatkarma (post-operative procedure):

When it has fallen away its body should be massaged by rice powder and its mouth by oil and common salt; its hind portion should then be held by the left hand in the between the thumb and fingers and its should be slowly and gently squeezed (beginning from the tail end to) as far upwards as the mouth by the thumb and fingers of the right hand and it should made to vomit till it shows the symptoms of

complete emptying. When the leech completely emptied of blood, it is left in a vessel of water while it moves to and fro in search of food. The leech which sinks down and does not move after left in water should be known to have vomited incompletely; it should again be made to vomit properly. After proper vomiting it should be replaced in water as described previously. After assessing the amount of bleeding, whether appropriate or incorrect, the wound should simply be anointed by Satadhaughrta (ghrita washed one hundred times) or else should be compressed by= gauze (soaked) in the same. The wound caused by the leech should further be rubbed with honey and cold water should be sprinkled over it; or else it should be bandaged; or astringent, sweet, greasy and cold paste may be applied over the wound.

Total treatment period was four weeks. On the basis of visual analogue scale (VAS), patient was assessed weekly.

Pain gradation was as follow

0-1 No Pain

2-3 Mild

4-5 Uncomfortable

6-7 Distressing

8-9 Intense

10 Worst Possible

Result

After the completion of therapy patient was in supervision up to 1 month without intervention follow up and it was observed that the patient is symptomless and cured. As we observed in VAS, before treatment pain grade was 8. After 7 days of treatment pain grade comes down 6, further on the completion of 2nd week, 3rd week and 4th week pain grade was 5, 3 and 1 respectively. Before treatment patient was having swelling on right leg which later completely subsided in two weeks. Gradual improvement in walking distance of patient was as following i.e. initially he was not able to walk, after the treatment of one week he was able to walk of the distance 25 meters and later after the treatment second, third week and four weeks he was able to walk up to the distance 70 meters, 90 meters, 200 meters respectively. Patient was suggested to continue treatment and advise to attend the OPD

after one month. Patient was observed that he has no problem in walking.

Discussion

The purpose of Ayurveda is to maintain the health of healthy individual and treat the patient. Basically the Ayurveda is the complete science of life, which has various drugs and techniques for treatment of mankind. Raktamokshana is one of the biggest innovations in the field of Ayurveda, which also includes the Leech therapy in the form of ashstrakritaraktamokshana. It is safe, painless and highly effective. Once the leech's bites a target, the saliva enters the puncture site along with enzymes and compounds responsible for all the positive effects. Because of anticoagulation agents the blood becomes thinner, allowing it to flow freely through the vessels. The anti-clotting agents also dissolve clots found in the vessels, eliminating the risk of them travelling to the other parts of the body and blocking an artery or vein. The vasodilation agents help widen the vessel walls by dilating them and this causes the blood to flow unimpeded too. Patients who suffer from pain and inflammation will feel relief from the anti-inflammatory and anesthetic effect of the leech's saliva.

Anti-coagulating effect of leeches–

The leech's saliva contains enzymes and compounds that act as anticoagulation agent. The most prominent of these anticoagulation agents is hirudin which binds itself to thrombin's, thus effectively inhibiting coagulation of the blood. Another compound that prevents coagulation is calin. This on the other hand work as an anticoagulant by prohibiting the von Will brand factor to bind itself to collagen, and it is also an effective inhibitor of platelet aggregation caused by collagen. The saliva of leech also contains factor Xa inhibitor which also block the action of the coagulation factor Xa.

Clot dissolving effect of leeches.

The action of destabilize is the break up any fibrins that have formed. It also has a thrombolytic effect, which can also dissolve clots of blood that have formed.

Vasodilating effects of leech

There are 3 compounds in the leech's saliva that act as a vasodilator agent, and they are the

histamine-like substances, the acetylcholine and the carboxy-peptidase inhibitors. All these act to widen the vessels, thus, causing flow of blood of the site.

Bacteriostatic and Anaesthetic effect of leech

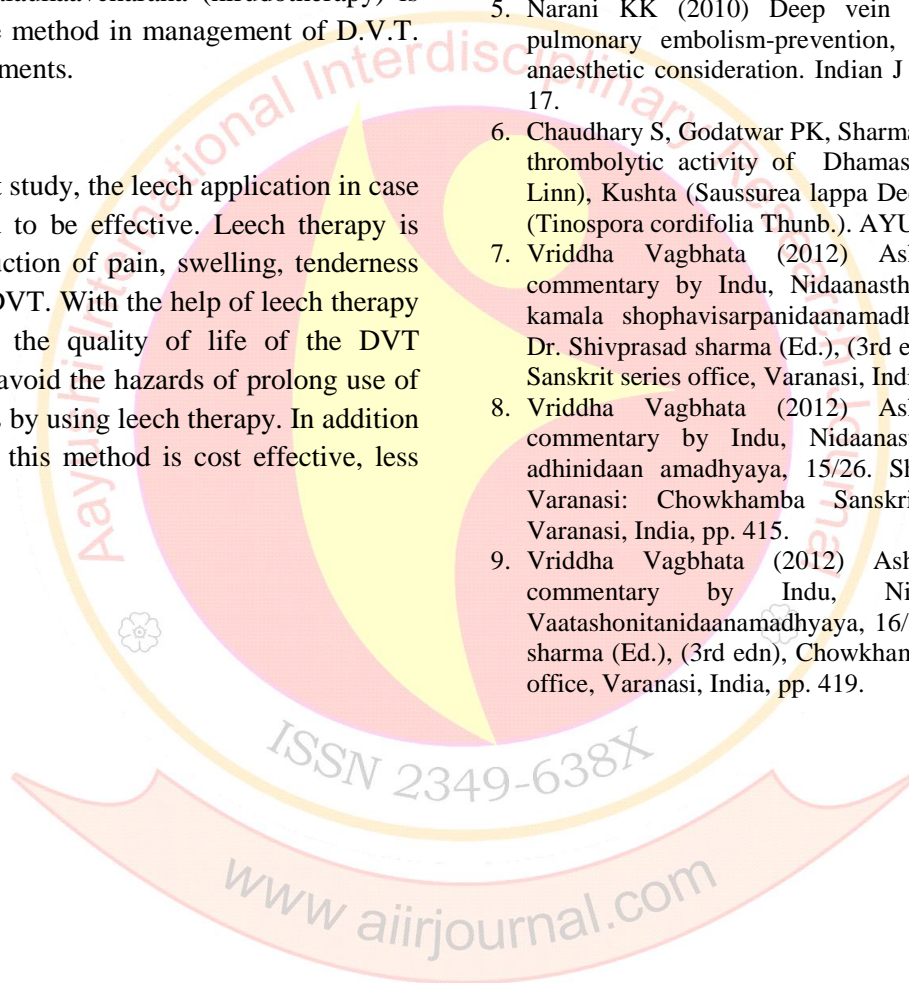
The saliva of leeches also contains anaesthetic substances which relieve pain on the site and also bacteria inhibiting substances which inhibit the growth of bacteria. There were no adverse events throughout the management. The mode of treatment was found to be cost effective, safe and easy to implement. So Jalaukaavcharana (hirudotherapy) is safe and effective method in management of D.V.T. than modern treatments.

Conclusion

In present study, the leech application in case of DVT is found to be effective. Leech therapy is beneficial in reduction of pain, swelling, tenderness in the patient of DVT. With the help of leech therapy we can improve the quality of life of the DVT patients. We can avoid the hazards of prolong use of heparin like drugs by using leech therapy. In addition to these benefits, this method is cost effective, less time consuming.

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An Ayurvedic Review On Phakka Roga W.S.R.To Rickets And Nutritional Deficiency In Children.

Dr.Rajendra Gaikwad¹,Dr.Lalita Patole²,

¹MD Scholar, Department of Kaumarbhritya, C.S.M.S.S. Ayurvedmahavidyalaya, Kanchanwadi, Aurangabad.

²AssociationProfessor,Department of Kaumarbhritya, C.S.M.S.S. Ayurvedmahavidyalaya, Kanchanwadi, Aurangabad.

Abstract:

Acharya Kashyap is considered as the father of Kaumarbhritya. The PHAKKA means walking inability in growing children. The childhood is divided into three stages i.e. Garbh, Bal, kaumar which is accepted even today. Asthivah srotas dusti seen in Phakka Vyadhi. Phakka is a disease complex characterized by a symptoms as the child is unable to walk even after the age of one year. Rickets may be vit D deficiency or non deficiency various metabolic disorder. Rickets is the disease of children caused by Vit D deficiency, characterized by imperfect calcification, softening and distortion of bones typically results in bow legs.

Keywords: Ayurveda, Kaumarbhritya, Phakka, Rickets, Nutritional deficiency.

Introduction.

Phakka disease is classified under kuposhanajanyavyadhi. A lack of adequate mineralization of growing bones results in rickets. The term Rickets is derived from english word wrick (twist) and Greek word rachitis means excess of osteoid tissue. Rickets is a condition that affects bone development in children. It causes the bones to become soft and weak which can lead to bone deformities. Rickets can cause bone pain, poor growth and deformity of the skeleton such as bowlegs, curvature of the spine and thickening of the ankle, wrists and knees. The incident is more in six month to 2 years age. More in poor socioeconomic condition with low vit D in diet. The area in which deprived of sunlight. Nutritional rickets usually presents in infancy or preschool age, usually as widened wrists or bowing of legs. Presentation in early infancy and finding of seizures or tetany suggest a defect in vitamin D metabolism.

PHAKKA. According to Ayurveda.

If a child after attaining age of one year does not walk on feet this is known as Phakka.

There are three types of Phakka Rog: Ksheeraj Phakka, Garbhaja Phakka, and Vyadhija Phakka.

1. KSHEERAJ PHAKKA:

It occurs due to kaphajstanya sevan by the child and child become krusha.

2. GARBHAJ PHAKKA:

If lactating mother becomes pregnant ~ Quantity of milk secretion becomes less in that mother ~ their are less nutritional content in milk which is required for growth and development of child. Because most of the part of nutrition is used for growth of fetus in mother ~ So child does not get sufficient nutrition from milk of mother ~ their is no proper growth and development in child. Then gradually child becomes krusha this is known as Garbhaj Phakka.

3. VYADHIJ PHAKKA:

In this Vyadhija Phakka child suffer from nij and agantujjwaradi Rog, hence child suffers from ksheenata of mansa, bal, shifk, bahuanduru becomes emaciated, abdomen becomes protuberant, head and face becomes more dominant, wasting of muscles.

Management of phakka:

A) ABHYANTARCHIKITSA:

- 1) Orally use of Kalyanakghrita, Shatpalghrita, Amruta ghrita, Sanvardhanghrita.
- 2) Asthiposhak vati, Kukkutandatwak bhasma, Liq kumarikalpa.

B) BAHYACHIKITSA:

- 1) Sarvang Snehana: By Balatail/Chandanbalalakshaditail/Rajtail.
- 2) Vedanashamak Tail: Narayantail, Dhanvantartail, Visgarbhatail, Dashamultail for Abhyang.
- 3) Sarvang Swedan:
 - 1) Bashpa Swedan with Dashmulbharadchurna.
 - 2) Nadi Swed with Vatagnadravya.

- 3)Swedan with shalishastikpindasweda.
- C) Deepan and Pachandravya like; Rasana, Madhukasidhaghrita, Draksha, Punarnava, Milk for brahankarma.
- D) PhysiotherapyanduseofPhakkaRath.

According To Modern Science:

Etiology Of Rickets :

- 1.Nutritional rickets.
- 2. Malabsorption states:
 - a) Cystic fibrosis
 - b) Biliaryatresia
 - c) chronic diarrhoea and vomiting
 - d)Liver disease
 - e)Excessive destruction of intestinal mucosa malabsorption
- 3.Refractory rickets:
 - a)Renal tubular dysfunction (hypophosphatemicVit D resistant rickets).
 - b) Renal tubular acidosis.
- 4)Prolonged anti convulsant therapy inducess rickets by interfering vit D metabolism.
- 5.Inadequate dietary intake of vit D and lack of sunlight.

Functions Of Vitmin 'D':

- 1) Vitamin D is required for normal growth in Bone's is related to its role in calcium and phosphorus absorption which is needed for bone development.
- 2) Vitamin D increases calcium and phosphorus absorption in intestine.
- 3) Vitamin D increases the reabsorption of phosphate by renal tubular cells and rise the level of phosphate in the blood.
- 4) In normal growth of bones,the bone forming cell's appears as cartilage cells which degenerate anddisappear and calcium and phosphorus are deposited in vitamin D deficiency cartilage cell do not degenerate but continue the grow.

Metabolic Changes In Rickets:

Deficiency of vit D



Decreased calcium and phosphate absorption from intestine



Decreased level of calcium and phosphate



Compensatory mechanism by parat hormone



- a) Reduced calcium excretion by kidney
- b) Calcium released from bones

c) Decreased Renal tubular reabsorption of phosphate



Sr calcium return to normal but phosphate level fallsProlonged vit D deficiency



Even parat hormone can not sustained it's action



Sr calcium and phosphate both level decreased



Interfere with calcification of osteoid tissue



Cartilage cells of bone can not be disappears



Increase osteoblastic activity

Clinical Features Of Rickets:

Rickets commonly present at 6 months to 2 years of age with bony deformities and hypotonia of supporting ligaments / muscles. Important changes in Rickets are:

A) Craniofacial changes:

- 1) Craniotabes : thinning softening of skull bones with pin-pong ball like resilience on pressure over parietal bones.
- 2) Frontal bossing : Prominence of frontal bones.
- 3) Delayed closure of anterior fontanel.
- 4) Delayed dentition.

B) Thoracic Changes:

- 1) Rachitic rosary: Round ,non tender bending due to widening of costochondral junction's.
- 2) Harrison sulcus: A groove / depression along the lower costal margins.
- 3)Sternal Deformities like pectus excavatum i.e.depression of sternum .Pigeon -Chest deformity.

C) Limb Deformities:

- 1)Widening of wrist ankles due to widened epiphysis and metaphysis
- 2) Gait abnormalities e.g.Knock-Knee ,Bow legs and Coxa -Vera.
- 3) Green stick pathological tatures of long bones.

D) Spinal Deformities:

- 1) Kyphosis or scoliosis due to lax ligament.
- 2)Short stature due to deformed spinal curvature.

- E) Generalized hypotonia with.
- 1) Pot -belly due to abdominal muscle hypotonia.
 - 2) Visceroptosis due to ligamental laxity.
 - 3) Hyper- extensible joints (acrobatric rickets).
- F)Other manifestation
- 1) Excessive sweating over forehead, recurrent respiratory infection.

Evaluation.:

1. Radiologic changes are characteristically seen at the metaphysis.
2. The first change is loss of normal zone of provisional calcification adjacent to the metaphysis.
3. This begins as an indistinctness of the metaphyseal marg in progressing to a frayed appearance with widened growth plate due to lack of calcification of metaphyseal bone.
4. Weight bearing and stress on uncalcified bone gives rise to splaying and cupping of metaphysis.
5. Eventually a generalized reduction in bonedensity is seen.
6. Laboratory diagnosis is of vitamin D deficiency is based on low circulating level of 25(OH)D3.
7. Values below 10ug/ml are indicative of deficiency.
8. An increased plasma level of 1,25(OH)2D3 indicates deficient intake of calcium or phosphorus.
9. Blood levels of alkaline phosphate are elevated; calcium and phosphate level may be normal or low.

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Treatment Of Rickets (According to modern science):

A)Vit D is administered orally either in a single dose of 600,000 IU or over 10 days (60,000IU daily for 10 days) followed by a maintenance dose of 400-800IU/day and oral calcium supplement 30 -75 mg/kg/day for 2 months.

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Clinical efficacy of Katibasti and yog basti In the management of Katigraha (lumbar spondylosis)

Sachin Lone¹, Anil K. Burley², Shrikant G. Deshmukh³

1. PG Scholar,
2. Guide and Professor,
3. HOD and Professor

Dept. of kayachikitsa , CSMSS Ayurved Mahavidyalay, Aurangabad, Maharashtra

***Corresponding author:**

Email: lonex358@gmail.com;

Phone: (+91)-8888333963

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Abstract:

Katigraha is degenerative condition in which affecting vertebral bodies, and vertebral discs and its associates with lumbar spine. We can correlate *katishoola* with lumbar spondylosis , Low back pain affects approximately 60.85% of adults during some point of their life and 10% of this is because of Lumbar *Spondylosis* (LS). In current study, the assessment of kati basti and *yog basti* in the management of *Kati Graha* with special reference to Lumbar spondylasis has been attempted on a patient female patient has age of 50yrs. having signs and symptoms of L.S. were selected and were administered *katibasti* and *yogbasti* for a period of 8 days. Highly significant results were observed and improvement in cardinal symptoms of *Kati Graha* was observed. It also provided highly significant results in improving range of movements and pain intensity this procedure appears to provide good clinical improvement in pacifying pure *Vataja Kati Graha*.

Introduction

In *Gad nigraha* separate introduction of the *katigraha* disease motioned and today we can correlate with lumbar *spondylasis*, as rationally lower back pain ranks as number one cause of disability in individuals under age of 45 yrs. L.S. commonly responsible for 10% of all back pain conditions,¹

KatiGraha is *Shosha* (degeneration),

Stambha (stiffness), and *Shula* (pain) predominant *Vyadhi* (disease). As correctly said by *Sushruta Acharya* without vitiation of *Vata*,

If we think about the *samprapti* (pathology) of *katigraha*, *Gada Nigraha* clearly states that pain is produced due to stiffness which is produced by *Sama* (with *Ama*) or *Nirama* (without *Ama*) *Vayu* movement into *Kati* (lumbar region) hence this suggests of presence of *Dhatu Kshayatmaka* (degenerative) and *Marga Avarodhaka* (obstructive) form.

This existence of constant pain urges one to find a remedy. But, there is no current concrete treatment approach to the diverse range of patient presentations of *Kati Graha* (LS) despite substantial research efforts to identify conservative and more invasive methods of managing symptoms and slowing progressive degeneration.²

Katibasti (contains *sahachar taila*) , *yogbasti* (medicated enema containing *dashmula kwath* for niruh, and *saindhavadi til tail* for anuvasan etc.) which was selected for present study is a mild type of *Niruha* that has *Balya* (strength promoting), *Rasayana* and *Vata Kapha Shamaka* effects. *Kati basti* added as adjuvant for *santarpan* properties for degenerated back bones.

Keeping in mind the high prevalence, rate of disability in productive span of life, intensity of symptoms of disease, lack of current effective treatment and considering classical reference of efficacy of *kati basti* and *yog basti* in *Kati Graha*, a open label, trial was conducted to assess the efficacy of *kati basti* and *yog basti* in the management of *Kati Graha* with special reference to LS.

History of illness

The female patient aged 45 years , she was quite well before 1 year, since then, she was been suffering from *Katishool, chankraman kashtata, prushtashul, amlodgar and daurbalya* ,

Past history of the patient

General Examination

Patient had no any previous medical or surgical illness and also there is no any family history that complaint ever about the disease

On general examination the heart rate was 78/min and blood pressure is 130/80 mmHg and whereas the body temperature is 98⁰ F at systemic examination and there is no any abnormality observed during systemic examination and there is no any abnormality was observed during GIT and respiratory , cardiovascular and related to nervous system , and the *prakruti* of the patient was diagnosed *vatapittaj* , there were no any complains regards to mal *mutra* and *jivha* , and *druka* of the patient is *shwetabh* (pallor).

DIFFERENTIAL DIAGNOSIS

The diagnosis was confirmed on the basis of *lakshanas* (symptoms) and physical examination of the patient

Investigations

Routine *haematological*, bio-chemical and urine investigations were recorded.

Digital X-ray, AP and lateral view of the lumbar spine were taken.

MRI OF SPINE REVEALS

- ❖ Degenerative changes in lumbar spine
- ❖ Diffuse bulge of L4/5 disc is noted with *ligamentum flavum* hypertrophy and *facetal arthropathy* causing spinal and *neural canal stenosis* with compression over bilateral transversing and exiting nerve roots.
- ❖ Screening of *cervico-dorsal* spine reveals degeneration spine reveals degenerative changes in cervical spine in the form of diffuse disc bulge at C5/6 level indenting the cal sac .

ELECTROMYOGRAPHY

- ❖ The EMG and thr nerve conduction study of right lower limb shows mild to moderate L5 *radioculopathy*

STUDY DESIGN

According to symptoms and the treatment was carried out daily *katibasti* with *sahachar taila* and initially one cycles of *yogabasti* and followed by oral medication there is time taken 15 days of the patient and other medications are stopped , during *ayurvedic* management is started , the subjective assessment was done under the basis of scoring pattern during specific period, after treatment in *patyanupathya* she was advised to tale easily digestible foods, *protienous* diet,

green leafy vegetables, fruits, *mansa acchadit asthi* (muscles covering with bone), eggs , *kukkut*, low fat diet, avoid fried and heavy foods and *vataj ahar* and *vihara*. Like walking and general physical activity,

Table no. 1

Medication and procedure

Medications	Dose	Time	Duration
<i>Katibasti</i>	100 ml.	After snehan svedan	8 days
<i>Mahayograj guggul</i>	500mg BD	After meal	15 days
<i>yogbasti</i>	Anuvasan 660ml.	After break fast	5 days
	Niruha 100ml.	Empty stomach	3 days

1. *Snehan(til taila) swedan (tandulodak bashpa swedan)* at *purvakarma* for 8 days
2. *Katibasti with sahachar taila* for 8 days
3. Oral medication of *Mahayograj guggul* 500mg BiD for 15 days
4. *Yogbasti* of for *niruh dashmul kwatha* and for *anuvasan til taila*

Table no. 2

SUBJECTIVE ASSESMENT CRITERIA

Kellgren – Lawrence grading scale:

Grades	Observations
0	No any narrowing of joint space or any other deformity
1	Dough full narrowing of joint space and possible <i>osteophytic lipping</i>
2	Definite <i>osteophytes</i> , definite narrowing of joint space
3	Moderate multiple <i>osteophytes</i> , definite narrowing of joints space, some sclerosis and possible deformity of bone contour
4	Large <i>osteophytes</i> marked narrowing of joint space severe sclerosis and definite deformity of bone contour

RESULT:

Effect on Roga Bala Kati graha (back stiffness), *Kati Shula* (back pain), *Sparsha Asahyata* (tenderness), *Gridrasivat* Pida (sciatic pain), Straight Leg Raise (SLR) test, *Pada Harsha* (tingling sensation in feet), *Pada Gaurava* (heaviness in feet), *Mamsa Bala Kshaya* (decreased muscle strength), *Gamane basti* and *yog basti* provided statistically highly significant effect on improving *Kati Graha (Kashtata)* (difficulty in movements). Insignificant relief was found in producing relief in symptoms of *Pada Supti* (numbness in feet), *Pada Daha* (burning sensation in feet) and *Mamsa Kshaya* (muscle wasting) The frequency of pain killers was reduced to statistically significant

Effect on objective criteria

In *Basti* group, though the values were statistically insignificant on radiographs of a patient disc size improvement was noted thereby reducing the mild *spondylotic* changes to minimal *spondylotic* changes which was confirmed by the radiologist. Improvement in the pain related symptoms were statistically highly significant

Overall effect of the therapy

In present study, patients achieved marked improvement.

Conclusion:

In the management of *Kati Graha w. s. r.* to L.S. *katibasti* and *yog basti* yields better Thus it can be clearly seen that *katibasti* and *yog basti* holds promising hope as non-invasive intervention results in pacifying pure *Vataja* or type of *Kati Graha*.

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Role of yoga in polycystic ovarian syndrome

Salunke Ashvini Prakash¹, Yennawar Sandhya M.², Deshmukh Jayashri S.³

1. PG scholar.
2. PG Guide & Associate Professor
3. HOD & Professor

Prasuti tantra & Stree roga Department.

CSMSS Ayurved College Kanchanwadi Aurangabad, Maharashtra

***Corresponding author:**
ashvinisalunke08@gmail.com

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Abstract:

Polycystic ovary syndrome (PCOS) is common endocrine system disorder among women of reproductive age most women with PCOS have many small cyst on their ovaries hence it is called PCOS. The cysts are not harmful but leads to hormone imbalance. One hormone changes triggers another, which changes another forming a various cycle. The incidence of PCOS appears to rising in India day by day it is seen as many as 5% to 10% of women in their reproductive age the incident is increasing may be due to change in life style to more sedentary existence overtime, lack of physical exercise, stress, strain, high caloric food & indiscriminate dietary habit result in metabolic, endocrinal, reproductive disturbances. Therefore women faces various problem related to reproductive disorder like irregular menstrual cycle, ovarian cyst, miscarriage, irritability, abdominal bloating, hair loss, acne, blemishes, hair growth in face, increase weight etc . To overcome through this problem the people are looking forward to *Ayurveda* & allied branches of successful option.

Yoga can play important role in the prevention & management of PCOS. *Yoga* can maintain the Physiology of H-P-O axis. *Yoga* is one of the important refreshing and rejuvenating modalities which can content and even root out stress completely. Since stress is playing important factor in exaggerating PCOS, some of the important *asana* (posture) *Nadishodhan* (anulom), *Bhramri*, *Pranayama*, *Suryanamaskar*, *Bhujangasana*, *Nau-kasana*, *Dhanurasana*, *Padmasana*, *Shavasana*, *Kapalbharti*. *Yoga* help to regulate the endocrine glands in body there by beneficial in balancing of hormones *Yoga* is effective in keeping your ovary & Uterus healthy. *Yoga* is precious gift which can enrich human life.

Introduction:

A woman is symbol of beauty. 'Beauty must not be skin deep, it should be maintained internally also there are many physiological changes take place in women's body which markedly seen in reproductive life. The God has blessed the female with the most valuable gift of motherhood. The preparation of motherhood starts with puberty and end with menopause.

Polycystic ovary Syndrome, widely known as PCOS, is an endocrine system disorder that Affects women in their reproductive years. Where the women experience reproductive, it is characterized by polycystic ovaries, chronic anovulation and hyperandrogenism leading to symptoms of menstrual irregularity, infertility and hirsutism. In *Ayurveda* no direct reference of PCOS is available but it may be correlated with *Aratavakshaya* or with *Pushphaghni Jataharani*. *Ayurveda* advocates that sedentary lifestyle, overweight and increased stress lead to *kapha-vridhi* and *medho-vridhi*, which in turn cause *srotavrodha* or blocking of *Vata* and *pitta* in minute body channel of the body, thereby disturbing the normal physiology. The hypothalamus- pituitary-ovarian axis gets disturbed resulting in the formation of small cyst in spite of formation of a mature ovum & finally leads to amenorrhoea. *Ayurveda* consider involment of four basic etiological factor i.e. unhealthy lifestyle, menstrual disorder, genetic defect, and cytogenic factors in the establishment of female genital disorder (*yoni vyapad*). The symptoms of *Pushphaghni Jataharani* is *Vyarth Pushpa-darshana* (anovular - menstruation), *Shtulaganda pradesha* (cheeks are corpulent) and *Lomayukta*

(hirsutism). According to *Ayurveda*, *Artava kshaya* is a disorder involving *Vata & kapha dosha, Medas Rasa, Artavaha dhatu*. PCOS can be also described with same involment of *Dosha, Dhatu, & Updhatu*.

Kapha Predominance of manifest as increased weight, subfertility, hirsutism, feel of coldness. *Pitta* Predominance of manifests as acne, hair loss, menses with burning problems. *Vata* Predominance manifests with Painful menses, scanty & irregular menstrual bleeding. The pathology is an obstruction (*sanga*) in the pelvic cavity (*Apan Kshetra*) causing disorder in flow of *vata*. This in turn leads to an accumulation of *Kapha* and *Pitta*.

Concept of Yoga:

YOGA means 'Union'.

Union of mind with super natural power having separated from the disharmonious worldly objects. Mind is a battle field of *satva* (the trasquil) *Rajas* (the Passinate) and *Tamas* (the inert) qualities of nature. *Yogik* processes greatly help the development of mental Potentialities and powers. In *Ayurveda charak sharis sthan* Indicate that yoga is highly essential for the human being, so he has indicate that isolation of mind from its object leads to *moksha*, which is ultimate end of human life.

Maharshi patanjali describes *Asthang yoga* as follows.

- 1) *Yama* - Abstention
- 2) *Niyama*- Strict observance
- 3) *Asana* – Easy posture
- 4) *Pranayama*- control Breath
- 5) *Pratyahara*- withdrawal of sense
- 6) *Dharana*- Concentration
- 7) *Dhyana*- Meditation

8) *Samadhi*- Contemplation

According to *Patanjali ashtang yoga* first two that is *Yama, Niyama* are mainly concerned with person's behaviour towards outer world especially with regard to ethics and morality.

Rest are i.e. *Asana, Pranayama, Pratyahara, Dhyana* and *Samadhi* mainly concerned with regulation of activities of mind. These are very useful to correct the various disorder of women life as follows.

1) *Asana (posture)*

- The steady and comfortable Posture brings about better co-ordination of muscular system with nervous system.
- Increase in correcting excessive or insufficient secretion of endocrine gland so that their optimal integration is achieved.
- Hormones go to shake our emotional making their taming produces emotionally balance and mentally poised personality and building a strong will.
- There are many *yoga* postures, which are good for PCOD.

a) To improve blood circulation and also the muscle tone of blood

vessels help in removal of accumulated toxin and metabolic waste from body.

b) To activate the pituitary and thyroid gland hypothalamus, adrenal gland. (Maintain the H-P-O axis)

Hypothalamus (GnRh)



Pituitary → a) Ant- FSH, LH, PROLACT

b) Post- OXYTOCIN

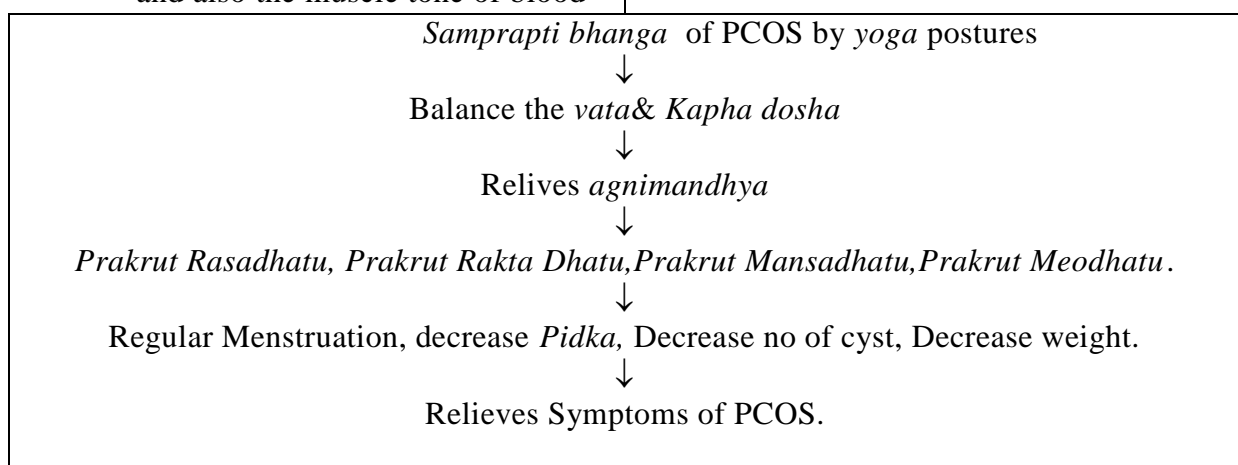


Ovary → OESTROGEN

PROGESTERON

Three Month (daily 10 to 15 minutes) practice noticed that the normal development of secondary sexual character, regularities and correction of PCOD, infertility, removal of inferiority complex, physical and mental stress, unhappiness, which is most important for future a healthy progeny.

Yoga helps to regulate the endocrine glands in the body thereby beneficial in the balancing hormones. *Yoga* helps to balance *tridoshas*.



Some important *Yoga Postures* are given below.

A) Bhadrasana (Butterfly Pose) :

This is an effective *asana* for those who are experiencing PCOD. Butterfly should be practiced coolly and calmly. It helps to open up the pelvic area and Promote relaxation. It beats stress and relieves menstrual discomfort.

B) Surya Namaskar (Sun Salutation):

The twelve *yoga* poses in the sun salutation is good to enhance flexibility in the body as well as effective in controlling hormonal imbalance. *Surya Namaskar* is also helpful in controlling of weight. Sun salutation helps to de- toxify and distress the entire system.

C) Bhujangasana (Cobra pose):

Bhujangasana exerts pressure on the stomach and helps to stimulate ovarian function. it has many advantages like

During *Pranayama* process

Purak (Inhalation of breath)
Kumbhak (Retention of breath)
Rechak (exhalation of breath)

improves digestion, bust stress, good for chest, lungs, and shoulder.

D) Naukasana (Boat Pose):

Naukasana is good in case of PCOS as the boat pose but excess pressure on the abdominal region.

E) Padmasana:

Helps to stretch the pelvic region and good to control hormonal imbalance.

F) Sukhasana:

Improve blood supply to Uterus and Pelvic organ.

H) Chakki chalanasana (moving the grinding wheel):

Help to modify the endocrine glandular function thus enhance the Efficiency of hormonal secretion.

2) Pranayama (Breath):

The vital force of life, is controlled positively by *Pranayama* to ensure homeostasis and wellbeing in humans.

Trains are body to stand in high CO₂ Pressure.

A) Nadisodhan Pranayama:

Nadishodhan Pranayama is also called *Anulom Vilom*, which helps to soothe your mind refresh your brain nerves thereby helpful in de-stressing the body. It brings peace and comfort to your body thus cures the PCOS naturally.

B) Bhamri Pranayama:

It is only *Pranayama* which control all the negative domains such as stress, strain, anxiety, tension, depression etc so, helpful in contending your mood swings.

3) Mudras (finger Posture):

It stabilizes the union of *pran*(inhalation) and *Apan*(exhalation)



Directly action upon *kundalini shakti*



This shines and illuminates the whole body

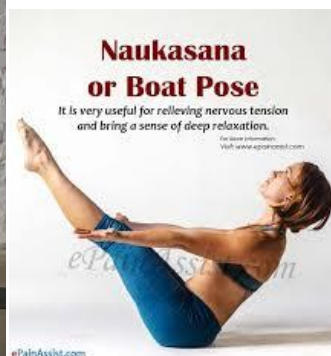
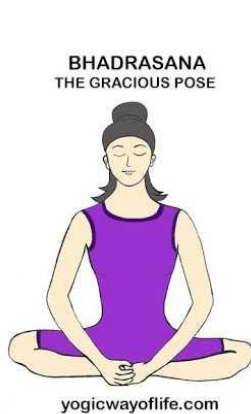


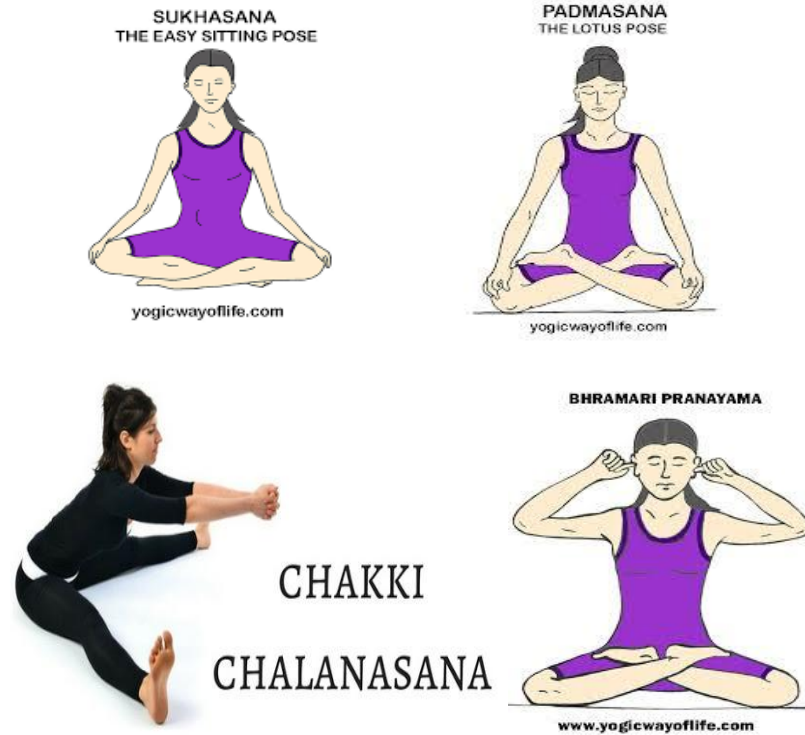
Apart from these days are numerous physiological, cultural and therapeutic benefits of *yogic* exercise, to maintain the health of women.

Conclusion:

Yoga affects every cell of the body. It brings better muscular relaxation, improves strength of the body and increases optimum functioning of all

organ system. *Yoga* can help to Regular menstruation, reduce the body weight & reduce the symptoms of PCOS.





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End of article

PHARMACEUTICAL STUDY OF SAMEER-PANNAGA

¹*Dr. Jyotsna S. Gulhane, ²Dr. Sanjay J. Dahake, ³Dr. Swapnali N. Khabade and
⁴Dr. Shubhada A. Rahatgaonkar

¹Professor & HOD, Rasashastra & Bhaishajya Kalpana Dept., S.R.C. Ayurved College,
Chikhli.

²Professor & HOD, Rasashastra & Bhaishajya Kalpana Dept., C.S.M.S. Ayurved College,
Aurangabad.

³Lecturer, Rasashastra & Bhaishajya Kalpana Dept., S.R.C. Ayurved College Chikhli.

⁴Lecturer, Samhita Dept., S.R.C. Ayurved College, Chikhli.

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*Corresponding Author

Dr. Jyotsna S. Gulhane

Professor & HOD,

Rasashastra & Bhaishajya

Kalpana Dept., S.R.C.

Ayurved College, Chikhli.

ABSTRACT

Rasashastra is the one essential part of ayurveda, concerned about the preparation of medicine. Those medicines are again divided in four parts. Among those Kupipakwa is one type that prepare in the glass bottle. This kupipakwa medicine needs a particular time period with required quantity of heat which is defiantly seems more than the any other medicine required. In this article the matter highlighted about the concept of heat regulation and record of temperature changes while preparing Sameerpannaga Rasa.

KEYWORDS: Kupipakwa rasayan, Sameerpannag.

INTRODUCTION

Ayurved is science of life and Rasashastra is its branch which deals with study of metallic and mineral preparations. Here the metals and minerals termed as “Rasadravyas” are processed with herbs to convert them from nirindriya to sendriya form. Although this is hypothetical. Here the process of shodhana and marana is worth mentioning. Shodhana process purifies the minerals and metals and also adds the qualities of shodhana dravyas to them, In shodhan prosses mineals and metals get purified and also receive the beneficial qualities of that shodhana dravya too, and prepares them for the process of marana. In this way minearals and metals are made easily assimilable in Bhasma form into human body by marana process.

Dose - 50 mg to 125mg

Procedure - Following are the stages of sameer-pannaga Ras preparation.

First all the contents were purified according to ayurvedic procedures.

1] Parad shodhan - Parada was purified by grinding it with the kalka of garlic and saindhava, for 7 days. [Aarogya prakash165]

2] Sulphur shodhan – Sulphur was mealted in Go-ghruta and poured in godugdha for 3 times. After that it was washed with warm water [Raas-Tarangini-8/7-11]

3] Haratal shodhan - Haratal was purified by boiling it with lime water in dola-yantra for 3 hours. [Ras-ratna samucchaya 3/70]

4] Mansheel shodhan – Mansheel was purified by grinding it [bhavana] with adraka-swarasa for 7 times.[Raas-Tarangini-11/14]

5] Somal shodhan – Somal was purified by boiling it with swarasa of bitter guard [karavellaka] in dolayantra for 3 hours. [Raas-Tarangini 11/136]

6] Kajjali nirmanam - Preparation of kajjali by grinding parad and Gandhak in khalvayantra for 7 days. Then shodhita hartal, mansheel, and somal were added in kajjali and that mixture was grinded for 6 days in khalvayantra.

7] Filling of kupi- Filling the prepared material upto 1/3 part of kupi which is already enwrapped in clay smeared cloth.

8] Kupi sthaapana in valukayantra- Arranging filled kupi in valukayantra in sand upto neck region.

Pakavidhi – Kupi was heated step by step with Mrudu, Madhya, and Teevra agni.

Mrudu agni - upto 220°C

Madhyam agni - upto 230°C--450°C

Teevra agni - upto 450°--550°C

Pak pariksha was done intermittently.

Post heating phase

1] Corking of bottle.

2] Filling chulhika with coal.

3] Swangshitikaran for 24 hours.

4] Breaking of bottle.

5] Collection of final product and storage.

For 500 gms of constituents 325 gms of sameerapannaga was obtained.

OBSERVATION

Time	Temp	Observation
06.00 am	0° c.	Corking of bottle was done.
09.00 am	40° c.	Corking was removed.
10.00 am	100° c.	White coloured fumes coming out. Kajjali becomes moist.
1.00 p.m.	140°c	Yellow coloured fumes coming out. Shalaka chalan.
3.00 p.m.	160°c	Dark yellow coloured fumes, diminished,
5.00 p.m.	200°c	White coloured fumes coming out. Kajjali-aardra.
7.00p.m.	280°c	Shalaka chalan. blue coloured flames at the tip of shalaka due to attached gandhak.
9.00 p.m.	350°c	Very few flames after shalaka chalan.
11.30p.m.	480°c	Fumes totally absent. Corking was done. Chulhika only on burning coals and left to cool by itself.[swangashitalikaran]

ANALYSIS**Organoleptic parameters**

Varna:- Blueish black.

Gandh:- Odourless.

Sprash:- Soft.

Rasa:- Tasteless.

Shabd - Doesn't produce any sound.

CONCLUSION

Sameerpannaga can be prepared in traditional earthen or cast iron valukayantra. For pollution control, time saving and fuel saving proper instrument should be used.

When we measure the temperature in three phases like mrudu, madhyam, and tivra agni cast iron valukayantra is more effective. Here we can maintain the agni-matra with the help of pyrometer. In this modified valukayantra three to four kupies can be placed at a time.

This process took 11 hours for mrudu agni, 2 hours for Madhya agni and 3 hours for teevra agni. Total process took 16 hours to complete.

In this way we can standardize the matra of agni and time period for the complete process of sameerapannag.

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The role of *palash mul arka ashotana* in *kaphaja timira* and *kaphaja kacha* W. S. R. immature cataract

Sarwade swati¹, Deshmukh A.B.², NisarAli Khan³

1. Associate Professor, Dept. of Shalakyatantra, C. S. M. S. S. Ayurved College, *Kanchanwadi*, Aurangabad.
2. Associate Professor, Govt. Ayurved College, Nanded, Maharashtra
3. Associate Professor, Govt. Ayurved College, Nanded, Maharashtra

*Corresponding author:
 drsarwadeswativ@gmail.com

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Abstract:

Blindness results due to numerous causes, Cataract is one of them, it is also major cause of blindness in tropical and developing countries all over the world due to direct effect on eye lens. In view of *ayurved* literature *Kaphaja timira* and *kaphaja kacha* is a dreadful disease of eye lens mentioned in *drishtigat roga vidyaniya addhyay*.

The disease shows gradual –progressive decrease in vision. *Ayurved* literature have recorded single drug and compound formulation for treatment of *Timir, Kacha* (Imm.cat.) as *Chakshushya* or *Netrya* (sight, vision improving) so that *Palasha* a *Chakshushya* drug in the form of *arka*, which is *kaphahara* is taken for the treatment of same and results are noted according to CRF and improvement in visual acuity and disappearance of symptoms are statistically analyzed. Results are significant and no side effects of *arka* are seen.

INTRODUCTION

Age related cataract is the most common cause of visual impairment and blindness. Only second to death, loss of vision is one of the greatest fears among the elders.

While working in OPD of GAC Nanded, it has been observed that there is the good no. of patient of *Immature Cataract*. Their worries for diminishing vision and asking for medical treatment for the same provokes to study the topic to observe the role of medical t/t in cataract.

The present study is designed to evaluate the role and efficiency of *Palash-Mul Ark Aschotana* used as eye drop with special reference to *Aschotana karma* in the management of *Kaphaja Timira* and *Kphaja Kacha* to confirm it's role and therapeutic efficacy.

OBJECTS

- To prevent further degenerative changes in eye lens
- To determine confirm efficacy
- Therapeutic role of *Palash –Mul Ark*

REVIEW OF LITERATURE-

According to *Ayurved* literature *Kaphaja Timira* and *Kaphaja Kacha Nidan* is characterized by following cardinal symptoms.

1. *Dhusardrishtita*
2. All the objects seen whitish, dull, lazy, oily, cloudy or laid down under the sheet of water.

According to Modern science the same disease (cataract) shows signs having

1. Decreased distant vision
2. Iris shadow

3. Lens opacity through ophthalmoscope

All above signs are noted in a clinical Pro-forma and statically analyzed.

ASCHOTANA

Instillation of medicated eye drop in an open eye towards inner *canthus* from a distance of 2 *anguli* is known as *Aschotana*

In *Kaphaja Timira* and *Kaphaja Kacha a Lekhana Aschotana* is taken so 8 drops of *Palashmul-Ark* are instilled in patient of immature Cataract

METHODOLOGY (APPROACH):

Above clinical study of *Aschotana karma* was done in G.A.C. Nanded in April 2002 to March 2005. 30 patient of bilateral *Kaphaja Timira* and *Kaphja Kacha* have been selected .In this way 60 eyes will be studied. Patient's were scrutinized for any unwanted sign. In this study all patient's Right Eyes considered as Experimental Group Eyes and Left Eyes as Controls Group Eyes. In Experimental group Eyes *Palashmul Ark* drop is instilled and in Controls Group Eyes distilled water eye drop is instilled. Observations were recorded and patient were told to review on 8th,15th,30th and 60th day. The *aschotana* therapy was completed by 2 month. After completion of drug course, observations and results were recorded as per norms and regulations of standard criteria of parameter.

SELECTION CRITERIA-

Bilateral immature Cataract, Bilateral progressive cataract, Bilateral early cataract, Bilateral *Kaphaja Timira*

and *Kaphaja Kacha* with age group 40 to 70 yrs of age

REJECTION CRITERIA-

Complicated cataract, glaucoma, blind-eye, corneal, uvula, retinal, vitreous, anomalies, dislocated lens, Bilateral *vataj and pittaja Timira* and *Kacha*, patient below 40 and above 70 years of age

PARAMETERS-

1. Both eye visual acuity will be recorded
2. Both eye auto *refractometer* reading will be recorded

3. Colour of lens with fundoscope

- Whitish colour optic disc and retinal vessels are not clearly seen+++
- Whitish bluish colour optic disc and retinal vessels are seen++
- Lens hazy no opacity with fundoscope

4. SLIT LAMP EXAMINATION-

1. Thick whitish opacity+++
2. Blackish opacity ++
3. Whitish hazy opacity+
4. Lens transparent 0

5. PATIENTS VISION COLOUR-

1. *Dhusardrishtita*++
2. Patient seen all the things whitish+
3. Patient not sees all the things whitish 0

PROCEDURE OF FORMATION OF PALASH –MUL-ARK:

In the night 10gm of *palash mul sukshma churna* is mixed in 100ml of distilled water. This mixture kept as it is up to the next morning about 8 to 10 hours.

The next day, that *mixture* is taken in a distillation apparatus as shown in photographs it is heated and *vapours* are collected and cooled by tap water it is obtained in liquid form known as ARK 50cc of ark was collected in a measuring conical flask.

PARTICULARS OF PALASH –MUL-ARK:

PH-value-7.03

Acidity-0.0009%

Volatile content-0.20%

Follow up:

Follow of these patients were taken on 8th, 15th, 30th, 60th day.

These observation were subjected to analysis.

Sr. No.	Signs	Gradation	Before treatment		After treatment	
			No. of Pts.	Score	No. of Pts.	Score
1.	Colour of lens with Fundoscope	Mild	00	00	05	05
		Moderate	01	02	25	50
		Severe	29	87	00	00
2.	Slit-lamp examination	Mild	00	00	22	22
		Moderate	10	20	08	16
		Severe	20	60	00	00

STATISTICAL ANALYSIS: TABLE SHOWING THE RESULT OF PALASH-MUL- ARKA –ASCHOTANA AS WHOLE ACORDING TO SCORES OF BOTH SIGNS:

Sr. No.	Signs	Gradation	Before Treatment		After Treatment	
			No. of Pts.	Score	No. of Pts.	Score
1.	Colour of lens with <i>Fundoscope</i>	Mild	00	00	00	00
		Moderate	01	02	01	02
		Severe	29	87	29	87
2.	Slit-lamp examination	Mild	00	00	00	00
		Moderate	11	22	10	20
		Severe	19	57	20	60

Table showing the result of distilled water as whole according to scores of both signs:

DISCUSSION:

1.ON VISUAL ACUITY:-During the clinical trial vision according to snellens chart with and without glass has been observed for each patient in experimental and control eyes. There will be seen visual improvement in each patients of E.G.eyes and not improvement in C.G. eyes. Also stastical analysis shows satisfactory effect on E.G. eyes with PALASH-MUL-ARK aschotana but non satisfactory result of distilled water aschotanain C.G. eyes.

2. GRADATION OF LENS OPACITY:-

lens opacity observed through colour of lens with fundoscope and slit lamp examination in E.G.eyes shows satisfactory effect of PALASH –MUL-ARK aschotana.but in C.G.eyes results are unsatisfactory with distilled water.

BREAKING OF KAPHAJA TIMIRA AND KAPHAJA KACHA SAMPRAPTI (PATHOGENASIS):-As PALASH having *katu, tikta, kashaya rasa* which are having *agni, vayu mahabhutadhikya, katu rasa* specially having *chakshuvirechana*

property, *katu vipaka, ushna virya* help in *kapha lekhana* thus PALASH –MUL –ARK treats *kaphaja timira and kaphaja kacha* (Immature Cataract).

SUMMARY AND CONCLUSION:-The study was carried out to study the role of and efficacy of PALASH MUL ARK aschotana in KAPHAJA TIMIRAAND KAPHAJA KACHA Tdrug means *palash mul ark* of concentration of 0.26% is used in experimental group eyes as *lekhana aschotana* of *matra* 8 drops/day in the morning up to two months. There were no bad effect or any complication due to *aschotana* were seen except mild irritation and watering ,which is self-limiting without intervention of any drug.

The effect of treatment on visual acuity for distance vision with and without glasses improved, also changes are seen in gradation of lens opacity and it effects on *auto refractometer* reading also. All results are statistically satisfied. SO”, CONCLUDED THAT, above treatment in experimental eyes not seems to be curative in *kaphaja timira and kaphaja kacha*

Reason behind it may be that-

Poor concentration of drug.

Treatment administered in severe gradation of lens opacity and severe visual loss, it should be started in mild grade of lens opacity and mild visual loss

Chemical analysis of *palash mul ark*.

Follow up of patients till the maturity of both eye.

As treatment shows it's effect on gradation of lens opacity so according to contents of cataractous and non cataractous eye lens which contents are reduced due to *PALASH MUL ARK Aschotana* should be observed .

These points of thinking left to the future study workers as Topic of further study”

So the “NEGATIVE NULLHYPOTHESIS” of *Kaphaja Timira and Kaphaja Kacha* TREATMENT OF *PALASH MUL ARK Aschotana* is proven and accepted.

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End of article

AYURVEDA CONSIDERATION OF VRANA, IT'S MANAGEMENT AND DIETARY, CONSIDERATION FOR WOUND HEALING

Vd. Sejal A. Patil^{*1}, Vd. B. N. Gadve² and Vd. S. R. Lonikar³

¹P. G. Scholar, Department of Shalyatantra, C.S.M.S.S. Ayurveda Mahavidyalaya, Kanchanwadi, Aurangabad.

²Associate Professor and Guide, Department of Shalyatantra, C.S.M.S.S. Ayurveda Mahavidyalaya, Kanchanwadi, Aurangabad.

³HOD, Department of Shalyatantra, C.S.M.S.S. Ayurveda Mahavidyalaya, Kanchanwadi, Aurangabad.

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*Corresponding Author

Vd. Sejal A. Patil

P. G. Scholar, Department of
Shalyatantra, C.S.M.S.S.
Ayurveda Mahavidyalaya,
Kanchanwadi, Aurangabad.

ABSTRACT

Wound healing has been the burning problem in a surgical practice because of a remarkable increase in the number of traumatic cases. The *Ayurveda* terms *vrana* resembles wound of modern science. The pathological condition of *vrana* may initiate due to the results of injury. *Sushrut samhita*, which is said to be a ancient textbook of surgery in Ayurveda, has mentioned about the diet for the person suffering from the wound and the author said that diet plays a very important role in the wound healing process. Ayurveda described various *upakarma* for the management of *vrana* such as: *shashtiupakram*, *Apatarpana*, *Aalepa*, *parisheka*, *Abhyang*, *Sweda*, *Vimlapana*, *Sneha*, *Vamana* and

Virechana are some other approaches used for the management of *vrana*. *Vrana* is seen as debilitating the scaring disorder, usually seen affecting the human being at any age well balanced nutrition plays an essential role in the wound healing.

KEYWORDS: Ayurveda; Vrana; Wound healing; Diet; Nutrition.

INTRODUCTION

Ayurveda described *vranas* pathological condition which broadly classified into two categories as *Nija vrana* and *Agantuja vrana*. *Nija vrana* occurs due to the intrinsic factors such as; burn, accidents, trauma and animal bites. *Vedana*, *Vrana*, *Strava* and *Gandha* are main clinical symptoms of *Vrana*.^[1-5] The pathologically it is believed that etiological factors

leads destruction in *Mamsa Dhatu* which causes *Rakta Dushti and dushta vrana*. Vitiating doshas along with external factors also contribute towards the pathogenesis of *vrana*.

Research on wound healing agents is one of the developing areas in modern biomedical sciences. Many of the synthetic drugs currently used for the treatment of wounds are not only expensive but also pose problems such as allergy, drug resistance etc. and this situation has forced scientists to seek alternative drugs. Nutrition plays an essential role in wound healing and wound care practices and nutritional support need to be considered a fundamental part of wound management.^[4] Attending to nutrition before or during the healing process may delay healing and impair wound strength, making the wound more prone to breakdown. Neglecting the nutritional health of an individual with a wound can compromise the entire wound management process.^[8]

Patho-Physiology of Wound Healing In Ayurveda

“The destruction/break/rupture/discontinuity of body tissue/ part of body, is called *vrana*.”^[5,6]

Healing Process in Open Wound Complete in 3 Phases

- 1) Inflammatory phase.
- 2) Collagen phase or proliferative phase.
- 3) Maturation phase or regeneration phase/remodelling phase.

The redness, swelling, heat and pain of inflammation are a natural part of the healing process. Many nutrients are involved in connective tissue repair and wound healing, such as amino acids, selective vitamins and minerals.^[7]

Management of Vrana: The basic line of treatment for severe types of *vrana* is conversion of *Dushta Vrana* into *shuddha vrana* and these include various measures such as; control of vitiated *doshas*, management of inflammation, surgical intervention and controlling etiological factors which are responsible for the formation of wounds. *Vimlapana*, *Avasechana*, *Upnaha*, *Patankriya*, *Sodhana*, *Ropana* and *Vaikritikarana* are some traditional approaches used towards the management of *Vrana*. The traditional approaches for the management of *vrana* involve *Shodhana*, *Stravahara*, *Dahahara* and *Ropana* properties. The *Ayurveda* also suggests use of drugs which offer properties such as; *Aampachaka*, *Tridoshhara*, *Krimihar* and *vishahara*. *Ayurveda* also recommended that *Shodhana chikitsa*

helps to cure *vrana* completely. Drugs which offer Katu, Tikta, Madhura and Kashaya Rasa offers beneficial effects in *Vrana*.^[4-7]

Ropana: The management of *Vrana* as per Ayurveda involve; healing of *Vrana* which described as *Ropana* at various stage of *vrana* such as *Vrana Roapana* at *Dushtawastha*, *Vrana Ropana* at *Shuddhawastha*, *Vrana Ropana* at *Ruhyawastha*. *Roapana* process helps to heal *vrana* at its various growing stage. There are various factors which affect healing process such as; age, *Sthana*, sex, presence of other diseases (Diabetes, skin disorder and tuberculosis), environmental conditions, *Ahara-vihara* and presence of other poisonous body.

Abhyantara Shodhana

- **Vamana-** Used for the *vrana* which are located above Nabhi pradesha and associated with kapha pradhana lakshana.
- **Virechana** – The wounds which process pitta dosha and longer duration of persistence can be treat with virechana.
- **Basti** – Vata pradhana and margavaranajanya *vrana* in lower extremities may be treating by using basti chikitsa.
- **Shirovirechana** – Urdhvajatrugata *vrana* associated with kaphahapradhan conditions may be treat by shirovirechana.
- **Bahya Shodhana-** 1) Raktamokshana – The margavarana *vrana* predominant of pitta and rakta dosha may be managed with raktamokshana.
- **Vrana Prakshalana-** Sursadi gana kashay, lakshadigana kashay, panchavalkala kashay may be used for *vrana* prakshalana to manage initial stage of *vrana*.
- **Vrana Pichu-** Pichu (medicated soaked cotton/swab)of Jatyadi Tail/Ghrita, Kshar tail, Nimbadi tail & Doorvadi ghrita may also offer relief in *vrana*.
- **Vrana Lepa** - Lepa of *vrana* with Tilkalkadi relief symptoms of *vrana*.^[8-9]

Ayurveda Formulation of Vrana

Panchavalkal Tail: *Panchavalkal tail* is consisted of vata, Udumbara, Parish, Plaksha & Til tail. It also possess *Vranaprakshalana*, *Vranaropana* & *Shothhara* properties.

Jatyadi Ghrita: *Ropan* with *jatyadi Ghrita* along with *sodhana karma* help to heal wound completely.

Durvatail Vranabasti: *The Durvatail application locally as vrana basti* reduces slough completely & offer healthy granulation tissue formation.^[10]

Pathya Ahara as Mentioned in Ayurveda (Diet To Be Taken/Followed): *Purana Shashtik shaali (old stored rice), Jaangala mamsa (less fatty chicken), Jeevanthi shaaka (red variety of Amaranthus Leafy vegetable), Karvellaka, Daadima, Mung, Saindhav, Lavan, Puran sarpi (old stored cow ghee), Vilepi.* These vegetables and fruits are to be taken more during the wound healing process as mentioned in Ayurveda.

Apathya Ahara as Mentioned in Ayurveda (Diet not Be Consumed): Nava Dhanya (newly harvested grain/cereals), Masha(Black gram), Til, Vishama bhojana, Atibhojana, Anishta Bhojana, (Undesirable food), Upavasa, Viruddha Bhojana(Incompatible food), Adhyasan, Kulattha(Horse gram), Nishpava(variety of pea), Amla-lavana-katu Rasa, Vallura mamsa, Shushka Shaaka, Vasaa, Sheetodaka, Madya (variety of alcohol), Asuri(mustard seeds), Mulaka(radish) are Doshajanak so these are to be avoided during the wound healing time as mentioned in Ayurveda.

DISCUSSION

Diet is considered as one of important factor for proper wound healing. Optimising nutrition is important to best practice care in the wound management. The overall goal for the healthcare team should be to make sure the patient is in the optimum nutritional state to give wounds the best chance to heal.

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Ayurvedic management of asthi – majjagatavat w. s. r. to manyastambha – A case study

Hulle Kavita Chinnappa ¹ , Neralkar Uday K. ²

1) PG. Scholar,

2) Guide and HOD,

Department of Panchakarma, CSMSS Ayurvedic Mahavidyalaya,
Kanchanwadi, Aurangabad.

***Corresponding author:**
kavitahulle02@gmail.com

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Abstract:

In today's era everyone is living stressful life. About 66 % of adults experience neck pain and 5% are highly disabled by neck pain. A female patient came to OPD with *manyashoola, manyastambha, chimchimayan,* and painful neck movement. Diagnosed as *Asthimajjagata vata* . As *Asthimajjagata vata* is degenerative disease *Shodhana, Bruhana chikitsa* along with some internal medicines are used. In *Yogbasti Dashmoola kwath niruh* and *Sahachar tail anuvasan* was given. After that *Manyabasti* with *Sahachar taila* and *Nasya* with *Karpasasthyadi taila* was given. Assessment was done before and after treatment. This therapeutic protocol proves very effective in this patient.

INTRODUCTION-

In today's era everyone is living stressful life. Because of change in life style, food habits, overstress, excessive travelling diseases of joints and locomotors system are very common. About 66 % of adults experience neck pain and 5% are highly disabled by neck pain¹.

Manyastambha is the clinical condition in which back of the neck becomes stiff and rigid which impaired the movement of neck. It can be correlated with *Cervical spondylosis*. In Ayurvedic texts there are two main reasons described for vitiation of *vata*. They are *Margavarodha* (Obstruction) and *Dhatukshaya* (Degeneration)². *Asthimajja gatavata* being a degenerative disease comes under *Dhatukshayajanya vataprakopa*. *Asthi dhatu kshya* plays important role in it. According to *Aashrya aashryee bhava* when *vata dosha* increases *asthi dhatu* decreases because *vata* and *asthi* are inversely proportion to each other³.

According to modern medicine cervical *spondylosis* is managed by NSAID's, steroids which have many side effects⁴. According to Ayurveda it is treated by *Panchakarma*, *Shamana* and *Bruhana chikitsa*. In *panchakarma Yogbasti*, *Nasya*, *Manyabasti* are very effective. So, in this case study *manyabasti*, *yogbasti* and *nasya* was given to the patient. Along with that *Rasnadi guggulu*, *Avipattikar choorna* was given as a part of treatment.

CASE REPORT-

A 46 years female patient came to OPD of Ayurvedic hospital. Patient presenting with *manyashoola* (pain in neck region), *Stambha* in *manyapradesha*, *sakashta*

kriya (painful movement), *Chimchimayan*. Patient was suffering from same complaint since 3 years. But from 2-3 months increase in severity of symptoms are noted.

HISTORY OF PRESENT ILLNESS-

Patient was having above complaints since 3 years, for these complaints she had taken treatment (modern medicines) but she didn't get relief from symptoms, so patient came to ayurvedic OPD for treatment.

PAST HISTORY-

- K/C/O HTN since 2 years taking treatment for that.

- No H/O any other major illness or surgical treatment.

PERSONAL HISTORY-

Aahar hetu -	Vihar hetu -	Kalaj hetu -
1. Tikta, ruksha, amla, tikta rasa pradhan aahar. 2. Irregular meal timing.	She works about 10 -12 hours daily.	<ul style="list-style-type: none"> Menopausal Sheet rutu.

GENERAL EXAMINATION-

- 1) Condition - Conscious and afebrile.
- 2) Pulse rate – 68/ min.
- 3) B.P.- 130/90 mm of Hg.
- 4) R.R.- 16/ min.
- 5) Weight – 54 kg.
- 6) Height – 152 cm
- 7) Systemic examination-
 - a) R.S. - A.E= B.E- Clear.
 - b) C.V.S. – S₁S₂ Normal. No abnormal sound.

- c) C.N.S. – Conscious and oriented.
- 8) P/A- Soft. Liver, Kidney, Spleen – not palpable.
- 9) *Prakruti* – *Kapha pradhan vatanubandhi*.
- 10) *Kostha* – *krura*.
- 11) *Agni* – *Visham*.
- 12) *Satva* – *Madhyam*.
- 13) *Sara* – *Madhyam*.

ASHTAVIDHA PARIKSHANA-

- 1) *Nadi- Vatapradhan kapha*.
- 2) *Mala- Samyak* occasionally constipation.
- 3) *Mutra* – 5-6 times per day.
- 4) *Jivha- Saam*
- 5) *Shabda- Spastha*.
- 6) *Sparsha- Samshitoshna*.
- 7) *Druk- Prakrut*.
- 8) *Akriti* – *Madhyam*.

INDRIYA PARIKSHANA-

- 1) *Dnyanendriya* – *Prakrut*.
- 2) *Karmendriya* – *Prakrut*.

STROTAS EXAMINATION-

- 1) *Rasavaha strotas* – *Panduta , Gaurav (Akshikoot pradesha)*
- 2) *Asthivaha strotas* – *Manyashoola(pain in neck region)*.
- 3) *Majjavaha strotas* – *Tingling and numbness in upper limb*.

CLINICAL EXAMINATION OF SPINE-

- Inspection- no any abnormality was seen.
- Gait – Normal.
- **INVESTIGATION** (On the day of admission)
 - Hb% - 10.8 gm %

- Urine examination- Sugar–Nil, Albumin–Nil.

MRI CERVICAL SPINE (25/01/2018)

- 1) Desiccated discs with reduced height of C4/5, C5/6 disc.
- 2) Central and left foraminal protrusion of disc C5/6 disc causing compression of left exiting nerve root.
- 3) Central protrusion with left sided uncovertebral osteophyte at C4/5 level abutting left exiting nerve root.
- 4) Mild central protrusion of C3/4 disc.

DIAGNOSIS AND ASSESSMENT –

Asthi- majja gatavata was diagnosed by complaints like pain in neck, stiffness and MRI findings like osteophyte and protrusion.

TREATMENT-

In 1st cycle following treatment was given-

Day	Treatment
1 st 3 days	<i>Aampachak vati</i> 250 mg. 2 tab 2 times after food with <i>koshna jala</i> .
Next 8 days	1) <i>Rasnadi guggulu</i> 250 mg. 2 tab 2 times after food with <i>koshna jala</i> . 2) <i>Sarvang Snehana (Abhyanga tail) Sarvang Swedana (Dashmool kwath bashpa swedana)</i> 3) <i>Yogbasti- Matra basti</i> with <i>Sahachar tail</i> (60 ml). <i>Niruha basti</i> with <i>Dashmool kwath</i> (600ml).

After that 7 days gap was given for *Parihara kala*. Then 2nd cycle of treatment was started-

Day	Treatment
8 days	1) <i>Manyabasti</i> with <i>Sahachar tail</i> . 2) <i>Pratimarshya nasya</i> with <i>Karpasasthyadi tail</i> .
Next 15 days	1) <i>Rasnadi guggulu</i> 250 mg. 2 tab 2 times after food with <i>koshna jala</i> . 2) <i>Avipattikar choorna</i> 2gm at night with <i>koshna jala</i> .

RESULT:

The assessment was done before and after the completion of treatment. The patient is symptomatically improved. Subjective parameters show improvement. (Table 1) The assessment was done before and after treatment according to VAS scale.

SUBJECTIVE PARAMETERS:

(Table no 1)

Symptoms	Before treatment	After treatment
Shoola	+++++++	+++
Stambha	+++++	++++
Chimchimayan	+++++++	++++

OBJECTIVE PARAMETERS-

Range of movement of neck was measured with Goniometry before and after treatment.

Movement	Before treatment	After treatment.
Flexion	30 degree of total neck movement.	45 degree of total neck movement.
Extension	25 degree of total neck movement.	40 degree of total neck movement.

DISCUSSION:

Manyastambha is mainly degenerative disease. It affects large population. *Manyastambha* is included in *Asthi-Majja gatavata* as it involves *vata*, *asthi*, and *sandhi dushti*.⁵

Basti is best treatment for *vata vikara*. *Basti* increses *Bala*, *Varna*, *Medha*, *Agni*, *Ayu* etc⁶. *Niruha basti* removes *Doshachaya* from body.⁷ For that *Dashmoola kwath* is used as it acts on both *vata* and *kapha*. *Anuvasan basti* gives *snehana* to body and it is best in *vatashaman*.⁸

In this patient due to life style changes, ageing *Dhatukshya* take place and *Sthanshanshraya* take place at *manyapradesh*. So *Manyabasti* is used for local management of pain. It gives *snehana* to that particular part. *Sahachar tail* described by *Vagbhata* is mainly used in *vataroga*. So it is used for *Manyabasti*.⁹ It helps to cure the local damage of muscle, nerve, bone etc.

Nasya is best treatment for *Urdhwjatrugata vyadhi*.¹⁰ It increases movement and flexibility of cervical joints and relieves pain. For the *nasya Karpasasthyadi tail* is used. Its content are – *Karpasasthi*, *Bala*, *Masha*, *Kulattha*, *Ajaksheera*, *Til tail*.¹¹ It is used in *Mayastambha*, *Pakshaghata*, *Ardita*.

Rasnadi guggulu is explained by *Yogratnakar* in *Vatavyadhi chikitsa*¹². It has *Aampachak*, Anti- inflammatory and Analgesic properties.

So, this line of treatment is used in this patient.

CONCLUSION-

Asthi-Majja gata vata is degenerative *vyadhi* so *Shodhana* and *Bruhana chikitsa* is used in it. In this study combination of *Yogbasti*, *Manyabasti* and *Nasya* is used for *Shodhana* of vitiated *Vata* and *Bruhana* of *Asthi* and *Sandhi*. Patient shows significant relief in symptoms.

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End of article



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Jinginyadi Nasya in the management of *Manyastambha* w.s.r. to Cervical *Spondylosis*: A Review

Radha A. Chawardol*¹, Uday K. Neralkar²

1. P.G. Scholar,
2. Professor and Guide,

Department of Panchakarma, C.S.M.S.S. Ayurveda Mahavidyalaya,
Kanchanwadi, Aurangabad, Maharashtra, India.

*Corresponding author: Email: dr.radha24@gmail.com

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Abstract:

At current era *Manyastambha* is most commonly occurring disorder; due to changing life style i.e. stressful jobs, dietary habits, travelling, improper posture of sitting, sleeping and working orders. *Manyastambha* is *Urdhvajatrugata Vyadhi* (supraclavicular region). So as per treatment point of view *Nasya* is effective *Karma* for *Manyastambh*. In the management of *Manyastambh* *Jinginyadi Nasya* is described by *Acharya Vangasena*. By signs and symptoms *Manyastambha* can be co-related with Cervical *Spondylosis* of modern era. As per research study the prevalence of Cervical *Spondylosis* is 5.23%. So as per prevalence of cervical *spondylosis* is common and major health issues to people and it can be solved with the help of treatment like *Nasya* in *Panchakarma*.

Keywords:

Manyastambha, *Nasya*, Cervical *Spondylosis*, *Panchakarma*, *Urdhvajatrugata Vyadhi*

INTRODUCTION -

Ayurveda basically derived three constituents of 'Shariram' i.e. *Dosha*, *Dhatu* and *Mala* ^[1]. Among three *Dosha's* *Vata* is described as 'Yantra Tantra Dhara' ^[2]. *Vayu* directs all the activities in body & henceforth *Vayu* is an active principle of body but when *Sama Avstha* of *Dosha* is disturbed pathology is generated.

Manyastambha has been described in *Bhruhatriees* and *Laghutriees*. A detail explanation of *Manyastambha* was given by *Acharya Charaka* and *Sushruta*. *Acharya Charaka* has described the *Vata Vyadhi* and categorised them into *Upasthamabhita* & *Nirupsthamabhita* ^[3] on the basis of types of pathogenesis and also *Samanyaja* & *Nanatmaja* ^[4] *Vata Vyadhi*. *Manyastambha* is *Nanatmaja Vata Vyadhi*. *Acharya Sushruta* has explained *Manyastambha* ^[5] with its treatment in detailed manner. *Manyastambha* is *Urdhvajatrugata Vyadhi* (supraclavicular region). So as per treatment point of view *Nasya* ^[6] is effective *Karma* for *Manyastambha*. *Nasya* is convenient, time and cost effective, easy with no side effect and act on root causes. In the management of *Manyastambha*, *Jinginyadi Nasya* ^[7] is described by *Acharya Vangasena*; which consist water soluble extract of *Manjishtha* & *Shuddha Guggula*.

By signs and symptoms, *Manyastambha* can be co-related with Cervical Spondylosis of modern era. At current era, *Manyastambha* is most commonly occurring disorder. Due to changing life style i.e. stressful jobs, dietary habits, travelling, improper posture of sitting, sleeping and working

orders as a result of this, *Manyastambha* i.e. cervical spondylosis has been increased.

As per research study the prevalence ^[8] of Cervical Spondylosis is 5.23% and it is more common in males than females the ratio is 3:1. So as per prevalence of cervical spondylosis is common and major health issues to people and it can be solved with the help of treatment like *Nasya* in *Panchakarma*.

AIM & OBJECTIVE-

AIM-

- To study the effect of *Jinginyadi Nasya* in the management of *Manyastambha* w.s.r. to Cervical Spondylosis.

OBJECTIVES-

Primary objective-

- A clinical study of *Jinginyadi Nasya* in the management of *Manyastambha* w.s.r. to Cervical Spondylosis.

Secondary objective-

- To study the *Nasya Karma*.
- To study the *Manyastambha Vyadhi*.
- To study Cervical Spondylosis.

Ethmology –

The term *Manyastambha* is composed of two words i.e. *Manya* & *Stambha*. *Manya* means neck & *Stambha* means stiffness. *Manyastambha* means stiffness in neck region. *Manyastambha* is explained as *Nanatmaja Vata Vyadhi*. Along with *Vata*, *Kapha Dosha* is also

associated. *Vata* is vitiated either because of *Kaphavarana* or *Dhatukshaya*. *Vata* is vitiated & lodged in the *Kapha Sthana* so the involvement of *Kapha Dosha* can occur. At the initial stage of *Manyastambha* the *Kapha Anubandhatwam* was acknowledge but when it becomes chronic, it becomes as a *Vata Vyadhi* only, which is degenerative condition in nature.

Causes of *Manyastambha*:

- *Diwaswapa* (day sleeping)
- watching downwards, upwards for the side for long time
- causing overstretching of neck
- wrong sleeping positions
- use of large pillow

Signs & Symptoms –

- *Manyashoola* (Pain in neck region)
- *Manyastambha* (Stiffness in neck)
- *Gaurava* (Heaviness)
- *Chimchimayana* (Numbness)

MATERIAL & METHOD –

Ayurvedic literature included *Sanhitas*, research articles & e-journals

Drug Review:

Sr. No.	Drug	Family	Latin Name	Rasa	Veerya	Vipaka	Guna/Prabhava	Part used
1.	<i>Manjishtha</i>	Rubiaceae	<i>Rubia Cordifolia</i>	Tikta, Kashay, Madhura	Ushna	Katu	Guru, Ruksha	Root
2.	<i>Guggula</i>	Burseraceae	<i>Commifora Mukul</i>	Tikta, Katu	Ushana	Katu	Laghu, Ruksha, Tikshna, Prabhava-Tridoshahara	Niryasa

were used as source material. Modern text including research publications were also used to understand modern point of view of *Manyastambha* which is co-related with cervical spondylosis. Pathophysiological compounds like *Dosha*, *Dhatu*, *Mala*, *Stratos*, *Roga Nidana* etc. were studied & interpreted treatment methods, formulations, compounds etc. were also reviewed from the point of their features, benefits, used to understand the various etiopathological changes described in *Ayurveda*. Result was observed from the findings of clinical studies on *Nasya*.

OBSERVATION -

Jinginyadi Nasya –

It is *Avapidaka* type of *Nasya*. In *Jinginyadi Nasya* homogenous paste (*Kalka*) in equal quantity 2 gms each both of *Manjishtha* & *Shuddha Guggula Choorna* is prepared by adding 6 ml water in it. After 10 minutes the *Kalka* is kept in pores cotton cloth and *Pottali* is prepared. For *Nasya Karma Pottali* is squeezed in patient's nostrils 4 *Bindu*^[9] in each nostril.

DISCUSSION: *Nasa* is mentioned as a gateway to *Shira* and diseases which affect the *Shira* can be cured by *Nasya*. It is said to be strengthening to shoulder and neck also. Thus the importance of *Nasya* is inevitable. Even in modern medicine also, nasal root of administration is taking new dimensions. Nasal root of administration is supposed to be the most potent drug delivery system as bioavailability of medicine will be more compared to other roots of administration.

Manyastambha in initial stage is *Shleshmanavrutta Vatta* when it becomes chronic, it becomes *Vata Vyadhi* only, which is degenerative condition in nature. *Jinginyadi Nasya* with *Sthanika Snehana* & *Svedana* acts on both condition. It breaks the pathology of the disease, gives strength to the neck region & improves the neck movement.

CONCLUSION –

- *Manyastambha* can be co-related with cervical spondylosis as per sings & symptom.
- *Jinginyadi Nasya* is *Avapidaka Nasya*.
- *Jinginyadi Nasya* is effective in both *Shleshmanavrutta Vataja* & *Vataja* condition.
- *Jinginyadi Nasya* can used in *Manyastambha* for 7 days continously for significant results.

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A CLINICAL STUDY OF MADHUTAILIK YAPANA BASTI IN VRUDDHAVASTHA

Nirpal Monali Ramesh¹, Sonwane Ramesh Dnyanoba²

¹MD Panchakarma; ²Pg Guide & Associate Professor;
Department of Panchakarma, C.S.M.S.S. Ayurveda College, Aurangabad, Maharashtra, India

Email: nirpalmonali16@gmail.com

ABSTRACT

Ageing is a natural process. *Vatavruddhi* occurs in old age naturally. Old age group goes through many degenerative changes and suffers from various health issues. *Madhutailik Yapana Basti* is a *Basti* which destroys hundreds of diseases, promotes health, prolongs healthy life span, has *Vataghna* properties & can be given in old age people too. **Objective:** To see the effect of *Madhutailik Yapana Basti* in *Vruddhavastha*. **Methods:** For present study 60 individuals of *Vruddhavastha* fulfilling the inclusion criteria were selected. From the characteristics of *Vruddhavastha* explained in Ayurveda, *Bala*, *Utsaha*, *Aayasen Shwasa* & *Vatavruddhi* were taken as assessment criteria. The *Madhutailik Yapana Basti* was given in *Yogbasti* pattern along with *Til Taila Anuvasana* for 8 days. **Result:** Effect of the *Madhutailik Yapana Basti* on symptoms observed in *Vruddhavastha* proved statistically significant ($p < 0.05$.) **Conclusion:** *Madhutailik Yapana Basti* is very effective in *Vruddhavastha* and can provide a way of healthy ageing.

Keywords: *Vruddhavastha*, *Vata*, *Basti*, *Madhutailik Yapana Basti*, Old age

INTRODUCTION

Out of all *Panchakarma* procedures *Basti* is the prime treatment, as it mainly controls and cures vitiated *Vata Dosha* in the body. *Vata* is ultimately responsible for working of all other *Dosha*, *Dhatu* & *Mala*. As *Basti* works on *Vata Dosha* mainly, it is said to be “*Ardhachikitsa*” i.e. half of entire treatment of a disease¹. This highly important *Basti* has two main types *Anuvasan* & *Niruha*². Both *Anuvasana* / *Sneha* & *Niruha* have various subtypes too, on the basis of drugs, method of administration, dosages, uses etc. *Sneha*, *Anuvasana* & *Matra* are types of *Sneha Basti* i.e. *Basti* of oil and is differentiated in three types on the basis of quantity of oil. *Niruha* is also called as

Asthapana Basti as it stabilizes age or delays ageing (*Vayahsthapanam*)³. It is a *Basti* of decoction (*Kwatha*). Different types of *Niruha Basti* have been explained by different *Acharya*. Out of which “*Yapana Basti*” is a special type of *Niruha Basti*. Where “*Yapana*” itself means “*Ayushyakara*”. This type of *Basti* is given specially to boost health, energy and to give healthier life span to a person.

Various types of *Yapana Bastis* are explained in detail in different *Samhita*. Combination of drugs varies in different type of *Yapana Basti*. Many of these types are named on the basis of their content. *Madhutailik Yapana Basti* is one of such type of *Yapana Basti*.

Madhu & Taila are the key ingredient of this *Basti* that's why it is called as "*MADHUTAILIK YAPANA BASTI*"⁴.

Charakacharya says that *Yapana Basti* can be given at any time⁵. Sushruta have explained *Madhutilik Yapana Basti* in *Chikitsasthan*. While praising *Madhutilik yapana Basti* Sushruta mentioned that; this *Yapana Basti* can be given without applying any rule of *Niruha Basti* regarding travelling, celibacy, diet and drinks etc. This *Basti* is highly beneficial and with less or no complications at all. It can even be given to delicate ones like children, females, elders. This *Basti* not only eliminates vitiated *Dosha* but also improves *Bala*, *Varna* and promotes health, as it is said to be *Balya & Ayushyakara*⁶. In detail age classification is given in both Ayurveda & modern science. Age is seen commonly classified into;

Young age (*Balya Avastha*), Middle age (*Madhyam Avastha*), Old age (*Vruddhavastha*)

Acharya Charaka considers *Vruddhavastha* (old age) from 60 to 100yrs of age. He describes that during old age there is diminution of the *Dhatu*s, strength of sense organs, energy, and valor, power of understanding, retention, memorizing, speech and analyzing facts. There is gradual diminution in the qualities of *Dhatu*s and dominance of *Vata* during this age⁷. Discoveries in medical science and increased socioeconomic status in past few decades have increased the life span of a man. For 2010 absolute size of old aged population (above 60 years) was 8% of total population, which is likely to rise up to 19% by 2050⁸. Ageing is a natural process. In the words of Seneca; "Old age is an incurable disease"⁹. This age group is most sensitive group of population. This age group goes through many degenerative changes and suffers from various health issues. This is tiring Physically, Emotionally, Psychologically & socially at times. Health of individuals of this group needs to be specially taken care of. Old age is normal & inevitable biological phenomenon¹⁰. Sir James Sterling Ross Commented that;

"You do not heal old age. You protect it. You promote it. You extend it."¹¹ *Madhutilik Yapana Basti* is

said to be a *Basti* which destroys hundreds of diseases and also promotes health, prolongs healthy life span, it has *Vataghna* properties & can be given in old age people too¹². Thus the present study was carried out to study the effectiveness of *Madhutilik Yapana Basti* in managing *Vruddhavastha*.

AIM - To study the effect of *Madhutilik Yapana Basti* in *Vruddhavastha*.

OBJECTIVES-

1. To study *Basti* in detail.
2. To study *Madhutilik Yapana Basti* in detail.
3. To study the geriatric changes and health issues according to Ayurveda & Modern science.

MATERIALS AND METHODS:

Source of data: A single group before and after self control clinical study was conducted on total 60 no. of individuals fulfilling inclusion criteria, individuals were selected from OPD & IPD of Panchakarma department of C.S.M.S.S. Ayurveda College, Aurangabad.

INCLUSION CRITERIA-

1. Patient between age group of 60-100 years of either sex.
2. Patient willing to trial & giving written consent.

EXCLUSION CRITERIA-

1. Patient below age of 60 years.
2. HIV +ve patients.
3. Patient of uncontrolled DM & Hypertension.
4. Neurological disorders- Epilepsy, strokes, unconscious patients.
5. Major disorders of spine like- pots spine, vertebral fracture.
6. Patient suffering from any malignancy.
7. Patient suffering from critical disorders like- congestive cardiac failure, pulmonary edema, MI.
8. Patient not willing for trial and not giving written consent.

ETHICAL CONSIDERATION-

No objection from the institutional ethics committee was obtained. Informed written consents of patients were taken prior to the initiation of the study.

DRUG & DOSAGES-

TABLE 1: DRUG & DOSAGES

	MADHUTAILIK BASTI	ANUVASANA BASTI
Drug	<i>Madhu, Tail, Saindhav, Erandmool kwath, Shatpushpa, Madanphal.</i>	<i>Til Tail</i>
Matra	480ml approx.	120ml
Kal	<i>Abhukta</i>	<i>Bhojanottar</i>
Pratyagaman Kal	<i>1 Muhurta (48 min.)</i>	<i>3 Yama (9 hrs.)</i>
Route	Anal route	Anal route

PHASE OF TRIAL:-

DIAGNOSTIC PHASE., INTERVENTION PHASE., ASSESSMENT PHASE.

1. DIAGNOSTIC PHASE- Individuals were selected on the basis of *Vruddhavastha Lakshana* as per *Sushrut Samhita Sutrasthan*. Criteria adopted for present study was as under-*Bala, Utsaha, Aayasen Shwasa, Vatavruddhi*.

2. INTERVENTION PHASE- After selection of individuals the study was intervened by the *Madhutailik Yapana Basti* for the duration of 8 days.

3. ASSESSMENT PHASE- The effect of *Madhutailik Yapana Basti* was assessed on the basis of clinical signs and symptoms as well as grading system and overall study.

TABLE 2: PLAN OF WORK

SR.NO	TREATMENT	DURATION
1	<i>Anuvasana Basti</i>	1 st Day
2	<i>Madhutailik Yapana Basti</i>	2 nd Day
3	<i>Anuvasana Basti</i>	3 rd Day
4	<i>Madhutailik Yapana Basti</i>	4 th Day
5	<i>Anuvasana Basti</i>	5 th Day
6	<i>Madhutailik Yapana Basti</i>	6 th Day
7	<i>Anuvasana Basti</i>	7 th Day
8	<i>Anuvasana Basti</i>	8 th Day

DURATION-8 DAYS

FOLLOW UP-0th (baseline), 8th Day, 24th Day (Completion of *Parihara Kala*)

ASSESSMENT CRITERIA: Out of all criteria's, *Bala* was taken as a whole physical strength individu-

al can feel he has in his daily activities & routine & *Utsaha* was taken as an energy an individual has. Individual included in the study were asked to score their *Bala & Utsaha* on VAS and the gradations were decided.

Table 3: Assessment criteria

Parameter	Findings	Scoring
1. BALA (Strength)- by VAS SCALE	Poor strength(0 score)	0
	Fair strength(1-3 score)	1
	Moderate strength(4-6 score)	2
	Normal strength(7-10 score)	3
2. UTSAHA (Energy)- by VAS SCALE	Poor energy (0 score)	0
	Fair energy(1-3 score)	1
	Moderate energy (4-6 score)	2
	Normal energy (7-10 score)	3
3. AAYASEN SHWASA (Shortness of breath)-	No signs of Aayasen Shwasa.	0

	Aayasen Shwasa & speak complete sentences during shortness of breath.	1
	Aayasen Shwasa & speak in phrases/Partial sentences during shortness of breath.	2
	Aayasen Shwasa & hardly speak in single word during shortness of breath.	3
4. VATAVRUDDHI (As mentioned in <i>Ashtang Hridaya Sutrasthan</i> 11/6. <i>Ushnakamitva, Kampa, Anaha, Malavshambha, Balahani, Nidrahani</i> these 6 symptoms of <i>vatavrudhi</i> were studied.)	No symptom present.	0
	1-2 symptoms present.	1
	3-4 symptoms present.	2
	5-6 symptoms present.	3

OBSERVATIONS

60 patients completed the full course of treatment. Maximum number of patients i.e. 36 belonged to the age group of 60-70yrs, followed by 23 patients in the age group of 70-80yrs and only 1 patient was observed in age group of 80-90yrs. None was of 90-100yrs of age. It shows that there are more health complications with increasing age. Unwillingness and unfitnes for the study are also the reason for lack of more patients from higher age group. Individuals between 60 to 70 years had lesser degree of symptoms than that of individuals from higher age groups indicates that *Bala*, *Utsaha* deteriorates with increasing age generally and *Vatavrudhi* is also more. In the age group of 60-100 yrs, younger ones showed more & early improvement. It was observed that *Basti Dharan Kala* in initial *Basti*'s was less than that of *Basti*

Dharan Kala in *Basti*'s of later half of the treatment. *Agni Deepana* was observed in progression of the treatment. *Twak Rukshata* decreased gradually with the progression of treatment. Individuals involved in the study also reported the feeling of lightness and *Vruddhi* in *Ruchi* even at the end of *Parihara Kala*. Non addicted people showed better & early results than addicted ones. This shows the contribution of addictions in process of ageing. An addiction such as alcohol, tobacco & smoking speeds up ageing process and certainly it's not a provider of healthy ageing.

RESULTS

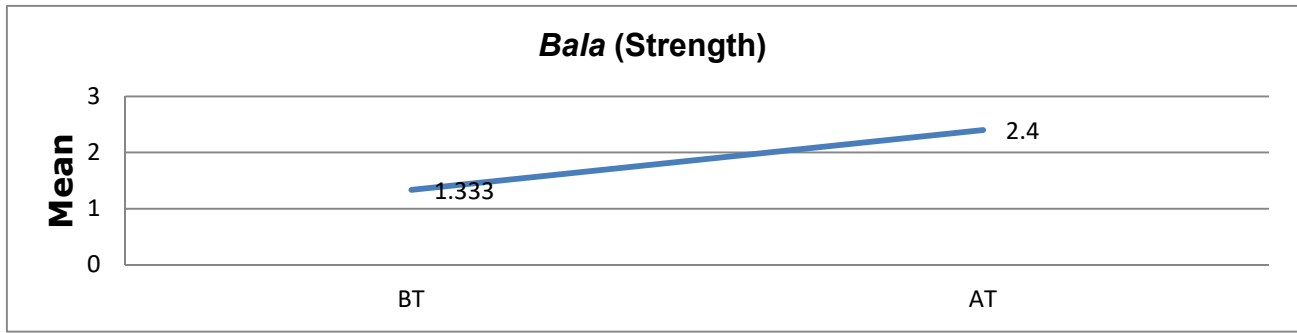
All the values in following table are calculated by using Wilcoxon Sign Rank Test for subjective criteria. Statistical analysis of every symptom is described in the following table.

Table 4: Statistical Analysis of every criterion

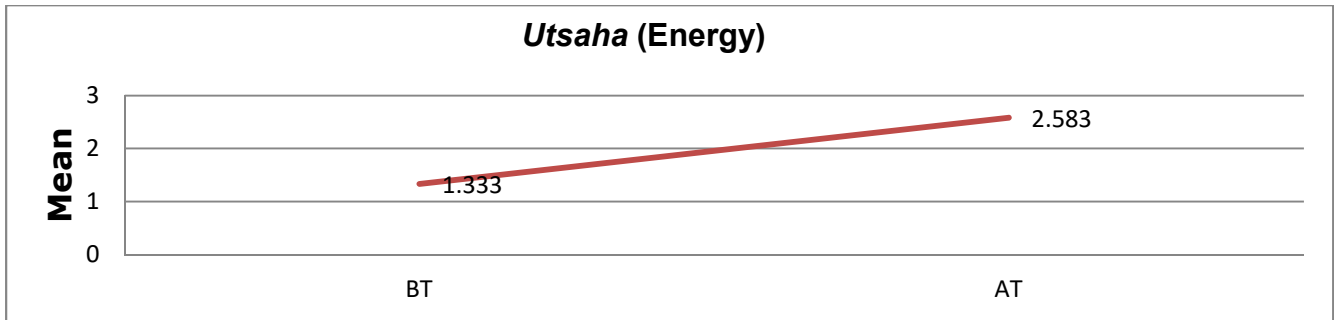
Symptom	<i>Bala</i> (Strength)	<i>Utsaha</i> (Energy)	<i>Aayasen Shwasa</i> (Shortness of Breath)	<i>Vatavrudhi</i>
Mean Score, B.T.	1.333	1.333	1.033	2.317
Mean Score, A.T.	2.4	2.583	0.533	0.367
S.D. (±), B.T.	0.876	0.876	1.057	0.624
S.D. (±), A.T.	0.806	0.72	0.791	0.639
S.E. (±), B.T.	0.113	0.113	0.136	0.08
S.E. (±), A.T.	0.104	0.092	0.102	0.082
W	-1378	-1400	465	1711
Z	-6.27	-6.19	-4.78	-6.62
P	P<0.05	P<0.05	P<0.05	P<0.05
Result	Significant	Significant	Significant	Significant

As the p value is lower than the significance level alpha = 0.05, we should reject the null hypothesis H₀ and accept the alternate hypothesis H_a for every criteria.

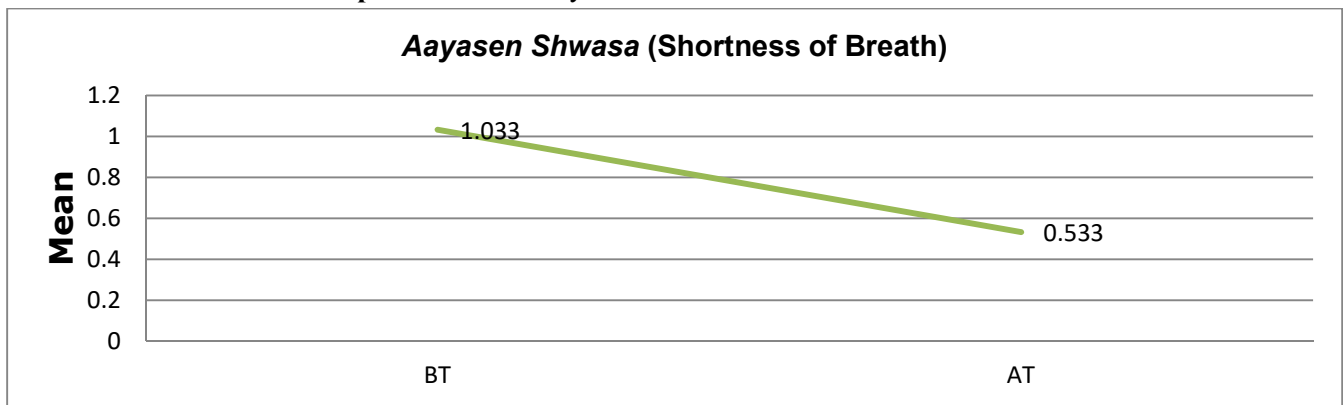
Graph 1: Mean of *Bala* before & After Treatment



Graph 2: Mean of *Utsaha* before & After Treatment



Graph 3: Mean of *Aayasen Shwasa* before & After Treatment



Graph 4: Mean of *Vatavruddhi* before & After Treatment

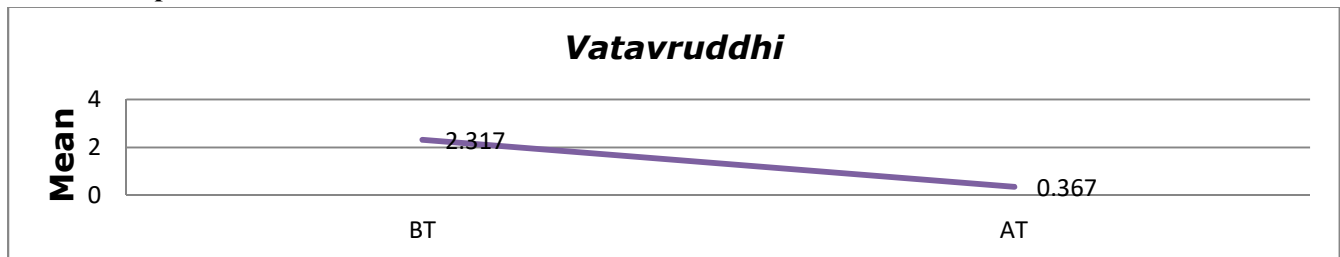


TABLE 5 - Z Test Result

Symptom	Mean score difference	SD	SE	Z value
Bala (Strength)	-1.067	0.634	0.081	13.03
Utsaha (Energy)	-1.25	0.75	0.096	12.90
Ayassen Shwasa (Shortness of Breath)	0.5	0.504	0.065	7.68
Vatavruddhi	1.95	0.669	0.09	21.6

Z value is greater than 1.96 (tabulated value at 0.05) for *Bala*, *Utsaha*, *Ayassen Shwasa* and *Vatavruddhi*, we should reject the null hypothesis H_0 and accept the alternate hypothesis H_a , i.e. the effect of treatment on all symptoms of *Madhutailik Yapana Basti* in *Vruddhavastha* is statistically significant. Effect of the *Madhutailik Yapana Basti* on symptoms observed in *Vruddhavastha* is statistically proved to be significant.

DISCUSSION

There is *Vata* predominance in *Vruddhavastha* & *Basti* is a prime Panchakarma therapy for *Vata Dosha*. *Pakwashaya* is a *Mulsthana* of *Vayu* which is main element of the body & root cause of every disease. *Basti* balances *Vayu* & hence treats many diseases. *Basti* not only regulate & co-ordinate *Vata Dosha* in its site but also balances other *Doshas*. Charaka & Vagbhata have described *Basti* as an *Ardha Chikitsa*. *Yapana Basti* prolongs the life & restores the health. *Madhutailika Yapana Basti* is a *Basti* which can be administered in old aged people. It removes *Dosha*, increases strength and complexion. This *Basti* is a safe *Basti* as it has no or less complications and multiple benefits.

Madhutailik Yapana Basti by its effects of *Brimhana*, *Dipana*, *Bala-Varna Kara* & *Rasayana* increases *Bala* & *Utsaha*, replenishes *Dhatu*s by acting on *Dhatuhani*, and pacifies *Vata Dosha* and *Rasayana Karma* acts on overall degenerative changes of *Vruddhavastha*. Contents of *Madhutailik Yapana Basti* have some specific properties that enhance its effect in *Vruddhavastha*. *Madhu* & *Taila* are two main ingredients of *Madhutailika Yapana Basti*. *Madhu* is “*Saukumaryakaram*”, which is exactly opposite of *Vruddhavastha*. By this property it acts very well in minimizing and slowing down the characteristic changes of *Vruddhavastha*. It has the *Roghara* proper-

ty against *Shwas* & *Vidgraha*, which are dominant issues of *Vruddhavastha*. *Til Taila*, another main ingredient of *Madhutailik Yapana Basti* is mainly *Vatashamaka* which breaks the process of *Vatavruddhi* and pacifies the increased *Vatadosha*. One of the main properties of *Tila Taila* is its *Balya* in nature, which restores the *Balhanai* of *Vruddhavastha*. It also does *Deepana* hence very effective in *Vruddhavastha* as there is a generally *Agnimandya* in this stage of life. By its property of *Snehana* it increases *Bala*, *Utsaha* & pacification of *Vata Dosha*. *Rasayana* property of *Taila* restores *Dhatukshaya* and other degenerative changes of *Vruddhavastha*. Other contents are all mainly *Vatashamaka* in *Doshghnata*, hence gives relief in *Vatavruddhi*. *Erandmoola* acts by the property of *Vayasthapana*. *Shatpushpa* does the *Vatanulomana* and it is *Snigdha* hence acts against the *Vatavruddhi* of *Vruddhavastha*. *Madanphala* is said to be *Sarvagadvirodhi*, also does the *Vatanulomana* & it is *Shwashara*. *Saindhava* also does *Deepana*, *Pachana* and it is *Tridoshghna*. Briefly stating, main ingredients of *Madhutailik Yapana Basti* are *Madhu* & *Taila* and these two are *Sukumaryakaram* & *Balya*, *Vatashamaka*, *Snigdha*, *Rasayana* respectively. Other drugs in the *Basti* are all *Vatashamaka* and have properties like *Vayasthapana*, *Vatanulomana*, *Deepana*, *Pachana*, *Shwashara*. Due to these properties *Madhutailik Yapana Basti* acts very well in *Vatavruddhi*, *Ayassen Shwasa*, *Balahani* & *Utsahahani* by doing *Vatashamana*, increasing *Bala* & *Utsaha* and decreasing *Ayassen Shwasa* and provides significant results in *Vruddhavastha*.

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CONCLUSION

Characteristics of *Vruddhavastha* i.e. *Balhani*, *Utshahahani*, *Ayassen Shwas* & *Vatavruddhi* increases with increasing age. *Madhutilik Yapana Basti* gives early & better results in younger individuals of *Vruddhavastha*. Individuals of age group of 60-70 years shows early & better results than & individuals in age group of 70-80 years and so on. *Madhutilik Yapana Basti* increases *Bala* & *Utshaha* in individuals of *Vruddhavastha* gradually as the treatment progresses. It provides better relief in *Ayassen Shwas* in the younger individuals and those with some precipitated causes like smoking or alcohol addictions of *Vruddhavastha*. It can be concluded that, *Madhutilik Yapana Basti* is very effective in *Vruddhavastha* and can provide a way of healthy ageing to aged people. No any adverse effects were found during or after treatment. Further study can be done in more number of patients & for longer duration to procure much sharper results.

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A clinical study to evaluate the efficacy of *Sahachar* and *Nimba Taila Shiroabhyanga* in the management of *Darunaka*.

Karika Vilas Pande*¹, Ramesh Dnyanoba Sonwane²

1. P. G. (Scholar *Panchakarma*)
2. P. G. Guide and Associate Professor, *Panchakarma Dept.*,

Email ID: ramesh10673@rediffmail.com

CSMSS Ayurved Mahavidyalay, Kanchanwadi, Aurangabad, Maharashtra

***Corresponding author:**

Email:

karika.21pkv@gmail.com

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Abstract:

Dandruff is the shedding of the dead skin cells from the scalp, it is the common scalp disorders affecting among half of the population throughout the globe and in Ayurveda it is correlated with *darunaka*. It produces from vitiated *kapha* and *vata*. In current dermatological practice there is no effective modern remedy for dandruff. Hence the present study is undertaken to find effective and safe alternative to convention topical anti-dandruff agent. *Shiroabyanga* comes under one of the four *murdhni taila*, which are basically used for the management of *Shiroroga* and *Urdhwa Jatrugat roga* while explain the important of shiroabyanga it is mentioned that is useful in the management of *ardita, Ratrijagarana, Nasa-Mukha shosha, Timira, Shiroroga, Darunaka* etc. It is best among the four *murdhni tail* procedure. So there is a need to find a safe and effective remedy in the management of *Darunaka*, which initiated for the study.

INRODUCTION

Hair fall, dandruff or graying of the hair makes people concerned. Healthy hairs are necessary for self-confidence which can boost the career. The quality and texture of the hairs differ from person to person. Unhygienic conditions and excessive use of cosmetic products, pollution and many more factors can cause hair problems. Likewise *Darunaka* is one of the major hair problems. According to *Ayurveda*, it can be correlated with Dandruff. In *Ayurveda* *Darunaka* is classified as one among the *kshudrarogas*. The disease is considered *Kshudraroga* as per *Acharya Sushrut*¹ *Shiroroga* and according to *Vagbhatacharya*². It causes dryness and itching in *Keshabhumi* (scalp). The dominant *Doshas* are *Vata* and *Kapha*³, they cause severe irritation and itching of the scalp skin. This condition is manifested due to vitiation of *vata* and *kapha doshas*, which result in dryness, itching in the scalp which further leads to scaling. Many *remedies* are described in *Ayurveda* in many texts for *Darunaka*. *Abhyanga* has been mentioned as a regular procedure to be performed for maintenance of health and prevention of certain non-manifested and upcoming disorders⁴. The *Shiroabhyanga* is coming under the classification of the *Murdhni taila*. *Sahachar* and *Nimb Taila* is one of the best

drugs used in the management of *Darunaka*. It is easy for external application, easily available and very cost effective.

Case report: A 26 years old girl, reported to the CSMSS College of *Ayurveda* and hospital, Aurangabad with the complaints of itching of scalp, hair fall, flakes over the head and shoulder, since six months. Patient was apparently normal before six months. Gradually he developed itching in his scalp along with hair fall. For that he approached contemporary medical sciences for treatment. But his complaints did not subside and which were aggravated in cold climate. So he came to our hospital, *Shiroabhyanga* treatment with administration of lukewarm *Shachar and Nimb taila* for 15 minutes for 21 days.

Aim: A clinical study to evaluate the efficacy of *Sahachar* and *Nimba Taila Shiroabhyanga* in the management of *Darunaka*.

MATERIALS AND METHODS:

Study Type: Clinical study: Source of Data: patients of *Darunaka* were selected randomly from OPD and IPD of *panchakarma* department in our *Ayurved* college, Hospital, urban and city of Aurangabad. Criteria for diagnosis of

Darunaka were selected on the basis of sign and symptoms described in *Shushrut*, *Vagbhat Samhita*. Patients have been given *Shiroabhyanga* of *Sahachar* and *Nimba* tail up to 15min that is 900 *matra* or 285 sec.

Duration Of Study: daily up to 21 day.

Follow-up: Baseline, Day 21

Material: *Sahachar* and *Nimba taila*

Method:

Tail was prepared by taking *Sahachar* and *Nimb Tila*. It taken equal quantity and mix well as per *Ayurvedic* principle. This lukewarm *Taila* was applied on scalp gently with finger tips up to 15 minutes and then washed the hairs with lukewarm water. This tail was applied up to 21 days.

Procedure of *Shiroabhyanga* The *Shiroabhyanga* is one among the *Bahrparimarjana chikitsa*⁵ which is done in following methods⁶ Patient is sit in comfortable position by using *Sukoshna Shachar taila* and *Nimba taila shiroabhyanga* done for the duration of 15 Minutes. It is carried out by using tip of the fingers gently massage over the Scalp.

Criteria for Inclusion:

1. Age- 15 to 50 years
2. Sex- either
3. Economical status- All Class

4. Patient having classical sign and symptoms of *darunaka* and mentioned in *samhita* like *kandu* (itching), *Twaka sphutan* (scaling of scalp), *kesha chyuti* (hair fall), *Rukshata* (dryness)

Criteria for Exclusion:

1. Age below 15 years and above 50 years
2. Secondary infected scalp/Psoriatic Scalp
3. Any other skin diseases related to the scalp.

Criteria for assessment:

1. *Twaka sphutan* (Scaling):

Features	Grade
Scaling seen at the time of combing and also at other time.	3
Scaling seen only at the time of combing.	2
Scaling absent during combing of hairs but seen over the scalp only after thorough examination of hairs.	1
No scaling	0

2 *Kandu* (Itching):

Features	Grade
Itching continuous during day.	3
Intermittent itching for more than 5 times a day.	2

Itching only once or twice a day.	1
No itching	0

3. *Kesh chyuti* (Hair fall):

Features	Grade
Hair fall at any time also on touch(Numerous)	3
Hair fall during combing of hairs (20 to 30)	2
Hair fall after washing hairs (10 to 20)	1
No hair fall	0

Scoring:

Absent	0
Mild Dandruff	1-3
Moderate Dandruff	4-6
Severe Dandruff	7-9
Very Severe Dandruff	10-12

Overall effect of Therapy *snehan*

Severity of *Darunaka*: For assessing the severity of *Darunaka* in each patient the above adopted scores and assessed as follows.

Showing overall effect of therapy

GRADE score

- Absent 0 (0)
- Mild 1 (1-4 score)

- Moderate 2 (5-8 score)
- Severe 3 (>8 score)

Sahachar Properties⁷:

GUNA: Laghu

RASA: Tikta, Madhur

VIPAKA: Katu

VIRYA: Ushna

DOSHAKARMA: Kapha-Vata Shamaka

Nimba Preoperty⁸:

- *GUNA: Laghu, Ruksha*
- *RASA: Tikta, Katu, Kashaya*
- *VIPAKA: Katu*
- *VIRYA: Sheet*
- *DOSHAKARMATA: Kaphaghna, pittaghna, vatkar*
- *PROPERTIES: Kandughna*

Symptoms	Before treatment	After treatment
<i>Twaka sphutan</i> (Scaling)	Grade – 2	Grade – 1
<i>Kandu</i> (Itching)	Grade – 2	Grade – 0
<i>Kesh chyuti</i> (Hair fall)	Grade – 3	Grade – 1
Dandruff	Grade – 7	Grade – 1
Total	14	3

RESULTS:

Before starting the treatment his score was 7 which came under the severe dandruff, but after taking of treatment and 21 days follow up score was reduced to 1.

After treatment patient got relief from his complains, but hair fall was present in the patients with grade. And after follow up of 21 day, the score was the remains same that which was after the treatment by applying the *Sahachar and Nimba Taila* as local application with light massage at night time once in whole day before going to bed.

DISCUSSION:

As *Darunaka*⁹ is one among the *Ksudra Rogas* in classics with *Vata-Kapha*¹⁰ predominance and *Shiroabyanga* is mentioned as the treatment for curing the disease. And *Sahachar and Nimba taila properties* is *Kapha-vata hara* and *Kapha vatakr Pitaghna*, *Nimba* is *krumighna*. So it was advised for the patient in *Shiroabhyanga*.

CONCLUSION:

This study it reveals that *Shiroabyanga* is an effective treatment for its management. It also proves that *Sahachar and Nimba Taila* is effective for used as *Shiroabyanga* along with local application for scalp. As it was said to the patient to apply the *taila* during night hour before going to bed shows the time of contact of oil with the

scalp, which gives the *Snehana* effect for long time. By virtue of *Snigdha, Sukshma, Vyavayi, Vikasi* and *Tikshna* property of *Taila* it penetrates the scalp and pacifies the *Vata* and *Kapha dosha*. Hence use of *Sahachar and Nimba Taila* is very good choice of treatment.

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End of article



National Journal of Research in Ayurved Science

A critical analysis on standardization of *bindu* for *mars'a nasya*

C. V. Jayadevan*¹, Barahate Ganesh Shesharao²

1. Guide, Professor and Head, Department of *Kayacikitsa*, V.P.S.V. Ayurveda College Kottakkal,
2. Associate Professor, Department of *Pancakarma*, C.S.M.S.S Ayurveda college, Aurangabad Email : ayurganesh@gmail.com; Mob. No.:- 9404109895

***Corresponding author:**

Mob. No:-8281969886,

Email :-

parvathyssj@gmail.com

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Abstract:

Nasya, based on the dose of oil used, is classified in to two types, as *Mars'a* and *Pratimars'a*. *Bindu* is the unit of measurement explained for the dose of oil. In routine *Aayurvedic* practice one *Bindu* is considered as one drop (0.05ml) while according to the definition of *Bindu* and standardized quantity mentioned by *S'aaran'gadhara*, it is 0.5ml. Thus the dose of *Mars'a nasya* is such an area where lot of disparity exists. Although the routinely practiced dose is ten times less and instilled only once, this itself have been proved significantly effective by many postgraduate researches. The present paper deals with classical concept of *Bindu* and its standardization for *Mars'a nasya*.

Introduction:

Aayurveda the art and science of living is at the doorstep of global acceptance. Among the various treatment modalities of *Aayurveda*, *Pancakarma* procedures are the ones which are mostly highlighted in the present scenario. Among five purification (*Pancakarma*) procedures, *Nasya* is said to be effective in curing the diseases of *Oordhvajatru* (supraclavicular region). The procedure by which medicine is administered through nasal route is called as *Nasya*.

Nasya is practiced in many clinical conditions in different medicinal forms, such as *Swarasa*, *kalka*, *kwaatha*, *coorna*, *sneha* etc. Among these *Sneha* (oil) is routinely practiced because of its practical feasibility, easy availability and inherent *Kaphahara* property (*As. H. Su.* 20/33).

Dose is a very important factor in any of the *Pancakarma* procedures to get optimum efficacy of the therapy. Change in dose can change the result and it can lead to side effects or no effect. Because of this reason, on the basis of dose of oil used, *Nasya* is classified in to two types as, *Mars'a* and *Pratimars'a*. *Bindu* is the unit of measurement explained for the dose of oil, *Bindu* is such an area where lot of disparity exists when compared with classical references and routine practice.

Classical concept of *Bindu* in *Nasya*:

In the context of dose of *Sneha nasya* (*S. Ci.* 40/28) the term *Bindu* was first coined by *Sushruta*: Except *Caraka* all other *Aacaaryas* used the term *Bindu* as the unit of measurement for any medicine in liquid form used for *Nasya*.

Definition of *Bindu*:

Bindu is the unit of measurement and defined as the quantity of *Drava* (*sneha*, *swarasa*, *kashaaya* etc.) that dribbles down when the first two parts of index finger (Patient's) are dipped into it and taken out (*As. H. Su.* 20/10).

The comment on this by *Hemaadri* proves beyond doubt that not just the first drop is one *Bindu*, but it is the total quantity dribbling down from the index finger when immersed in the liquid should be considered as one *Bindu*.

Yaavatpatati taavaan binduh`, na prathamapatita eva / *Hemaadri* on *As. H. Su.* 20/10

Bindu pramaana for *Sneha nasya*:

Asht'aangasangraha has first classified *Sneha nasya* in to two types depending on the *Bindu* as, *Mars'a nasya* and *Pratimars'a nasya* (*As. Sam. Su.* 29/14).

For *Sneha nasya* the term *Mars'a* was first coined by *Asht'aangasangraha*. For *Sneha nasya*, *Caraka* has used the term *Naavana* while *Sushruta* used the

term *Nasya* (S. Ci. 40/22). *Vaagbhat'a* has mentioned three different doses as 10 *Bindu* (*uttama*) 8 *Bindu* (*Madhyama*) & 6 *Bindu* (*Heena*) for *Mars'a nasya* (*Sneha nasya*) depending on the *Dosha* and *Bala* of the patient. (As. Sam. Su. 29/14, As. H. Su. 20/10). *Sushruta* has not classified *Nasya* depend on the dose of *Sneha* used, but has mentioned three different doses for *Sneha nasya*. In *Sushruta samhita* the dose is mentioned as, 8 *Bindu*, *S'ukti* and *Panis'ukti*, which are the *Heena*, *madhyama* and *Uttama maatraa* respectively. *D'alhana* comments that *Heena maatraa* 8 *Bindu* is to be instilled in each nostril. He says that *S'ukti* is 32 *Bindu* and *Panis'ukti* is 64 *Bindu*. Similar opinion is also mentioned by *S'aaran'gdhara* (*S'aa. Utt. 8/25*) *Cakradatta* (*C. D. 73/10*) *Vangasena* (*Vanga 86/15*) and *Bhaavaprakaas'a* (*B. P. Po. kha. 5/213*). *Caraka* has not mentioned specific dose for *Sneha* to be used in *Nasya*. Only for *Anu taila*, *Caraka* mentions the dose as $\frac{1}{2}$ *Pala* (24ml)(*C.Su.5/62*). Except *Caraka*, all other *Aacaaryas* have mentioned *Bindu pramaana* for deciding the dose of *Drava dravya* to be used for *Nasya*.

As from the above explanations it is evident that for *Drava dravya*, *Bindu* is the unit and it is measured by patient's index finger. Thus the quantity of one *Bindu* may vary from person to person as

the size of the index finger is different. The quantity of *Bindu* also varies according to the *Drava dravya* used for the *Nasya*. It would be practically convenient if standard or fixed quantity of one *Bindu* can be decided for any of the *Drava dravya* used for *Nasya*.

Such an attempt of Standardization of *Bindu* for *Sneha nasya/ Mars'a nasya* was at first successfully done by *S'aaran'gdhara* in 14th century.

Critical analysis on standardization of *Bindu* in the context of *Mars'a nasya*:

Evam`vidhairbindusanjn`airsht`bhih`

s'aana ucyate/ S'aa. Utt. 8/40

S'aaran'gdhara has stated that, 8 *Bindu* is equals to one *S'aana* and further the dose of *Mars'a nasya* is explained in multiples of *S'aana* itself, as 8 *S'aana*, 4 *S'aana* and 2 *S'aana* for *Pradhaana*, *madhyama* and *heena maatraa*.

According to *S'aaran'gdhara*

1 *S'aana* = 4 *Maasha*

4 *Maasha* = 4 gm = 4ml

(*Ayurvedic Formulary of India*)

Thus, 8 *Bindu* = 1 *S'aana* = 4 ml

1 *Bindu* = 0.5 ml

According to *Aayurvedic*

Formulary of India, 1 drop = 0.05ml,

10 drops = 0.5 ml

1 Bindu = 10 Drops = 0.5ml

It can be stated from the above explanation that standardized quantity of one *Bindu* for *Mars'a nasya* is 0.5 ml (10 drops).

Relevance of *s'arangadhara's bindu* in present period:

As *S'arangadhara* has given the quantity of one *Bindu* for *Mars'a nasya* in the 14th century, it was essential to find its relevance in present period.

A pilot study was conducted in 30 samples to assess the quantity of one *Bindu* of oil (*Karpaasaasthyaadi taila*), between age group 18 to 60 yrs, irrespective of sex, height, weight and dimensions of index finger.

Table no 01: Quantity of one *Bindu* as per pilot study

Sample	Mean	SD	SE
30	0.49 ml	0.07	0.01

It was observed that mean *Bindu* is 0.49 ml \pm 0.07 with SE of 0.01. Thus it was established that *S'arangadhara's* standardized quantity of one *Bindu* (0.5 ml) is relevant in the present period.

Analysis on dose of *Mars'a nasya* as per standardized *Bindu*:

From above analysis the doses mentioned by various *Aacharyas* for *Mars'a nasya* can be converted according to standardized quantity of *Bindu* as follows,

Table no 02: Revised doses of *Vaaghat'a* as per the standardized *Bindu*.

AACAARYA		<i>Uttama Maatraa</i>	<i>Madhyama Maatraa</i>	<i>Heena maatraa</i>
<i>Asht'aangahr`daya</i> (As. H. Su. 20/6) <i>Asht'aangasamgraha</i> (As. Sam.Su. 29/14)	<i>Bindu</i>	10 <i>Bindu</i>	8 <i>Bindu</i>	6 <i>Bindu</i>
	Drops	100 drops	80 drops	60 drops
	ML	5ml	4 ml	3 ml
<i>Sushruta</i> (S.Ci.40/36) <i>S'aaran'gdhara</i> (S'aa .Utta.8/25) <i>Cakradatta</i> (C.D.73/10) <i>Vangasena</i> (86/15) <i>Bhaavaprakaas'a</i> (B.P.Po.kha. 5/213)	<i>Bindu</i>	64 <i>Bindu</i>	32 <i>Bindu</i>	16 <i>Bindu</i>
	Drops	640 drops	320 drops	160 drops
	ML	32 ml	16 ml	8 ml

It is observed that there is huge difference between the dose of *Vaagbhat'a* and other *Aacaaryas*. It is clear that the dose mentioned by *Sushruta* and other *Aacaarya* with similar opinion is 16 *Bindu* (8 ml) 32 *Bindu* (16 ml) and 64 *Bindu* (32 ml), and according to *Vaagbhat'a* it is 6 *Bindu* (3 ml), 8 *Bindu* (4 ml) and 10 *Bindu* (5 ml) for *Uttama*, *madhyama* and *Heena maatraa* respectively.

Interpretation of classical doses:

The answer for this variation among *Aacaaryas* regarding the dose lies in the procedure of *Nasya*.

Virecayet trirdvirathaikas'o vaa balam` sameekshya trividham` malaanaam`
(C. Si. 1/50)

Tatas'caivameva dviteeyam`s'manushecayettatha tr`teeyam`a doshadibalena vaa`
(As. Sam. Su. 29/18)

Dvistrirvaa nasyamaacaret` (As. H. Su 20/19)

Mars'asya dvitrivelam`a vaa veekshya doshabalaabalam` (S'aa. Utt. 8/26)

Above references tell that *Nasya* can be done once, twice or even thrice according to *Dosha* and *Bala* of the patient in the same sitting. If the dose of *Vaagbhat'a* and *Sushruta* is compared, the reason for this huge variation in dose

can be found in above reference, if e.g. according to *Vaagbhat'a madhyama maatraa* (8 *Bindu* - 4 ml in each nostril) is instilled thrice, i.e. 8 ml x 3 = 24 ml (48 *Bindu*) then the total quantity used for the *Nasya* on same day same sitting will be in between *Sushruta's madhyama* and *Uttama maatraa*.

Nasye Put'asankhyaamaah` - evamiti (Hemadri on As. H. Su 20/19)

Hemadri says that 2 or 3 *put'a* of *Nasya* has to be done according to patient's *Bala* and *Dosha* in one sitting of *Nasya*.

In similar way *Caraka's* dose of *Sneha nasya* can be also interpreted. *Caraka* have mentioned the dose of *Anu taila* as ½ *Pala* (24 ml). Thus the dose will be 48 *Bindu* (standardized *Bindu* = 0.5ml) and which is the quantity mentioned for one sitting of *Nasya* and not for the 7 days.

So it is very clear that there is no variations of doses exist among *Aacaaryas*. *Vaagbhat'a* mentioned the dose for each instillation and it is the range given from 6 *Bindu* to 10 *Bindu*. While *Sushruta*, *s'aaran'gadhara*, *cakradatta*, *vangasena* and *bhaavaprakaas'a* have given the dose for the complete *Nasya* in one sitting and it is the range given from 16 *Bindu* to 64 *Bindu*.

Table no 03: Interpretation of variations in classical doses

Dose in <i>BINDU</i> (In each nostril)	FIRST INSTILLATION	SECOND INSTILLATION	THIRD INSTILLATION
<i>Uttama maatraa</i> 10 Bindu	10 <i>Bindu</i> each nostril X1 = 20 Bindu	10 <i>Bindu</i> each nostril X 2 = 40 Bindu	10 <i>Bindu</i> each nostril X 3 = 60 Bindu
<i>Madhyama maatraa</i> 8 Bindu	8 <i>Bindu</i> each nostril X 1 = 16 Bindu	8 <i>Bindu</i> each nostril X 2 = 32 Bindu	8 <i>Bindu</i> each nostril X 3 = 48 Bindu
<i>Heena maatraa</i> 6 Bindu	6 <i>Bindu</i> each nostril X 1 = 12 Bindu	6 <i>Bindu</i> each nostril X 2 = 24 Bindu	6 <i>Bindu</i> each nostril X 3 = 36 Bindu

From the above analysis it can be stated that there may not have been any difference of opinion among *Aacaarya* regarding the dose of *Mars'a nasya*.

Routinely practiced *Bindu*:

The definition of *Bindu* is followed with the similar reference but it is interpreted in different way. In routine practice only the first single drop which dribbles down from the first two parts of index finger is considered as one *Bindu*.

$$\text{Bindu} = 1 \text{ drop} = 0.05 \text{ ml}$$

Routinely practiced dose of *Mars'a nasya*

Uttama maatraa : 10 drops (0.5ml)

Madhyama maatraa : 8 drops (0.4ml)

Heena maatraa : 6 drops (0.3ml)

Number of instillation in Routine

Practice:

In routinely practiced procedure of *Nasya* only one instillation is done in one sitting, i.e. 10 drops, 8 drops or 6 drops is instilled only once in each nostril.

Second or third instillation is not done in the same sitting of *Nasya*.

ANALYSIS BETWEEN ROUTINE

PRACTICE AND CLASSICAL

PRACTICE OF NASYA:

Dose: On comparison the classical *Bindu* is 0.5ml and routinely practiced *Bindu* is 0.05ml, which is 10 times less.

Number of instillation:

As already stated above the *Nasya* can be done twice or even thrice according to *Dosha* and *Bala* of the patient. Thus it is not always mandatory to stop *Nasya* after first instillation, if necessary second or even third instillation can be done. Thus in routine practice, if second instillation is avoided the 10 times less dose becomes 20 times less and if, the third instillation is avoided it becomes 30 times less, provided the *Dosha* and *Bala* of the patient demands the further instillations.

It can be stated that routinely practiced highest dose of 10 *Bindu* (10 drops) of *Mars'a nasya* itself is half the quantity of classical dose of *Pratimars'a*. It can be really a point of debate that the dose which is half of *Pratimars'a*, can ever do *S'odhana*? Thus it can be concluded that,

CONCLUSION:

- *Bindu* is not equivalent to drop (*Bindu* ≠ Drop).
- Routinely practiced dose is due to misinterpretation of concept of *Bindu*.
- Routinely practiced dose is 10 times less compared to classical dose.
- Standard dose of one *Bindu* for *Mars'a nasya* is 0.5ml (as according to *S'aaran'gadhara*, 1 *S'aana* = 8 *Bindu*) and it is relevant in present period.
- As per classical procedure dose can be repeated for two to three instillation according to need of clinical condition and if complications are not present, which is not followed in routine practice of *Nasya*.
- 10, 8 & 6 *Bindu* is the range of dose mentioned for one instillation of *Mars'a nasya*.

- 64, 32 & 16 *Bindu* is the range of dose mentioned for one sitting of *Mars'a nasya*.
- Measurement of *Bindu* should be defined in milliliter in standard literature or in formulary so as to avoid the misinterpretation of quantity of *Bindu*.

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End of article



ORIGINAL RESEARCH PAPER

Ayurveda

ROLE OF PATHYADI KALPANA IN SOOTIKA

KEY WORDS: Pathyadi Kalpana, Sootika, Ayurved

Yennawar S. M.*	Associate Professor, Stree-Rog Prasuti Tantra CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra. *Corresponding Author
Bawankar R. J.	Associate Professor, Ras-Shastra Bhaishajya Kalpana CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra.
Thote A. S.	Assistant Professor, Kayachikitsa CSMSS Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra.

ABSTRACT The sootika period which starts from the time of expulsion of placenta stretches up to six weeks according to all Acharyas & even seconded by the modern obstetrician. Generally the woman after delivery is exhausted due to utilization of her nutrition for nourishment of fetus during pregnancy, stress, & strain of delivery. She is considered as having "Shunya sharir" & is prone for disease, so she should be protected from puerperal infection by providing restricted diet & regimen for a period of 1 month. Ahara encourages a good circulation & more specifically restores the muscle tone of the abdominal wall & pelvic floor, so it mainly helps in involution of genital organ. After digestion of food, the niram rasa is formed, sweet essence part of this rasa circulating through entire body by the vyanavayu, reaches stomach & then stanya utpatti takes place.

INTRODUCTION:-

The sootika period which starts from the time of expulsion of placenta stretches up to six weeks according to all Acharyas & even seconded by the modern obstetrician. In special cases of moodgarbhanishkraman, it extends to 4 months & Kashyapa also opined that till the resumption of her menstruation which suggests the "Dhatusamparipurnata". Lady is to be considered as "Sootika", during this crucial period the enormous changes & adaptations which have taken place in maternal body to accomplish the smooth growth & expulsion of the body. Synonymous word "Punarnaveebhavati" which means completely reconstructing the body of woman like virgin.

Generally the woman after delivery is exhausted due to utilization of her nutrition for nourishment of fetus during pregnancy, stress, & strain of delivery. She is considered as having "Shunya sharir" & is prone for disease, so she should be protected from puerperal infection by providing restricted diet & regimen for a period of 1 month.

Though sootika is not a stage of illness, but there is an increase need of supplementation for food & special nutrition. It is realized that after child birth the digestive power the women is weak at the same time her nutritional need increase to meet the dual purpose of regaining her strength & to breast feed the child. Therefore a light carminative, nutritious & liquid diet is suggested in contrast to the sweet, oily, & heavy diet during pregnancy.

The dietary regimen allows time for the body to recuperate as well as protect the digestive functions of the women's body therefore reducing morbidities related to the digestive system in her ensuring normal life cycle.

Ahara encourages a good circulation & more specifically restores the muscle tone of the abdominal wall & pelvic floor, so it mainly helps in involution of genital organ. After digestion of food, the niram rasa is formed, sweet essence part of this rasa circulating through entire body by the vyanavayu, reaches stomach & then stanya utpatti takes place.

AIM & OBJECTIVES:

एवं हि गर्भवृद्धिक्षिपितशिशिल सर्व शरीरधानु प्रवाहण वेदना क्लेद रक्तनिसृति विशेष शून्यशरीराश्च पुनर्नवी भवति ।¹
अ. सं. शा. ३ / ३९

- To restore the health of the mother & baby in the form of three R—Repair, Rejuvenation, and Reconstruction.
- To enhance the process of involution of uterus.
- To enhance niram stanyanirmiti.
- To prevents sootika vyapads.

MATERIALS & METHODS:---

Sootika paricharya according to different Samhitas:--

1)Aacharya Harita²:-

- 1st day:--Fast
- 2nd day:--Nagar, Haritaki, guda at morning, Ushna kullatha yush at afternoon
- 3rd day:--Panchakola siddha yavagu
- 4th day:--Chaturjatak mishrit yavagu
- 5th day:--Shashti Odan upto 10-15 days.

2)Aacharya Kashaypa³:-

- 1-3rd day :--Upvasa(Fast)
- 3-5th day:--Manda according to agnibala.
- 8th day:--After snehapanajirna pipali ,shunthiyukta lavana virahit ,alpa sneha yukta yavagu .
- Aamlayukta kullatha yusha /jungal mansa/kushmanda and mulak kand with ghruta .
- Yonipuran:--- Priyangadi siddha krushra.
- Krushra:-- Tandul+Dal+Lavan+ Aadra+Hinga.

3)Aacharya Charak⁴:-

- 5th-7th day:--Snehapan with panchkola and Yavagupan.
- 8th day :--Bruhana.

4)Aacharya Sushruta⁵:-

- 3rd day:--Vidarigandha siddha yavagu .
- 7th day :--Yava,kola kullatha siddha mamsarasawith snehasiddha odan.
- 12th day:--Mamsarasa.

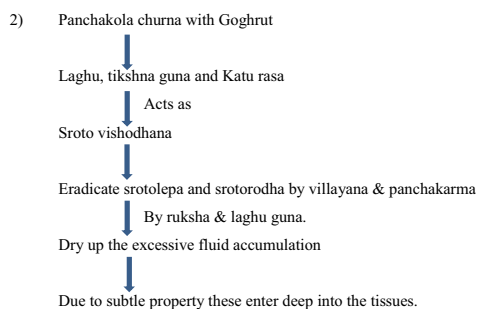
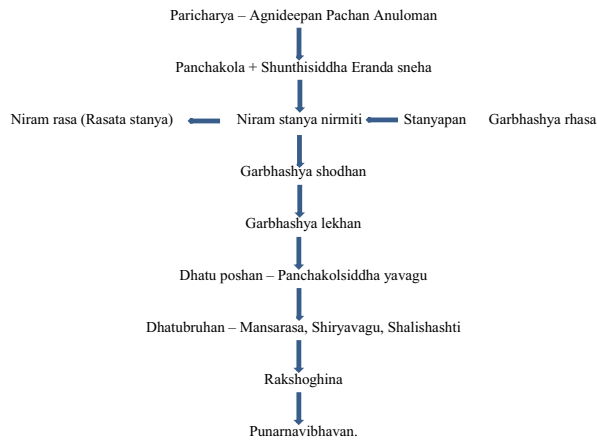
5)Aacharya Vaghabhat⁶:-

- 5th-7th day:--Sneha with panchkola.
- 8th day:-- Yava,kola kullatha siddha yusha with laghu aanapana.
- 12th day:--Mamsarasa.

METHODOLOGY:

Pravahanjanya and dhatushajanya vataprakop (Saman, Vyan, Apan)





Snehan – A) Bahya, B) Abhyantar

A)Bahya snehan with Bala taila/Vatashamak tail in the form of Abhyanga, Udavartana, Samvahana, especially abdomen, back and buttocks.

Abhyanga – The heat produced through abhyanga and ushna jala parishek allows the blood vessels to become dilated and increase circulation of the blood around the body resulting in more oxygen being allowed to get to the parts of the body.

- Abhyanga releases the endorphins from the cells into the blood circulation thus gives pain relief, stress relief, relaxation, hasten the reduction of fluid retention and helps the uterus to shrink to original size (involution), helps to regain the tone and strength of abdomen.
- Heat generated during the massage burns the adipose tissue. Increases the phagocytosis/ autolysis of the dead cells.
- Rhythmically massaging the abdomen increases circulation and tone to the internal organs to encourage waste elimination, reduces the gas and bloating.
- Stimulation of sensory receptors in the peripheral nervous system creates a positive change in all nervous system, thereby restoring haemostasis.
- Increases the availability of serotonin which regulates behavior allowing us to do the appropriate thing at the appropriate time.
- Increases the level of Dopamine which influence fine motor activity. It affects intuition, inspiration, joy and enthusiasm.
- Increased oxytocin is a neurohormone that affects both couple and parental bonding by supporting feeling of attachment and care taking.
- Reduces the cortisol, a stress related neurohormone produced by adrenal glands.

B)Snehapan Abhyantar –

Any one of the Mahasneha along with Panchakola churna depending upon her satmyata, agnibala by the action of Vatahara, srotoshodhana, shulahara, vatanuloman property, it helps for cleansing the uterine cavity. This helps for the proper extraction of uterus, thereby reduces the risk of postpartal hemorrhage and makkalshula.

Goghrt has vital capacity to elevate the weakened agni. Elevation of agni nourishes cell dhatus and increases metabolic

rate. Sarpi is effective in all 3 doshas. It alleviates Vata dosha by virtue of its snigdha (unctuous) quality. It pacifies pitta dosha due to its madhura and shitta qualities. It also treats kapha dosha by virtue of sanskara anuvartana. It is good bio enhancer of accompanying drugs as well as good ojokara (immunity enhance). Ghruta is a rich source of vitamin A, vitamin E and carotenoids.

Yavagu pan – After digestion of sneha, yavagu is given. It is light carminative, nutritious and liquid diet. It improves abhyavara and jarana Shakti which helps for absorption of essential nutrients required for the replenishment of fluid and blood.

Panchakola siddha yavagu shows improvement in the vishamagni as well as mandagni. It is laghu, depniya, tarpan, grahi, hrudya and anuloma. They are considered to act as Prana Dharan.

Brahman yavagu---

Yavagu prepared with vidarigandhadi aushadhi as it increases in agnibala & help her to regain strength and energy.

Vatahar yavagu –

Yavagu with dashmularishta ,honey or puran guda.

Shalioodan—

Snigdha, grahi, laghu, guna helps in agnideepan, bruhan, stabilization.

Manda—

It is agnideepak, vatanuloman, swada janak, so increases digestive power, & nourishes body very quickly & softens the strotos.

Kulattha yusha—

It is semisolid preparation obtained by boiling kullatha. It is Dipak, rochak, swarya, varnya, balakara & agnivardhaka. It increase swadan & give a feeling of contentment & nourish the body.

Priyangadi krushra & krushara—

It is balyakar, buddhiprada, malamutra vardhaka.

Mansarasa with shalioodan

Mansarasa – It is ruchikar. It helps in relieving tiredness, exertion, dyspnea and emaciation. It is ruchikar, nutritive, vattapittahara and useful in dhatukshaya. It is rich source of vitamins, organic iron and calcium.

DISCUSSION:--

Acharya Charaka says to administer “Acchasneha” with Panchkaola choorna when the lady feels hungry after delivery, taking care of her agnibala.

By the action of vatahara, strotoshodhan, shulhara, vatanuloman, property, it helps for cleansing the uterine cavity by, expelling any bits of placental membranes & retained blood clots in the uterine cavity. This helps in the proper extraction of uterus, thereby reduces the risk of post partal hemorrhage & makkalshula.

After the digestion “Snehayukta yavagu” is to be administered. The liquid based diet easy to digestion nutrition, gives strength & energy to her very quickly. This is continued for five to seven days and then gradually Apyanana or Brihamana is given to help her to regain her strength and energy.

According to Acharya Sushruta initially abhyanga with Balataila and vataharushnakwathaupa chara is given followed by pana of panchkala choorna with guaodaka for agnideepana. After 2 to 3 days of this upachara ,vidarigandhadiganasiddha sneha or ksheeryavagu is given for three days ,followed by sidda Jangala mansarasa & shalyadana.

Acharya Vagbhata advocated sneha with panchkola choorna & yavani, Upakunchika, saindhava, followed by vidarigandadi gasiddha ksheera & sneha yavagu.

Kashyapa has given priyangukrishara for abhyanga & swedan followed by ushna ambu snana & Dhoopan.

Kashyapa's concept of samanya sootikaparicharya and vishesh sootikaparicharya according to Desha and kula of the patient seems more practical where as Charak's Acchasnehapan seems to be suitable only for the patients of Jangaladesha as there is vatapradhanta and not for the females of Anupadesha due to kledadikyata and kapha dominance in their body.

Acharya Sushruta's concept of gudodaka with panchkola is appropriate for the anupadeshaj women where dhupana, langhana and kledanirharan should be given prime importance before starting Brihana chikitsa.

The traditional practices of sootikaparicharya of various parts of India, the difference in their diets and customs are strictly different. In the northern part of Rajasthan, Delhi which are relatively dry lands or Jangaladesha, the paricharya starts with kesaribhat (A sweet dish with lot of ghee and rava.) and halwa (A sweet dish with wheat flour and ghee.) & dry coconut scrapings, for the purpose of Agnideepan, Ajmoda is used lavishly and lashuna is used for vatashamana.

In Southern part or coastal belts the initial few days kledanirharan is given prime importance, hence restricted water intake, food without much sneha & laghu anna is advised along with preparation of shunthi followed by ksheeryavagu especially the coconut milk.

CONCLUSION:--

Ayurveda the science of life could contribute significantly in improving Mother's and newborn's health. The holistic regimens advised during sootika kala sustain the overall health, nutrition and well-being of both the women and baby. The measures are simple, easy to follow by women and family at the household level since the emphasis is on the use of locally available resources.

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**Effect Of Madhur Aushadh Siddha Tail Matra Basti (Anuvasan Basti)
For Sukhaprasav - A Single Case Study**

Preeti Ghonge¹ Sandhya Yennawar² Jayshree Deshmukh³

1.MS Scholar , 2. Senior Associate Professor 3.HOD

Department of Prasutitantra avum Streerog,
CSMSS Ayurved Mahavidyalaya.

Abstract:

Pregnancy is physiological event occurring in every woman’s life. Delivery is the end of this stage .Normal Vaginal Delivery is always considered as safe for both fetus & Mother to avoid Post partum complications. Nowadays, LSCS occurrence rate is seen comparatively more than Normal Vaginal Delivery. Hence, to avoid LSCS , proper procedure should be accepted unless & until there are any absolute indications. In Ayurveda ,Maasanumasik Garbhini Paricharya given. Sushrutacharaya has advised Anuvasan Basti for ease of Sukhaprasav .It not only helps in oletion of Apatyapatha but also gives strength to pelvic organs by Vaatashaman. This is achieved when ,regimen adopted from 9th Month of pregnancy up to delivery.

Key words - Normal Vaginal Delivery ,Maasanumasik Garbhini Paricharya ,Anuvasan Basti.

Introduction -

Gestation phase begins from embryogenesis up to development of viable fetus. This ends up after expulsion of this fetus by delivery process ,which is endless joyful moment for female. Throughout complete antenatal duration ,ANC care should be taken, to achieve this. When expulsion of viable fetus occurs via vaginal route , its Normal Labor unless & untill it is cephalic presentation excluding any risk factors.

Because of adoption western culture ,changing lifestyle, sedentary habits etc factors add-on to undergo Caesarian Section .Anxiety ,fear of fetal distress enables Obstetrician to take for Section though ,favorable cervical & uterine conditions..

Ayurveda has elaborated Maasanumasik Paricharya for Garbhini keeping an aim in mind to ease in labor .For Sukhaprasava ,Acharayas have been advised Anuvasan Basti siddha with Madhur Skand drugs.

Out of Madhur Skand Aushadhis, only 5 drugs are chosen for case study,

As follows -

- 1) Shatavari
- 2) Bala
- 3) Guduchi
- 4) Yashtimadhu
- 5) Gokshur

Drug Review -

Na me Of Dru gs	Shat avari	Bala	Gudu chi	Yashti mad hu	Goks hur	T i l
Lat i n na me	Aspa ragus race mosu s	Sida cordifolia	Tinos pora cordif olia	Gly cerr hiza glab ra	Tribul us terrest ris	Sesa mum indic um
Fa mil y na me	Liliac eae	Malvacea	Menis permi acea	Leg umi nos ae ,Pap ilio nata e	Zygo-phylla c-eae	pedal iacea e
Ras a	Madh ur,	Madhur	Tikta. Katu, Madh ur	Ma dhu r,		Mad hur, Kahs ay, T i k t a
Viry a	Sheet ,	Madhur	Madh ur	Ma dhu r		Mad hura
Vip ak	Madh ur	Shit	Usha n	Shit		Ushn a
Dos hag hna ta	Vaat- Pittag hna	Vata- pittaghna	Trido shngh a	Vaa t- kap hag na	Vaatg hna	Vata ghna



Role of *Veertarvadi Gana* in *Mutrashmari* : A Review Study

B. N. Gadve¹, Sheetal M. Balkunde^{*2}

1. Associate professor and Guide,

2. P.G. Scholar,

Department of Shalyatantra,

C.S.M.S.S. Ayurveda Mahavidyalaya, Kanchanwadi, Aurangabad.

*Corresponding Author: Email: drsheelalbalkunde@gmail.com

Abstract:

Group of drug described as Gana in Samhita. Veertarvadi Gana is one out of 37 Ganas mentioned in Sushruta Samhita Sutrasthan 38/4, with 18 herbs in it. They are indicated in Vaatvikar, Ashmari, Sarkara, Mutrakrichha, Mutraghat. Ashmari is very common problem due to todays lifestyle, Dietary habits, it contributes more in formation of Mutrashmari (Urinary Calculus). Acharya Sushruta included it in Ashthamahagada. The main aim of this article is to review the importance & utility of Veertarvadi Gana in Mutrashmari.

Keywords: Veertarvadi Gana, Mutrashmari, Urinary Calculus.

Introduction:

Ashmari (Calculi) comprises of two words i.e. 'Ashma' & 'Ari. Ashma means a Stone & Ari means Enemy.

Ashmari Specifically called as Mutrashmari (Urolithiasis), is a disease of Mutravahastrotas (Urinary tract) & involves formation of stone resulting into severe pain as given by Enemy¹. Ashmari has been mentioned in all our ancient texts but Acharya Sushruta has described it elaborately & included it in Ashthamahagada².

Urinary Calculus is a stone like body composed of Urinary salts bound together by a colloid matrix of organic materials. It consists of a nucleus around which concentric layers of Urinary salts

are deposited³. Urinary calculus below 5 mm size are flush out automatically with urine, more than 5 mm size causes pain, dysuria, haematuria⁴. According to modern science surgery is the only one treatment & very less medicines are available but recurrence is common.

In Ayurveda group of drugs are mentioned to treat Mutrashmari among them the Vitarvadi Gana mentioned in Sushruta Samhita Sutrasthan 38/4. This Gana contains 18 plants as Veertaru, Sahachradvya, Darbha, Vrikshadani, Gundra, Nala, Kusha, Kasha, Ashmabheda, Agnimantha, Morata, Vasuka, Vasira, bhalluka, Kurantaka, Indivara, Kapotvanga, Shwadanshra. They are indicated in Vaatvikar, Ashmari, Sarkara, Mutrakrichha, Mutraghat⁵.

Samprapti (Pathophysiology)⁶:

Non adoption of Vamana, Virechanadi Panchakarma, Mithya Aahar-vihar (Unhealthy diet & life style) due to this Kapha Dosha is vitiated & combines with urine reaches the Basti (Urinary bladder) & stay there produces Ashmari .

Prodromal Signs & Symptoms (Ayurvedic aspects)⁷:

Pain around the Umbilicus, Urinary bladder region, penis & other nearby areas during micturition. Obstructed Urinary flow, scattering of urine, haematuria, colour of urine resembles like Gomedak (Hessonite stone), turbid urine, Sand like particles passing along with urine. Pain aggravated by jumping, swimming, running, riding, walking etc.

Classification of Ashmari⁸:

1) SHLESHMAASHMARI: Ashmari is white in color, slimy texture & as big as a Hens egg or having colour of Madhuka flower.

2) PITTAASHMARI: Ashmari is reddish, yellowish & resembles the colour of Honey & seed of Bhallatka.

3) VATAASHMARI: Ashmari is bluish dusty in colour, hard, irregular, rough & thorny like Kadamba Flowers.

4) SHUKRA ASHMARI: Occurs in adults only due to suppression of ejaculation for months or years & frequent coitus or coitus interruption. The semen to be ejaculated gets obstructed ,condensed & brought in between the scrotum & penis by Vata.

This calculi break at its place when squeezed by hand.

Shleshma Ashmari can be correlated with the phosphatic calculus, Pitt Ashmari with the Uric acid calculus, Vata Ashmari with oxalate stones & Shukra Ashmari with spermolith or seminal or spermatoc concentrations.

Aim: To study the role of Veertarvadi Gana in Mutrashmari.

Method & Material : Classical texts of Ayurveda, journals, Internet.

Veertarvadi Gana:

1) VEERTARU:

Latin name- *Dichrostachys cineria*

Family- Leguminosae **Local**

Name- Vellantar

Gun- Laghu, Ruksha **Ras-** Tikta, Kashay

Virya- Ushna **Vipak-** Katu

Karma & Doshagnata – Kapha, Vatashamak, Ashmarinashan, Mutral, Vedanasthapan

Prayojyanga- Mula

Properties – Useful in retention of urine, Calculi⁹.

2) Sahachardavaya-

Latin name- 1) Shwet Sahachar- *Barleria cristata* 2) Nil Sahachar- *B. wild strigosa*

Family- Acantheaceae

Local Name – Sayreyak, Koranti

Gun- Laghu

Ras- Tikta, Madhur

Virya- Ushna

Vipak- Katu

Karma & Doshagnata- Kapha, Vataghna, Mutral, Mutrakrucchahar

Prayojyanga- Panchang (Visheshtah Patra) **Properties** – Diuretic

3) Darbha :

Latin name- *Imparata cylindrica*

Family- Gramineae

Local Name- Dabha, Kusha

Gun- Laghu, Snighdha

Ras- Madhur, Kashay

Virya- Shit

Vipak- Madhur

Karma & Doshagnata- Tridoshagnata, Ashmarinashak, Mutral, Dahaprashaman

Prayojyanga- Mul

Properties – Diuretic, useful in urinary disorder¹⁰.

4) Vrukshadani:

Latin name- *Dendrophthoe falcata*

Family- Loranthaceae

Local Name- Bandak, Bandgul

Gun- Laghu, Ruksha

Ras- Kashay, Tikta, Madhur

Virya- Shit

Vipak- Katu

Karma & Doshagnata-

Ashmarinashak,
Mutrakrucchahar

Mutrajanan,



ayurlog
N J R A S

Prayojyanga- Panchang

Properties – Diuretic¹¹.

5) Gundra :

Latin name- *Typha elephantina Roxb.*

Local Name - Pater, Godar

Family- Typhaceae

Gun- Shit

Ras- Kashay, Madhur

Virya- Shit

Vipak- Madhur

Karma & Doshagnata- Mutral,
Dahanashak, Ashmarinashak

Prayojyanga- Mul

Properties – Diuretic¹².

6) Nala:

Latin name- *Arundo donox*

Family- Gramineae

Local Name- Nala, Narasal

Gun- Laghu, Snigdha

Ras- Madhur, Kashay, Tikta

Virya- Shit

Vipak- Madhur

Karma & Doshagnata- Mutral,
Dahashamak, Bastishothahar,
Mutakrucchahar

Prayojyanga- Mul

Properties – Diuretic¹³, lithotriptic, used
in cystitis and Dysuria¹⁴.

7) Kusha:

Latin name- *Desmotachya bipinnata*

Family- Gramineae

Local name- Kusha

Gun- Laghu, Snigdha

Ras- Madhur, Kashay

Virya- Shit

Vipak- Madhur

Karma & Doshagnata- Asmarinashak,
Mutral, Bastishulnashak

Prayojyanga- Mul

Properties – Diuretic, Lithotriptic¹⁵.

8) **Kasha** :

Latin name- *Saccharum spontaneum*

Family- Gramineae **Local**

Name- Kasaie

Gun- Laghu, Snighdha **Ras-**

Madhur, Kashay

Virya- Shit **Vipak-**

Madhur

Karma & Doshagnata-

Vatapittashamak, Mutravirechaniya,
Ashmaribhedan

Prayojyanga- Mula **Properties**

– Diuretic, lithotriptic¹⁶.

9) **Ashmabheda**:

Latin name- *Bergenia Ligulata*

Family- Saxifragaceae

Local Name- Pashanbhed

Gun- Laghu, Snigdha, Tikshna **Ras-**

Kashay, Tikta

Virya- Shit

Vipak- Katu

Prabhav – Ashmaribhedan

Karma & Doshagnata-

Tridoshshamak, Ashmaribhedan, Mutral

Prayojyanga- Mul

Properties – Lithotriptic, used in
dysuria¹⁷

10) **Agnimanth**:

Latin name- *Premna intergrifolia*

Family- Verbenaceae

Gun- Ruksha, Laghu **Ras-**

Tikta, Katu, Kashay, Madhur

Virya- Ushna **Vipak-**

Katu

Karma & Doshagnata-

Kaphavatashamak, Shothahar,
Vedanasthapan

Prayojyanga- Mul, Patra

Properties – Analgesic¹⁸.

11) **Morata**:

Latin name- *Marsdenia tenacissima*

Family- Asclpiadaceae

Local name - Murva

Gun- Guru, Ruksha

Ras- Tikta, Kashay

Virya- Ushna

Vipak- Katu

Karma & Doshagnata- Tridoshnashak

Prayojyanga- Mul

Properties – Antispasmodic, used for colic pain¹⁹.

12) Vasuka:

Latin name- *Osmanthns fragrans*

Family- Sapotaceae

Local name – Bruhat bakkul

Gun- Guru

Ras- Kashay, Katu

Virya- Shit

Vipak- Katu

Karma & Doshagnata- Pitta-kaphashamak, Bastishothahar

Prayojyanga- Twak, Pushpa, Phala

Properties – Used in Cystitis²⁰.

13) Vasira:

Latin name- *Achyranths aspera*

Family- Amaranthaceae

Local name- Apamarg

Gun- Laghu, Ruksha, Tikshna **Ras-** Katu, Tikta

Virya- Ushna

Vipak- Katu

Karma & Doshagnata- Kapha-vatashamak, Mutral, Ashmarinashan

Prayojyanga- Mul, Tandul, Panchahng

Properties – Analgesic, Diuretic²¹.

14) Bhalluka:

Latin name- *Oroxynum indicum*

Family- Bignonaiaceae

Local name- Shonyak

Gun- Laghu, Ruksha

Ras- Kashay, Madhur, Tikta

Virya- Ushna

Vipak- Katu

Karma & Doshagnata- Kaphavatshamak, Mutral, Bastishothahar

Prayojyanga- Mul, Twak

Properties – Diuretic²².

15) Kurantak:

Latin name- *Barleria prionitis*

Family- Acanthaceae

Local name- Pit Sayreyak

Gun- Laghu

Ras- Tikta, Madhur

Virya- Ushna

Vipak- Katu

Karma & Doshagnata-
Kaphavatshamak, Mutral,
Mutrakrucchahar

Prayojyanga- Panchang (Visheshtaha
Patra) **Properties** – Diuretic²³.

16) Indivara:

Latin name- *Nelumbo nucifera*

Family- Nymphaeaceae

Local name- Nilkamal

Gun- Laghu, Snigdha, Picchil

Ras- Kashay, Madhur, Tikta

Virya- Shit

Vipak- Madhur

Karma & Doshagnata-
Kaphapittashamak, Mutrakrucchahar,
Mutravirechaniya

Prayojyanga- Panchang (Visheshtah
Pushpa, Beej, Mul)

Properties – Diuretic²⁴.

17) Kapotvanga:

Latin name- *Herpestris moniera*

Family- Scrophulariaceae

Local Name – Brahmi

Gun- Laghu

Ras- Kashay, Tikta

Virya- Shit

Vipak- Madhur

Karma & Doshagnata- Tridoshnashak,
Mutral

Prayojyanga- Panchang

Properties – Diuretic²⁵.

18) Shwadanshtra:

Latin name- *Tribulus terresteris*

Family- Zygophyllaceae

Local name- Gokshur

Gun- Guru, Snigdha

Ras- Madhur

Virya- Shit

Vipak- Madhur

Karma & Doshagnata-
Vatpittashamak, Ashmarinashan, Mutral

Prayojyanga- Phal, Mul

Properties- Diuretic, Lithontriptic²⁶.

Discussion:

On reviewing the all ingredients in this
Veertarvadi Gana Darbha, Kusha,

Gundra, Morata (Murva) are Sandigdha Dravyas (controversial drug).

Controversial is a term used for medicinal plants having various sources.

There is enormous controversy between Kusha and Darbha in Ayurveda literature.

Though the synonyms actions and indications of Kusha, Darbha are mentioned together in different texts, The most of the Nighantus accepted both Kusha and Darbha as two different varieties and mentioned as synonyms for each other²⁷.

Typha elephantina roxb²⁸, Cyperus rotundus²⁹, Callicarpa macrophylla³⁰ are considered as Gundra in different books.

Marsdenia tenacissima³¹, Clematis gouriana³², Sansevieria roxburghiana³³, Chonemorpha fragrans³⁴ are considered as Murva in different books.

Conclusion :

Maximum Herbs are Ashmaribhedak (Lithotriptic), Mutral (Diuretic), Mutrakrucchahar and useful in diseases of Bladder and Kidney.

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Role of Veertarvadi Gana in Mutrashmari: A Review Study
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Literary Study Of Aadilopa Aarthashraya And Madhyalopa Aarthashraya**Farhana Nirgude¹, Dr.Smita Dhurde²,Dr.Pritam Rathi³**P.G.Scholar student , Dept of Samhita Siddhant CSMSS Ayurved Mahavidyala College Aurangabad¹ .H.O.D and professor of Dept of Samhita Siddhant CSMSS Ayurved college Aurangabad².Assistant Professor at Dept of Samhita Siddhant CSMSS Ayurved College Aurangabad³.**Introduction –**

Ancient Ayurveda classical text are in Sanskrit for the better reading and understanding of fundamental principles, sutras from these texts . some tools / tantra gunas are described by ancient Acharyas and commentators. Tantrayukti, vyakhya , Aarthashraya , Tacchilya, kalpana are tantra gunas.

Aarthashraya is made up with two words ,
i.e

Aarth - means Subject

Ashraya- means Relevance to any Subject

In arrangement of shastra some subjects are related to adhisthan or sthan are called as Aashrita to that Adhisthan or sthan.

Key words - Aarthashraya ,Lopa ,Aadilopa ,Madhyalopa.

Aim-

To study Aarthashraya .

Objective –

To study Aadilopa and Madhyalopa Aarthashraya

Material –

1. Aashtanghruday and Sarvangsunder commentary of Acharya Arundatta.
2. Charak Samhita : ‘Ayurveda Deepika’ ,commentaries of Chakrapani and ‘Jalpalkapatara’ commentary of Acharya Gangadhar Rai.
3. Text book of Maulik sidhanta and Ashtang hriday
4. Topic related articles .

Methodology-

Selection of topic



Review of literature



Critical reading of sutras from samhita



Analysis of sutras



Discussion



Conclusion

Acharya Arundatta has described 20 Aarthashraya and Bhattarharishchandra mentioned 21 Aarthashrayas. Among these Aadilopa and Madhyalopa are selected for the study.

Lopa –

While arranging sutra ,from the group of words if any word is unstated or unwritten is called as Lopa.

Aadilopa-

While arranging sutras if there is lopa of first word, from the group of words (unsated word) then it is called Aadilopa.

Examples -

- i. धारणोदीरण

अ . ह . नि . १ १४

धारणोदीरण वातवेगादीनाम्

अरुणदत्त टीका

Acharya Arundatta stated that dharanodeeran means vata vegadi dharan deeran in th above sutra ,before dharanodeeran “vega” word is unstated so it is the example of Adilopa Arthashraya .

- ii. A) वृहणः प्रीणनो वृष्यश्चक्षुष्यो वृषहा रसः
अ.ह.सू.६.३२
रस इति मांसरसः अरुणदत्त टीका
- B) स्निग्धद्रवोष्णधन्वोत्थरसभुक् स्वेदमाचरेत्
अ.ह.सू.१६.३६
धन्वोत्थरसो जांगलदेशमांससमुद्भुतो रसः
अरुणदत्त टीका
- C) वृहणो रसमाद्याद्यैः सभक्तोऽल्पः हितः स च
अ.ह.सू.१६.१९
रस इत्यविशेषोक्तौ ज्ञेयो मांसभवो रसः
इति तन्त्रान्तत्रोक्त्या रसशब्देन मांसरसो बोधव्यः
अरुणदत्त टीका
- D) पिवेद्रसं नातिघ्नं रसालां रागखाण्डवौ
अ.ह.सू.३.३०
रसशब्देनादिलोपाख्याया तन्त्रयुक्त्या मांसरसः उच्यते
- E) रसान स्निग्धान पलं पुष्टं गौडमच्छंसुरां सुराम्
अ.ह.सू.३.१२
रसान् मांसरसान् अरुणदत्त टीका

In above examples rasa means manrasa as mentioned by Acharya Arundatta .here” mansa word” is unstated so these are the examples of Aadilopa Arthashraya .

- iii. अथातो वस्तिव्यापत्सिद्धीं व्याख्यास्यामः
इति स्माह भगवानात्रेयः
च.सि.७.११
अत्र वस्ति शब्दो निरूह एव वर्तते
चक्रपाणि
- गंगाधर
अथाध्यायोद्देशकमाद् वस्तिव्यापत्सिद्धिमाह अथात् इत्यादि
वस्तिव्दिधा तस्य स्नेहवस्तेः षड्व्यापदो व्याख्याताः
शेषत्वादिही निरूहवस्तिः

According to acharya Gangadhar Rai sneha and niruha are mainly the two types of basti. Shadvypada of sneh basti are already mentioned in fourth Adhyay of charak Samhita Siddhi stan. So in the अथातो वस्तिव्यापत्सिद्धीं व्याख्यास्यामः इति स्माह

भगवानात्रेयः Sutra niruh word is unstated before basti vyapad so it is the example of Aadilopa Aarthashraya.

Madhyalopa –

While arranging sutras if there is a lopa of middle word from the group of words then it is called Madhyalopa Aarthashraya.

Examples

- 1) अथातो द्रवद्रव्यविज्ञानीयमध्यायं व्याख्यास्यामः
अ.ह.सू.३.१२
तस्मादाहारद्रव्यस्वरूपमतः परं प्रतन्यते
तत्रापि पञ्चवर्ग स्वभावत्वे नाल्पवक्तव्यत्वात्
प्राग्द्रवद्रव्यविज्ञानीयस्वरूपं निर्देष्टु युक्तम् अन्नस्य
सप्तवर्गस्वभावत्वेन भूयस्त्वादित्याह
अरुणदत्त टीका

As properties (swaroopta) of dravadravya are mentioned in the aadhyay so the desirable meaning of aadhyay is dravadravya swaroop Vidnyayniya. Sixth adhyay of aashtang hruday Sutrasthan in Annaswaroop Vidnyayniya in which properties of aahar are explained taking concern to this as properties of dravadravyas are explained in fifth adhyay. The aadhyay name should be द्रवद्रव्यस्वरूपविज्ञानीयमध्यायं, here, swaroop word is unstated so it is the example of Madhyalopa Arthashraya.

- 2 अथात् स्नेहव्यापदिकीं सिद्धिं व्याख्यास्यामः
इति स्माह भगवानात्रेयः
च.सि.४.१

गंगाधर
अथाध्यायोद्देशकमाद् स्नेहव्यापच्चिकित्सासिद्धीमाह अथात्
इत्यादि
स्नेहवस्तिव्यापदिकसिद्धयस्ताः सन्त्यस्मिन्निति
स्नेहेत्यादि स्नेहानामानुवासिकानां स्नेहवस्तिव्यापदिसिद्धीः
चक्रपाणि

According to Acharya Gangadhar Rai and Chakrapani sneha vyapad means Sneha Basti Vyapad. Here ‘basti’ word is unstated. So it is the example of Madyalopa Aarthashraya.

3 a) इक्षु वर्ग

इक्षु विकार वर्ग
माधुर्य सामान्यादिक्षुविकृति प्रायो वर्ग उच्यते
चक्रपाणि

After mentioning the properties of Ikshu ikshu vikruti such as Guda ,sharkara ,pindika ,khanda are mentioned under ikshuvarga. According to chakrapani desirable meaning of ikshu varga is ikshuvikrutivarga .Hence vikruti word is unstated so it is the example of Madhyalopa Arthashraya.

Discussion –

1. Aadilopa and Madhyalopa Arthashraya are important to understand proper meaning of sutra .
2. Appropriate understanding of shastra is useful for human being .
3. At many more places of samhita Aadilopa and Madhyalopa are used.

Conclusion

For the correct interpretation and proper understanding of Shastra Aarthshraya are important.

Abreviations

- अ .ह .नि अष्टांग हृदय निदान स्थान
अ .ह .सू अष्टांग हृदय सूत्रस्थान स्थान
च .सि चरक सिद्धि स्थान
च .सू चरक सूत्र स्थान

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AN AYURVEDIC PERSPECTIVE OF POLYCYSTIC OVARIAN SYNDROME (PCOS)

Yennawar S. M.*	Associate Professor, Department of Stree-Rog Prasuti Tantra *Corresponding Author
Utkar S. R.	Assistant Professor, Department of Dravyaguna
Sangode N. P.	Assistant Professor, Department of Rachana Sharir
Thote A. S.	Assistant Professor, Department of Kayachikitsa

ABSTRACT The polycystic ovarian syndrome is a common endocrine disorder affecting women in their reproductive age group. It was first time described by Stein and Leventhal in 1935 so called Stein and Leventhal syndrome. It is characterised by a combination of hyperandrogenism either clinical or biochemical, chronic anovulation and polycystic ovaries. It is frequently associated with insulin resistance and obesity. It is the best known and most extensively studied cause of an ovulatory infertility in the reproductive age women. In present era of globalization there has been a transient change in the life style to a more sedentary exercise over time, lack of physical exercise, stress, high caloric food and indiscriminate dietary habits. A medical intervention of polycystic ovarian syndrome includes hormonal therapies which have long term health consequences. Hence, researchers are looking for the Ayurvedic (Herbal) medicine for the treatment of PCOS in alternative medicine which do not causes any side effects.

KEYWORDS : Polycystic Ovarian Syndrome, Hyperandrogenism, Ayurveda

INTRODUCTION

The women is said to be three times more responsible in the procreation. She has to bear the responsibilities of reproduction and bringing up of children for which there is a need for disease free mind, body and in particular the healthy reproductive system.

Owing to complex structure and function of the female reproductive system, women are subject to large number complaints connected with menstruation and also fertility. Among that polycystic ovarian syndrome is one of the major burning issues which reflect as irregular menstruation, oligomenorrhoea, amenorrhoea, infertility, obesity, hirsutism, acne vulgaris.

The polycystic ovarian syndrome is a common endocrine disorder affecting women in their reproductive age group. It was first time described by Stein and Leventhal in 1935 so called Stein and Leventhal syndrome. It is characterised by a combination of hyperandrogenism either clinical or biochemical, chronic anovulation and polycystic ovaries. It is frequently associated with insulin resistance and obesity. It is the best known and most extensively studied cause of an ovulatory infertility in the reproductive age women.

In present era of globalization these has been a transient change in the life style to a more sedentary exercise over time, lack of physical exercise, stress, high caloric food and indiscriminate dietary habits.

A medical intervention of polycystic ovarian syndrome includes hormonal therapies which have long term health consequences. Hence, researchers are looking for the ayurvedic (Herbal) medicine for the treatment of PCOS in alternative medicine which do not causes any side effects.

Ayurveda with the main objective of स्वस्थस्य स्वास्थ्य रक्षणं आतुरस्य विकार प्रशमनम् | has to evolve as a main stream of medicine in combating such emerging health problems like PCOS without any adverse effect by competing with allied branches of evidence based medicines.

As per description in Charaka Samhita which states that whatever the knowledge of medicine that is available else where is included in Ayurveda and whatever that is not available in Ayurveda cannot be found elsewhere.

This verse conveys that, Ayurveda understands a disease based on the *Doshas* and *Dushyas* involved in disease manifestation but the specific nomenclature of the emerging diseases as such in not available as the other streams of medicine. This indicates that there is a description of emerging disorders in Ayurveda which are explained under various contexts which needs to be analysed based on the symptoms. It depends upon the *Yukti* of the physician to derive an exact correlation of the disease PCOS as per Ayurvedic parlance and arrive at a correct conclusion.

The conditions which are mentioned in various contexts in ayurvedic classics under various headings as *Artavkshaya*, *Anartava*,

Nastrartava, *Vyandya yonivyapad*, *Pushpaghni Jataharini*, *Shushkarevati Jataharini*, *Sthoulya*, *Prameha*, *Strotodushiti*, and *Santarpamothavyadhi* can be to some extent compared with the symptoms of PCOS which needs to be analysed as per ayurvedic parlance.

PCOS – Poly Cystic Ovarian Syndrome Summary According to Modern Science⁽¹⁾

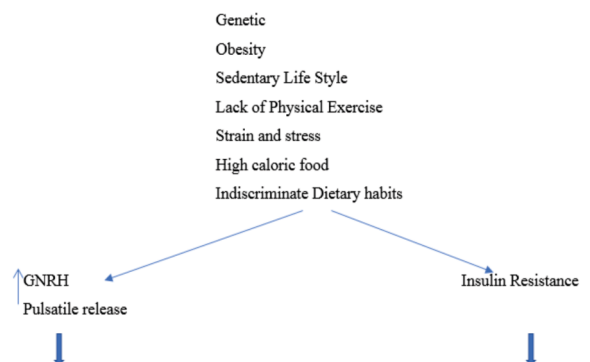
- Most common Gynaecological disorder.
- Prevalence 6-10%.
- One of the leading causes of female infertility.
- One of the leading reproductive, endocrine and metabolic disorder in the world.
- First time described by Stein and Leventhal in 1935 so called Stein and Leventhal syndrome.
- Poly means many/ multiple, cystic- abnormal sac containing fluid, Ovary- female gonads, Syndrome- group of multiple symptoms.
- Characterised by hyperandrogenism, anovulation, and polycystic ovaries.
- Frequently associated with insulin resistance and obesity.

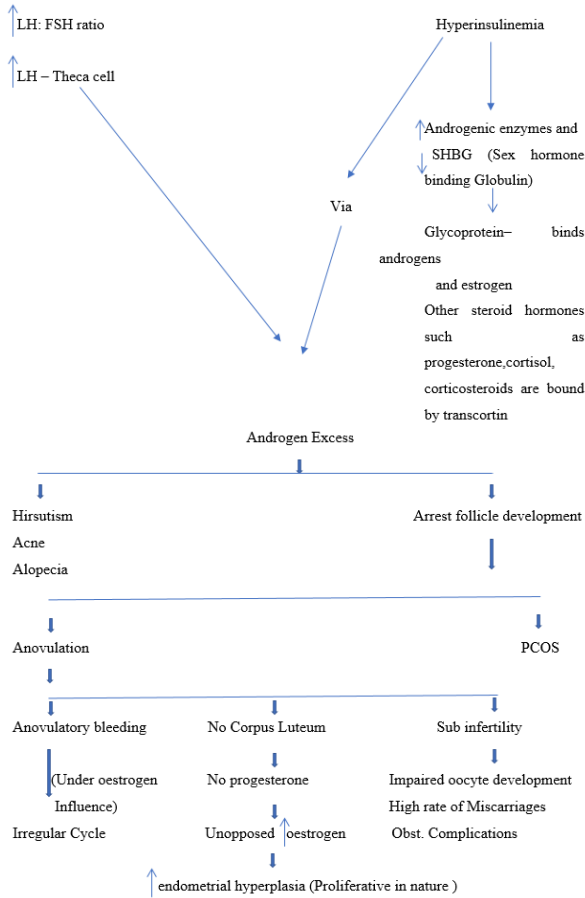
Diagnostic Criteria:-

- Increase in ovarian size
- No of cyst- 12 or more
- Size of cyst- 2 to 9 mm in diameter
- Ovarian volume 10 ml (10 cm³)
- Endometrium thickness 12 mm

Management PCOS:-

- Hormonal and Surgical Intervention (Laparoscopic ovarian diathermy LOD)
- Lowering of insulin level
- Restoration of fertility
- Treatment of Hirsutism and acne
- Restoration of regular menstruation
- Prevention of endometrial hyperplasia





Possible diseases which up to some extent compared to PCOS

1) Vandhya Yonivyapat

वंध्या नष्टार्तवा विद्यात । सु. उ. ३८/१०
 नष्टार्तवा- destruction of artavam
 भवत्यनिलवेदना- causing vatika types of pain

वंध्या निरार्तवा ज्ञेया । भा. प्र. चि. ७०/६, ७
 निरार्तव - Absence of artava

यदा हि यस्याः शोणिते गर्भाशय बीजभागः प्रदोषम आपद्यते, तदा वंध्या जनयति । च. शा. ४/३०

According to Charaka, while describing the beejanshudshti, there is a description that if a part of the beej responsible for the development of uterus and artava is defective, then the born child would be vyandhya.

Here Artava mean Antahpushpa/ streebeeja (ovum) and Nashtartava means Anovulation
 आर्तवं तु द्वि त्री बिद्धात्मकं ऋतौर्भवं आर्तवं ।
 मातृद्वित्रिबिंदुकावस्थं शोणितं ॥ अ. ह. सु. १/८
 आर्तवं तु चतुरंजली प्रमाणं । सु. शा. ३/५
 Here Artava mean Bahupushpa/ Raja/ Menstrual flow

नष्टार्तवः दौषैरावृत्तमार्गत्वात् । सु. शा. २/२३
 Nashtartava means- Amenorrhoea (It is secondary amenorrhoea which may revert back with medication or by reducing the predisposing factor)

Kaphadosha in an association of vata dosha causing margavrodha (i.e. obstruction in strotas). Hence, Anovulation and secondary amenorrhoea can be taken as one of the symptoms of PCOS (not merely the disease as such)

2) Artavakshaya

आर्तवक्षये यथोचितकालदर्शनमल्पता वा योनिवेदना च । सु. सु. १५/१२
 आर्तव- Menstrual flow

क्षय- Cease or to get reduced

The artavkshaya is a condition where in the menstruation does not appear in its appropriate time (यथोचितकालदर्शन) or is delayed or intermenstrual period is prolonged as well as (अल्पता) the quantity of menstrual flow is reduced or scanty and (योनिवेदना) menstruation is associated with pain.

Irregular and scanty menses is one of the symptom of PCOS.

3) Pushpaghni Jataharini

वृथा पुष्पं तु या नारी यथाकालं प्रणश्यति ।
 स्थूललोमशगण्डा वा पुष्पघ्नी साऽपि रेवति ॥
 का. कल्पस्थान रेवती कल्याध्याय ६

पुष्प- Artava (ovum)
 घ्नी- Destruction
 जात- Born
 हारीणी- Destruction
 वृथा पुष्पं- Destruction of pushpa (anovulatory cycles)
 यथाकालं प्रणश्यति- menstrual occur regularly
 स्थूल- obesity
 लोमशगण्डा- Hairy chin and cheek (Hirsutism)

so pushpaghni jataharini clarifies both hormonal imbalance and metabolic disturbances.

4) Granthi

सग्रन्थिः ग्रथनात्समृतः। अ. ह. उ. १/३

वातादयो मांसमसूक च दुष्टाः सन्दुष्य मेदश्च कफानुविद्धम ।
 वृत्तन्नतं विग्रथितं तु शोफं कुर्वन्त्यतो ग्रन्थिरिति प्रदिष्टः॥ सु. नि. ९/१३

Granthi is considered as round swelling or enlargement in any part of the body. It has been taken in due consideration basically because of the appearance of the cyst in the ovaries, which increase the volume of the ovary and gives it a swollen appearance.

Due to tridosha prakopaka ahara vihara which vitiates all the tridoshas, which in turn vitiates the Asruk, manas and medadhatu, with predominance of kapha dosha causing Khavaigunya at any particular part leads to the formation of vrutta, unnata, vigrathita shopha called Granthi.

Multiple cysts with a typical appearance of a “String of Pearls” or “Pearl Necklace”. These cysts are fluid filled sacs in the ovary which increases the volume of the ovary giving it a swollen appearance. These are the Hallmarks of PCOS.

5) Sthoulya (Santarpanotha Vyadhi)

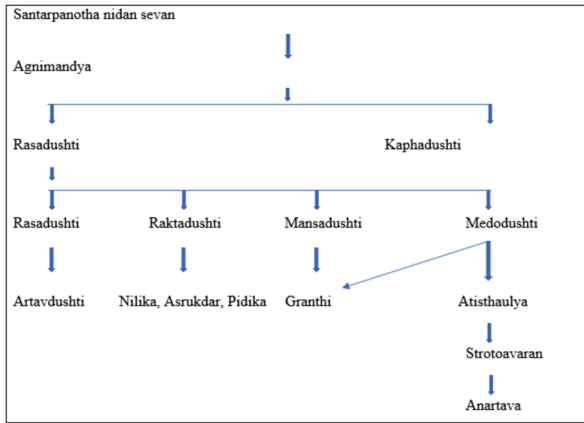
The cause and symptoms of polycystic ovarian syndrome finds its similarity with most of the santarpanotha vikaras Ch. Su. 23/4 It involves excessive indulgence in snigdha, madhura, guru, picchila ahara, navanna, nava madya, Anup and varija mamsa, gorasa, gudika, paistika preparation, chesta dveshi- lack of physical exercise, Diwaswapna- indulgence in excessive day sleep, shayyasanasukha-comfortable bed and seats suffers from diseases caused by over saturation.

Some of the santarpanotha vikaras include, prameha, pidaka, atisthoulya, gurugatrata, indriya strotasam lepa, aampradosha, buddhemoha and shopha, have relevance with some of the symptoms of PCOS.

Samprapti

Santarpanotha nidana sevana leads to Agnimandya (leads) → Agnimandya (leading) to ama annarasa → Dhatvagnimandya → Formation of dushtit Rasa dhatu (which circulates through the whole body) → due to madhurata and ati snigdha property of rasa dhatu, having close affinity to medadhatu → leading to ati sthoulya and

avarana to other strotas caused by kapha dosha → results into improper formation of dhatu.

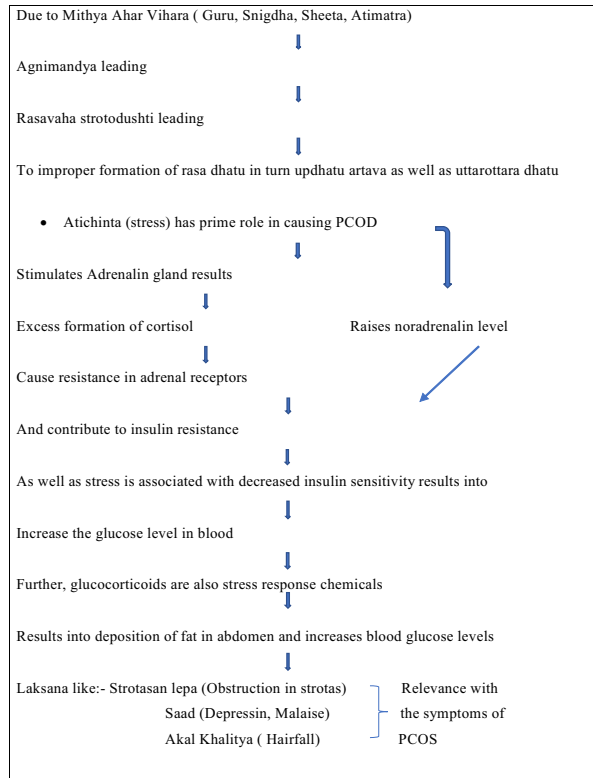


Samprapti Ghatakas

- Agni-** Jatharagni and Dhatvagni
- Dosha-** Kapha and Vatta
- Dushya-** Rasa, Rakta, Mamsa, Meda, Asthi, Artavavaha, Rajovaha
- Strotas-** Rasavaha, Raktavaha, Mamsavaha, Medovaha, Asthivaha, Artavavaha
- Rogamarga-Adhithana-** Abhyantara
- Vyaktasthana-** Garbhashaya, Phalakosha
- Udbhavasthana-** Sarvasharir
- Dushtiprakar-** Amapakvashaya
- Sanga (obstruction), Atipravrutti (enhanced flow), Granthi (formation of nodules), Vimargagamana (flow of content in wrong direction)

1) Rasavaha strotodushti Lakashana

चित्यानां च अतिचिंतनात् रसवाहिनी दुष्यन्ति । च. वि. ५/२३



2) Raktavaha strotodushti Lakashana

Hetu- Those who indulge in food and drinks which are vidahi, snigdha, Ushana, liquids and also exposure to atapa and anil suffers from morbidity of Raktavaha strotasa.

Lakshanas- are mentioned in Cha. Vi. 5/14, Cha. Su. 28/8-15, Su. Su.

24/9-12 like

- Asrugdar- Menorrhagia
- Neelika- Acanthosis Nigricans (discolouration, Hyperpigmentation)
- Pidika – Acne, pustular eruption

Above lakshana have relevance with the symptoms of PCOS

3) Mamsavaha strotodushti Lakashana

Hetu- Abhishyandi, Guruahara, Daysleep

Lakshana- Granthi i.e. appearance of cyst in USG is one among the main manifestation of PCOS.

4) Medovaha strotodushti Lakashana

Hetu- Lack of physical exercise, day sleep, excessive intake of fatty food and Alcoholic drinks - Cha. Vi. 5/16

Lakshana- Prameha purva roopa i.e. premonitory sign and symptoms of Prameha, Granthi (cyst) and Atisthauilya (obesity) have relevance with the symptoms of PCOS.

5) Asthivaha strotodushti Lakashana

Hetu- who indulges in food and drinks which cause the vitiation of vata constant suffer from asthivaha strotas.

Lakshana- keshlomasmashru dosha i.e. abnormality in hair, bodily hair, beard and moustache which indicates that it can be compared to hirsutism in PCOS.

6) Artavavaha strotodushti Lakashana

आर्तववहे द्वे तयोर्मूलं गर्भाशय आर्तववाहिन्यश्च धमन्यः।

तत्र विध्दायां वन्ध्यत्वं मैथुनासहिष्णुत्वमार्तवनाशश्च। सु. शा. १/२२

when the strotas is pierced at its moola it produces the symptoms as follows

- अल्पावर्तव – Oligomenorrhoea
- कष्टावर्तव – Dysmenorrhoea
- वन्ध्यता – Infertility
- मैथुनसहिष्णुता – Dyspareunia
- आर्तवनाश – Amenorrhoea

मिथ्याचरेण ताः स्त्रीणां प्रदुष्टेनार्तवेन च ।

जायन्ते बीजदोषात् च दैवात् च शृणुः ता पृथक्॥ च चि ३०/८

Mithyachara – Mithyaahara vihara

- Sedentary life style
 - Unhealthy food habits
 - Seal packed food
- } Impaired metabolism

Pradushta Artava-Ashtartav Dushti

Beeja dosha- Shukra and Streebeej Dushti

Daiva- unetiological cause/ it implies the effects of the sinful acts of the previous life.

Beej Dushti- If a mother or father taking dosha prakopaka ahar vihara, there will be vitiation of shukra or shonita, leading to Dushta lakshana which may be carried to the offspring.

Also, the defect in garbhoptadaka bhava i.e. matruja, pitruja, rasaja, satwaja, satmyaja etc can also be carried on to the child and hence the same manifestation as in the parents.

Meda, mamsa, rakta, Hrudaya, yakruta, garbhashaya etc all of which are derived from matruja bhavas can be considered to be vitiated in this disease and the same is carried to the foetus which manifests in later life.

Also keshha, shmashru, shukra etc factors obtained from the parental side have also been involved. This shows the possibility of genetic predisposition or the hereditary transfer of the disease.

The genetic predisposition acts as a utpadak nidana, where it may require the vyanjaka nidanas like kapha doshamedo dhatu pradohaka ahara and vihara to have a full blown up picture of a disease.

Role of Tridosha in Ovulation and Menstruation

A) Vata (Apana vayu, Vyana vayu)

Apana vayu is responsible for the evacuation of mala, mutra, shukra/ artava, garbha through adhomarga (Anulomana)

Vyan vayu is present all over the body and is responsible for the rakta stambhana, sweda and asruka stravana.

Contraction and relaxation of the uterus is also under the influence of apana and vyan vayu. Vata is also responsible for the movement of follicles, rupture of follicles, release of ovum and movement towards fimbriae.

B) Pitta

Responsible for the action of hormones which results into various stages of M.C. i.e. ovarian cycle.

C) Kapha

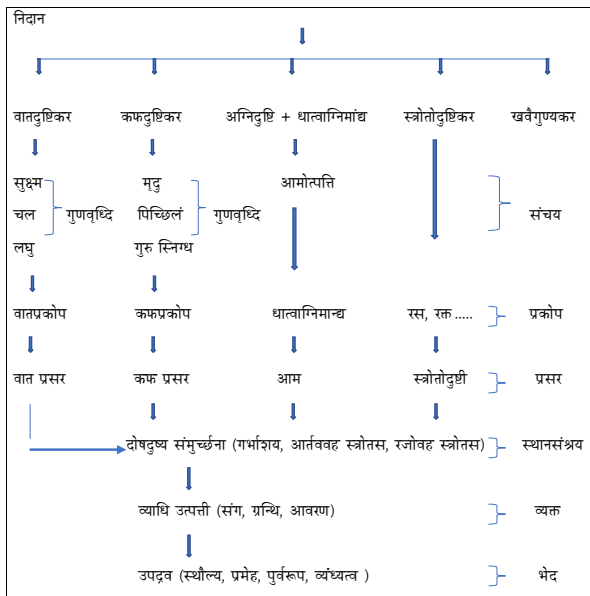
Responsible for the nourishment and development of the tissues that form and support the reproductive system including the growth of the follicles during ovarian cycles

Nidan-

Purvaroopo- irregular menstrual cycle, weight gain, mild ache, appearance of cystic ovaries

Samprapti- sanchay, prakopa, prasara, sthansamshraya, vyakti, Bhed.

Samprapti of PCOS from Ayurvedic view



Lakshana of PCOS from an Ayurvedic Perspective

- Includes Strotodushti lakshanas, Santarpanotha Nidan, Beeja Dushti
- 1) Prameha purvaroopo - kapha medo dushti- hyper insulinemia
 - 2) Strotasam lepa- the kapha and vatadosha causes avaranato the artavavaha strotas leading to obstruction which results in Amenorrhoea, oligomenorrhoea, Irregular menstrual cycle, under the influence of only oestrogen.
 - 3) Akala Khalitya- premature balding (higher level of androgens)
 - 4) Neelika (raktavaha stroto dushti lakshana) Darkening and thickening of the skin around the neck, groin, underarms or skin folds called Aconthosis Nigricans.
 - 5) Atyartava- long running amenorrhoea due to unopposed oestrogen which result in endometrial hyperplasia and occasionally when there is a menses it will be heavy and prolonged anovulatory bleeding.
 - 6) Keshlomasmashru dosha- this is the result of beejaa dushti

Pitruja factor being transferred to the foetus in abnormal proportions leading to abnormal distribution of the loma or the smashru (usually not seen in females).

Excess insulin stimulates the ovary to produce large amount of the androgen which is taken to blood stream which result into reduction in SHBG (sex hormone binding globulin/ sex steroid binding globulin)

and increase in free testosterone which stimulates the hair follicle for excess hair growth.

Ayurvedic Approach of Treatment

Tridoshas represent a broad based generalization of the vital functions of the body, classified under three main headings i.e. vata, pitta and kapha. The equilibrium of doshas are mainly responsible for health, any derangement to this will lead to imbalance state disease.

Charaka has told that every disease can't be named so, vaidyas should know the disease condition according to the involvement of doshas, dhatus, and strotas etc. (cha. Su. 18/44)

Hence even if there is no direct mentioning of a disease in Ayurveda which is having direct correlation of a disease to modern disease, a detailed analysis of the lakshanas, the state of doshas, dhatus, agni, strotas etc will guide to formulate an ayurvedic management by understanding its symptoms or pathogenesis.

PCOS, the term itself indicates more than one symptoms and hence possibility for multisystem involvement with ovarian dysfunction.

According to doshic involvement, the treatment should be aimed at pacifying the vitiated kapha, making the vata anulomana and raise the guna of pitta. Bahudosha avastha is evident in PCOS, symptoms are multiple, so treatment include more than one as shodhan followed by shaman (as the absorption rate of drugs are increase after shodhana, thus shaman aushadhi are to be used later).

A) Samshodhan Chikitsa:-

Measure by which the waste products are thrown out is known as samshodhan.

Vaman- as kapha is the main dominating dosha Basti- for the anuloman of associated vata i.e. lekhan basti, madhutailik basti

सर्वा व्यापन्नयोनिं तु कर्मभिर्वमनादिभिः ॥४५॥
 मृदुभिः पञ्चभिर्नारी स्निग्धस्विन्नामुपाचरेद । सर्वः सुविशुद्धायाः शेषं कर्म विधीयते ॥४६॥
 नहि वातादृते योनिनारिणां संप्रदुष्यति ॥११५॥ शमयित्वा तं अन्यस्य कुर्यात् दोषस्य भैषजं ॥११६॥ च. चि. ३०/११५,११६

Vata is the main causative factor in manifestation of all types of yonivyapadas, so, it should be treated first.

Nidan parivarjan, Agni dipan, Pachan, Anuloman, use of Agneya dravya, Kaphaghna Dravya, Vataghna dravya, Artavajanana, Medohar, Shoothhar, Pramehaghna, Kushthaghna, Vrushya, granthivilayan, Rasayan, Daivavyapashraya.

स्नेहस्वेदोपपन्न..... स प्रकृपितः प्रलापोन्मादहिक्का ।
 बिजोपघाततिमिर पुष्पोपघाताय संपदयते ॥ का. सि. ३/२०
 अल्पपुष्पनष्ट पुष्पनष्टबीजाकर्मण्यबीजपरीता अनुवास्या इति ॥ का. सि. ७/११
 प्रतिदोषं तु साध्यासु स्नेहादिक्रम इष्यते । दद्यादुत्तर्बस्तींश्च विशेषेण यथोदितान ॥२१॥
 शुक्रार्तवाद्यो दोषाः स्तनरोगाश्च कीर्तितः । क्लेब्यस्थानानि मुदस्य गर्भस्य विधिरेव च ॥३११॥
 गर्भिणी प्रतिरोगेषु चिकित्सा चाप्युदाहता । सर्वथा तां प्रयुंजीत योनिव्यापस्तु बुद्धिमान ॥३२॥ सु. उ. ३८
 बस्तभ्यंङ्गपरीषेक प्रलेप पिचुधारणम ॥४०॥ अ. स. उ. ३९
 मृदुभिरतीक्ष्णीर्वमनादिभिर्वमनविरेचन स्थापनस्त्रस्त्रावनस्यैः पञ्चभिः कर्मभिः ॥ अ. स. उ. ३९/४६,४७ इंदुटीका

B) Shaman Chikitsa:- It includes

- 1) Deepan - the drug which stimulates, strengthen jatharaagni and do not digest ama. Deepan drugs are agneya mahabhuta Pradhan, katu amla lavana rasatmak, laghu and tikshna gunatmaka, ushnaviryatmaka.
- 2) Pachan - the drugs which digest the ama by their ushna virya but do not stimulate jatharaagni. i.e. Mishreya, Shtpushpa, Nagkeshar, Hingvashtak churna.
- 3) Vatanuloman - the drugs which apakva mala, correct vitiated vatta dosha, facilitate easy evacuation of mala through anus. i.e. Haritaki, Aragwadha, chavya, Gandharvharitaki, etc.
- 4) Use of Agneya dravya-

आर्तवं तु आग्नेयम् ।

सु. शा. ३/३

आग्नेयानां च द्रव्यानां विधिवत् उपयोगः ।

दोषैरावृत्तमार्गत्वादातं नश्यति स्त्रियाः ॥२॥

तत्र मत्स्यकुलत्थाम्लतिलमाषसुरा हिताः ।

सु. शा. २/२१

Ushna virya, katu tikta rasa, katu vipaka, ushna ruksha tikshna guna, stimulates Agni there by clearing Ama dosha caused by kapha. Thus by initiating the proper function of Ahar rasa and updhatu artava. This also clears the Apanavayu aavarana and strotoshodhan, thus chala guna of apanavayu will be triggered which helps to inhibition of artava and help in regularization of menstruation.

- 5) Kaphaghna dravya- It acts by katu rasa (subside both pichchila and guruta qualities), tikta rasa (reduces kapha), Kashaya rasa (removes the Sneha of kapha) e.g. Dhanvayas, Vasa, Sahachar, Musta, etc.
- 6) Vatahar dravyas- it acts by Lavana rasa, Amla rasa, Madhura rasa. Lavana - it reduces Vimbadhatwa, sheetalatva, and Laghutwa of vata Amla- Anulomana gati to vata Madhur- vatashaman.
- 7) Atravajanjan
- 8) Medohar/ lekhaneya- Guggulu, Erand Dhanvayaas, etc are useful to reduce overweight and also cut on Granthi (ovarian cyst)
- 9) Shothahar- Rasna, Erand, Punarnava, Devdaru, etc are useful for reducing obesity and BMI
- 10) Pramehaghna- Vasa, Haritaki, Guduchi, Gokshur, Devdaru, Pippali, Guggul, etc. are useful to reduce obesity and hyperinsulinemia.
- 11) Kushthaghna- Vasa, Haritaki, Guduchi, Pippali, Guggulu, etc. acts by its katu, tikta rasa, Ushna Veerya to decrease the sign like Aconthosis Nigricans.
- 12) Rasayana (Rejuvenation)- revitalizes the cells and tissues of the body. i.e. Amalaki, Haritaki, Guduchi, Ashwagandha, Shatavari, Pippali, Guggulu, Bhallataka.
- 13) Vrushya/ Artavjanan- increases shukra in male and Artav in female. i.e. Ashwagandha, shatavari, Bala, Gokshur, which increases quantity and quality so useful in hypo, oligo, anovulation.
- 14) Daivavyapashraya chikitsa- Pushpaghni Jataharini considering as a aagantuj vyadhi, prime importance is given to the Daivavyapashraya chikitsa like varanbandhan (Kashyap Revati Kalpadhyay), Mantrachikitsa etc.

C) Sthanik Chikitsa- Uttar Basti, Yoni Pichu Dharan, Lepa

D) Kalpa-

- Maharasnadi Guggul/ Kwath
- Mahayograj Guggul
- Lashunadivati
- Shatapushpa- shatavari churna
- Kuberaaksha Vati
- Rajapravartani vati

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AN AYURVEDIC APPROACH TO VICHARCHIKA WITH SPECIAL REFERENCE TO ECZEMA- A CASE REPORT

¹Fadnavis Kavita Kishor

¹Associate Professor, Dept. of Kaumarbhritya, C.S.M.S.S Ayurved Mahavidyalaya and Rughnalaya, Kanchanwadi, Aurangabad, Maharashtra.

ABSTRACT

Vicharchika is mentioned as a type of *Kshudra Kushtha* in Ayurved. It means the disease which erupts on skin and spreads all over body. The modern equivalent of *Vicharchika* is Eczema. Eczema is an inflammatory and chronic skin disease which is mostly relapsing in nature in spite of treatment. It is the most common skin disease for any age. The present case report deals with a six year old male patient having Dry Eczema who has received modern line of treatment for successive three years without getting any sustained relief. Though Ayurveda mentions *Shodhana* therapy as a major part of the treatment, present study shows effect of *Shamana* therapy on *Vicharchika* considering the age of the child. The patient was given internal and external *Ayurved* treatment for four months along with *Nidanaparivarjana*. The efficacy of the treatment was mainly assessed on EASI (Eczema Assessment and Severity Index) scale. The scoring was calculated as before treatment and after treatment. The symptomatic relief was also assessed during treatment. *Shamana* therapy is found to be effective for sustained relief of the disease. *Nidanaparivarjana* also played an important role during the course of the treatment.

Keywords: *Vicharchika*, Eczema, *Shodhana*, *Shamana*, *Nidanaparivarjana* and EASI.

INTRODUCTION: Skin is supposed to be the mirror of the body. It reflects physical, mental and psychological state of an individual. It is unique in many ways, but no other organ demands so much attention and concern in both states of disease and health. There are a lot of skin diseases, out of which *Vicharchika* is most common for any age.

Vicharchika is the disease in which skin erupts especially at upper and lower limbs of an individual. “*Vichar*” also means to move or to spread.¹ So, in other words, the disease which spreads all over body is called as *Vicharchika*.

In Ayurved texts, it is mentioned as a type of *Kshudra kushtha* by all *acharyas*. *Acharya Sushrut* mentioned its symptoms as *Raji* (lines/ striae/furrow/thickening), *Atikandu* (excessive itching), *Atiruja* (extremely painful) and *Rukshata* (dryness).² whereas according to *Acharya Charak*, *Kandu* (itching), *Shyava pidaka* (blackish brown eruptions) and *Bahusrava* (excessive exudation) are the symptoms of *Vicharchika*³, where *Rukshata* is a *Vataja linga* (symptom) and *Kandu* and

Bahusrava are *Kaphaja linga*. The *Dushyas* involved in it are *Twak*, *Rakta*, *Mamsa* and (*Ambu*) *Lasika*.

In modern science, *Vicharchika* resembles Eczema. The word Eczema comes from the Greek word “*ekzein*” means “to boil out” where “*ek*” means out and “*zean*” means boiling. Eczema is an inflammatory reaction pattern of the skin due to various internal and external factors.⁴ It is a superficial inflammation of the skin primarily affecting epidermis which causes itching and red rash often accompanied by blisters that weep and crust. It is followed by scaling, thickening and discoloration of the area.⁵

CASE REPORT: A Six year old male patient reported in the OPD of *Kaumarbhritya* department of CSMSS Ayurved Hospital, Kanchanwadi, Aurangabad, Maharashtra complaining with blackish scaly patches with severe itching at Shin part of right leg since last three years. The patient was apparently not having any complaint till three year of age however, he had very dry skin. Suddenly he had mild papular rash on shin of right

leg. It was associated with severe itching. Then he was taken to a local doctor for seeking allopathic treatment, got no relief. Then he was referred to two dermatologists for subsequent two years but only during medication would he get relief. After discontinuing medicines, the symptoms would relapse. He was unable to tolerate the condition and also not having any sustained relief. Then he came to the Hospital for Ayurvedic treatment.

General Examination:

General condition- Good

Pulse- 82/min.

Respiratory System- Air Entry Bilaterally Equal

Cardiovascular System- S₁ S₂ Normal

Ashtavidha Parikshana-

Nadi- Vatapradhana Pitta

Mutra- Samyak Pravritti

Mala- Samyak Pravritti

Jivha- Saama

Shabda- Prakrit (normal)

Sparsha- Samashitoshna, ruksha

Druka-Prakrit

Akriti- Madhyama

Prakriti Parikshana- Vatapitta Pradhana

Koshtha- Madhyam

Local Examination- The lesion at the shin of right leg was associated with excessive dryness, induration, peeling and hyperpigmentation leading to blackish discoloration at the site. The margins around skin lesion were not demarcated.

Brief history-

Socioeconomic status- Poor

Ahara itivritta (Dietic history) - Habitual eating of Chapati (containing salt) with tea (of milk), pickles and biscuits for last four years.

Vihara itivritta - Regular activities included playing in the sand alongside the gutter since last four years.

Investigations- Routine haematological (CBC and ESR) and Urine microscopic examinations were done and were found to be within normal limits.

Diagnosis: It was based on Ayurvedic texts specially *Sushrut Samhita*. The signs and symptoms of the patient were as per Acharya *Sushruta* mentioned e.g. *Raji*, *Atiruksha* and *Atikandu*.

Nidanapanchaka

Nidan- *Viruddhashan* (habitual eating of incompatible food items), *Atiruksha* and *Atimadhura*, *amla* and *lavana rasapradhana ahara* and *atiruksha vihara Poorvarupa-* *Kandu*, *Shotha* (inflammation) and *Raktavaivarnya* (redness)

Rupa- *Raji* (Thickening and scaling), *Kandu* (pruritus), *atirukshata* (dryness) and *Karshnya* (blackish discoloration)

Samprapti- Due to habitual eating of incompatible food items and *atiruksha* and *atimadhura amla*, *lavan rasapradhana ahara*, *Vatapradhana tridosha* vitiated and impurified *Rakta*, *Mamsa dhatu*, *Lasika* and *Twacha* causing *Shotha*, *twakavaivarnya* and *Kandu* resulting in *Vicharchika*

Dosha- *Vatapradhana Tridosha*

Dushya- *Rakta*, *Mamsa*, *Twak*, *Ambu* (*Lasika*)

Srotasa- *Raktavaha*.

Avastha- *Jeerna (chronic)*

Sadhyasadyata- *Kashtasadya*

MATERIALS AND METHODS:

First of all, *Nidanaparivarjana*⁶ (avoidance of cause) was advised. The patient was asked to stop eating salty chapatti with tea. *Madhura*, *Amla*, *Lavana rasa pradhana ahara* was also prohibited. Also he was asked to stop playing in the sands.

The patient was mainly subjected to *Shaman chikitsa* (pacification therapy) as *Bahya* (external) and *Abhyantar* (internal) *chikitsa*.

The patient was followed up every 15 days at OPD of Dept. of Kaumarbhritya of CSMSS Ayurved Hospital, Aurangabad, Maharashtra.

Table no.1 showing Shamana Chikitsa – Internal Therapy

Visit	Medicines	Dose	Anupana
First visit	1. <i>Arogyavardhini vati</i> -250mg	1 tablet twice a day Mor. - eve. After meals	With lukewarm water
	2. <i>Gandhaka Rasayana</i> - 125 mg	1 tablet twice a day Mor. - eve. After meals	With milk
	3. <i>Raktaprasadaka kwatha</i> - 10 ml	Twice a day Mor.- eve. After meals	With <i>khand sharkara</i>
	4. <i>Panchatikta ghrita guggulu</i> - 250 mg	1 tablet twice a day Mor. - eve. After meals	With lukewarm water
Second visit (after 15 days)	1 to 3 continued		
	4. <i>Panchatikta ghrita</i> (for next 15 days)	5 ml twice a day	With lukewarm water and <i>khand sharkara</i>
The same treatment was continued for next 2 months (60 days)			
After 3 months of treatment	1. <i>Panchatikta ghrita</i> (for next 1 month i.e.30 days)	5 ml twice a day	With lukewarm water and <i>khand sharkara</i>

External Therapy: Throughout the therapy of four months, *Karanja Taila* was prescribed for local application twice a day i.e. at morning- after bath and at night- before sleep.

OBSERVATIONS 1.Based on Subjective Criteria-

Table no. 2 showing remarkable effect of therapy on Subjective Criteria

Symptoms	BT	After 15 days	After 30 days	After 45 days	After 60 days	After 90 days	After 120 days
<i>Rukshata</i> (dryness)	++++	++++	+++	++++	++	+	--
<i>Kandu</i> (itching)	++++	++	--	++++	--	--	--
<i>Raji</i> (thickening / scaling/ induration)	++++	+++	++	++++	++	+	--
<i>Karshnyata</i> (blackish discolouration)	++++	++++	++++	+++	++	++	+

Table no. 3 showing Grading scale of Subjective Criteria

Grade	Score
Very Severe	++++
Severe	+++
Moderate	++
Mild	+
Absent	--

1. Based on Objective Criteria-

The patient also satisfied the criteria of Eczema developed by “American Academy of Dermatology”.⁷ Efficacy of treatment was assessed on EASI (Eczema

Area and Severity Index) scale.⁸ EASI Scale is a tool to measure the extent (area) and severity of Eczema. The assessment was done before treatment i.e. BT and after treatment i.e. AT.

Table no.3 showing effect of therapy on EASI scale

Body region		Redness	Thickening	Scratching	Lichenification	Severity index	Area score	Region score
Head/ Neck	BT	0	0	0	0	0	0	0
Trunk	BT	0	0	0	0	0	0	0
Upper limbs	BT	0	0	0	0	0	0	0
Lower limbs	BT	0	2	2	2	6	2	3.6
	AT	0	1	0	1	2	0	0



Figure 1- First visit



Figure2- After 15 days of treatment



Figure 3- after 45 days of treatment



Figure 4 After 90 days of the treatment



Figure 5 After 120 days of the treatment

DISCUSSION: In modern point of view, the treatment of Eczema mainly revolves around local application and systemic corticosteroids which may mask infection and its sudden withdrawal can lead to aggravation of Eczema. Its Side Effects

are well known for long term toxicity.⁹ In Ayurved context, considering *Bahudoshavastha* (increased levels of *doshas*) of *Kushtha*, all *Acharyas* emphasized primarily on *Shodhana chikitsa* (elimination or purification

therapy). Charak Acharya mentions *chikitsa siddhant* (line of treatment) according to *doshapradhanatata* as *Sarpipana* in *Vatapradhana Kushtha*; *Vamana* in *Kaphapradhana kushtha* and *Raktamokshana* and *Virechana* in *Pittapradhana Kushtha*.¹⁰ This *Shodhana* is mainly indicated for adults whereas children are mainly subjected to *Shamana* therapy.¹¹ Also *Nidanaparivarjana* always remains a first stream of management of Ayurved treatment. *Viruddhashana* is said to be amongst the first *Nidana* of *Kushtha* by all *acharyas*. This child has specific dietic history as habitual eating of salty chapati with tea (made up of milk). Salt and milk are *Viruddha ahara*. The strict restriction of *Viruddhahara* and other *Nidanas* showed significant improvement for first two months; however after fourth visit child resumed eating *Viruddhashana* and other *ahara* and *vihara*, there was immediate aggravation of symptoms like *Rukshata*, *Kandu* and *Raji*.

Orally administered *Arogyavardhini Vati* has been specifically indicated in *Vatakaphapradhana Kushtha*; it also has *deepana* (appetizer), *pachana* (digestive) and *malanashaka* (destroying waste products) properties.¹² Therefore it was prescribed to the patient. The main impact of *Gandhaka Rasayana* is found to be on *Rakta dhatu* and *Twacha* which are main *dushya* in *Vicharchika*. It is specifically indicated in chronic skin diseases. Therefore *Gandhaka Rasayana* was selected for oral administration.¹³

For *Shamana snehapana*, *Panchatikta ghrta* having *Kushtha* as *Rogadhikara* was selected but considering the palatability of the *Tikta rasatmak ghrta*, the patient on his first visit was prescribed its modified and palatable form as *Panchatikta ghrta Guggulu*.¹⁴ But after 15 days of initiation of the treatment (taking into mind, significant reduction in the symptoms), the patient was convinced to take *Panchatikta ghrta*¹⁵ orally. It specifically helped in *Vatashamana*

(alleviation of *Vata*) by decreasing the symptom like *Rukshata*.

Along with these, some drugs were selected which were available in OPD dispensary like *Khadira*, *Sariva Manjishtha*, *Lodhra* and, *Nagkeshara*. They were given to the patient in the decoction form and this decoction was given a name as "*Raktaprasadaka Kwatha*". Acharya Charak specifically mentioned *Khadira* as "*Kushthaha*" (antidermatosis). (vishishyate kustha khadira)¹⁶ While *Sariva* helped in *Raktaprasadana* (blood purifier) and *Varnyakaratva* (improvement in skin colour); *Nagakeshara* as *kushthanashan*; *Manjishtha* worked as *Kaphaghna* (alleviating *Kapha*), *raktashodhaka*, *Varnakara* and *Kushthaghna* while *Lodhra* acted as *Kaphapittashamaka* and *Vranaropaka* (healing wounds).

Locally applied *Karanja taila*¹⁷ was found to be helpful in soothing the texture of the skin by relieving the symptoms like *Rukshata* and *Kandu*.

After taking this treatment for four months, patient got sustained relief without any recurrence however he was advised to avoid *Viruddhashana* lifelong.

CONCLUSION

Vicharchika is a skin disorder which not only disturbs body but also mind. An Ayurvedic approach of management aims to give blissful life to the patient by decreasing the vitiated *doshas*.

From this study, it can be concluded that the *Shaman chikitsa* can also be very effective in the management of *Vicharchika* in the child.

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Corresponding Author:

Dr Fadnavis Kavita Kishor,Associate Professor, Dept. of Kaumarbhritya, C.S.M.S.S Ayurved Mahavidyalaya and Rugnalaya, Kanchanwadi, Aurangabad,Maharashtra.
Email id- dr.kavitafadnavis@gmail.com

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Ksharkarma – A Review Study From Sushrut Samhita**Dr. S. R. Lonikar¹, Dr. Vaibhav V. Kamble^{*2}**

1. HOD & Prof., Shalyatantra Dept.,

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

2.PG Scholar, Shalyatantra Dept.,

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

Corresponding Author: Email- Dr.vaibhav33@gmail.com

Abstract:-

Ayurveda is the science of life. It deals with treatment of diseased people's as well as it maintains the health of healthy peoples. Shalyatantra is the branch of Ayurveda which includes treatment of enemies or harmful things to body and mind that is Shalya. Acharyasushruta is the father of surgery. He told many treatment modalities in the context of various diseases. Acharya has mentioned one of the most powerful weapon that is Ksharkarma. He explained, Ksharkarma is said to be among the Anushastrakarma. It is considered as superior among Shastra and Anushastra because it does the functions like excision, cutting and scraping.

Keywords:- Ksharkarma, Anushastrakarma.

Introduction:-

Kshara is the herbal extracts of plants can be prepared from combination of many herbs or may be from single herb. It also acts on vitiated Tridosha. The prepared drug substance is called Kshara because it causes Ksharana (Destruction of tissue) to Mansa and other Dhatu¹. Its actions such as burning, ripening, bursting etc. are not hindered; because of predominance of Agneya Dravyait is pungent, hot, penetrates deep, causes ripening, liquification, purification as well as promotes healing etc². Kshara Karma is useful as the substitute of surgical instruments because they can be used safely on the patients who are afraid of surgery. Acharya Sushruta is the pioneer of Kshara Kalpana, as he introduced Kshara Kalpana in one of the specific chapter. These Kshara preparations have many therapeutic usages and even proved to be effective in treating many disorders.

Aim:- To study the Ksharkarma from Sushrut Samhita .

Objective:- To Study the literary review of Ksharkarma from Sushrut Samhita .

Material & Methodology:-

The study will be conducted in 3 stages,

1. Review of Literature
2. Compilation
3. Classification

Material:-

1) Review of Literature – Literary review will be done from Sushrut Samhita .

Methodology:-

- 1) Compilation – Data related with Ksharkarma will be collected from Sushrut Samhita.
- 2) Classification – Collected data classified under different heads as below ,

Definition:- Acharya Sushruta defines the Kshara as the substance possessing Ksharana and Kshana properties & it causes Ksharana i.e. Destruction of Vitiated to Mansa and other Dhatu¹.

Kshara is described as one among the Anu-shastras³.

Kshar Pradhanya:- Kshara is considered as superior among Shastra and Anushastra because it does the functions like excision, cutting and scraping. It also acts on vitiated Tridosha. It is versatile, because even in such places that are difficult to approach by ordinary measures can be treated by kshara karma⁴.

Types of Kshara⁵:-

On the basis of administration	1) Pratisaraneeya (External application) 2) Paneeya (Oral administration)
On the basis of concentration	1) Mrudu 2) Madhyam 3) Teekshna

Properties of Kshara⁶:-

1) Rasa	Katu(Pradhan Rasa)
2) Virya	Ushna
3) Varna	Shukla
4) Guna	Saumya, Teekshna, Agneya
5) Doshaghna	Tridoshaghna
6) Karma	Dahana, Pachana, Darana, Vilayana, Shodhana, Ropana, Shoshana

Qualities of Kshara :-

Sr. No.	Good Qualities ⁷	Bad Qualities ⁸
1	Na-atitikshna	Atimridu
2	Na-atimrudu	Atishweta
3	Na-atishukla	Atiushnatva
4	Slakshnatva	Atitikshnatva
5	Picchila	Atipicchila
6	Avishyanda	Ativisarпита
7	Sheeghrakaariva	Atisandrata
8	Shiva	Apakvata
9		Hinadravyata

Kshar Nirman Vidhi:

1) Pratisaraneeya Kshara⁹

The Panchangas of plants should be collected, dried up and made into small pieces. Then these are burnt with lime stone. While burning the dispersed parts of the plants are kept with the help of Tilanala. When the ash cools down it should be separated from the residue of limestone and Bhasma Sharkara. The collected ash should be mixed well with six times of Water or Gomutra, then filtered twenty one times in a big vessel through a piece of cloth. The residual portion is thrown away and the filtrate i.e. Ksharodaka should be kept on Mandagni and continuously stirred well until it reduces to 1/3rd. This is MriduKshara. From these eight Palas has to be taken and mixed with Shankhanabhi or Shukti to make Prativapa. In the meantime, heating should continue and Prativapa should be mixed. Care should be taken that it is not too liquid or too dried up. The solution thus obtained is known as Madhyama Kshara. The Madhyama Kshara should be heated up again by adding some

Prativap Dravyasuch as Danti, Chitraka, Ativishaetc¹⁰. With this thick solution obtained which is known as Teekshna Kshara.

2) Paneeya Kshara¹¹

The collected ash should be well mixed with six times of water. Then filtered 21 times in a big vessel through a piece of cloth. The residual portion is thrown away and the Ksharodaka should be kept on Mandagni and continuously stirred well until it remains 1/3rd.

3) Ksharsutra Nirman Vidhi—Acharya Chakradatta has mentioned the Ksharsutranirmanvidhi in Arshoadikara topic.

Ksharsutra is the medicated thread which is prepared by 21 coatings of SnushiKsheer, kshar and Haridra on 20 No. Barbour's Surgical linen thread. Coatings are done in 3 Steps as follows,

- 1) Step 1 –Snuhikshir (11 Coatings)
- 2) Step 2 –Snuhikshir + Kshar (7 Coatings)
- 3) Step 3 –Snuhikshir + Haridra (3 Coatings)

After every coating hot air is blown to dry the thread and UV lamp Lighted for Sterilization of thread. After completion of 21 coatings on 21 day cut the thread and store in glass tube.

Kshara Matra:-

Paneeya Kshara¹²:

- 1)Uttam- 1 Pala (4 Tole)
- 2)Madhyam-3 Karsha (3 Tole)
- 3)Hina- ½ pal (2 Tole)

Pratisaraneeya Kshara:

- 1)Alpa Matra- Nakhotsedhasama
- 2) Madhyam Matra – Twice of the Alpamatra
- 3)Uttam Matra- Thrice of the Alpamatra

Indication of Kshara:-

Indication of Pratisaraneeya Kshara¹³:-

Pratisaraneeyakshara is indicated in good number of diseases by ancient Acharyas. Kushtha (skin diseases), Kitibha (psoriasis), Kilasa (vitiligo), Mandala kushtha, Bhagandara (fistula-in-ano), Nadivrana (sinus), Dushtavrana (infected wounds), Bahyavidradhi, Dushtavrana (infected wounds), Arbuda (tumor), Charmakeela (wart), Tilakalaka (mole), Vyanga (pigmentation of skin), Mashaka (nevus), Saptamukhroga i.e. Upajivha, Adhijivha,

Upakusha (gingivitis), Dantavaidarbha, Vataja, Pittaja, Kaphajarohini.

Indication of Paneeya Kshara¹⁴:-

Garavisha, Gulma, Udararoga, Agnisanga, Ajirna, Arochaka, Aanaha, Sharkara, Ashmari, Aabhyantaravidhradhi, Krumiand Arsha.

Indications of Ksharsutra¹⁵:-Bhagandar, Arsha, Nadivrana,Warts, Krusha ,Durbal and BhiruRugna.

Kshar Dagdha Lakshane¹⁶-

Dagdha Prakar	Lakshane
1) Samyaka Dagdha	1) Alleviation of symptoms and signs of disease 2) Without any secretions 3) Well-being to the patient
2) Heena Dagdha	1) Pricking pain 2) Itching 3) Numbness 4) Aggravation of disease
3) Ati Dagdha	1) Burning sensation 2) Redness 3) Suppuration 4) Secretions 5) Body ache 6) Thirst 7) Faintness 8) Even death

Discussion-

As per review from Sushrut Samhita Acharya Sushruta has mentioned the Kshara,Types of Kshara, Kshar Nirman Vidhi, Use of Kshar and Ksharsutra in Various diseases. Ksharkarma is effective in treating many disorders like Dushta Vrana, Bhagandara, Arsha , Nadivrana, Charmakeela, Ashmari , which shows its importance in Shalya Tantra. Ksharkarma is simple, very safe, effective and procedure with minimal or no complications.

Conclusion –

The Study can be concluded that Acharya Sushruta has mentioned Kshara is useful as a medicine for external and internal use in different formulation. There are number of Ksharas which are prepared from various medicinal plants can be used for Ksharkarma.Kshara has important role in

medicine, surgical and para- surgical practice. Ksharakarma has been considered as a wealth and a strongest weapon in Ayurveda.Ksharakarma plays an important role in treatingthe disease of Shalyatantra. Hence Ksharkarma reflects its own importance in Shalyatantra.

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The Study Of "Toxicological Analysis Of Haridra Siddha Jal (Turmeric Dilution) On Residues Of The Pesticides Sprayed On Cucumber

Author-Dr.Rajeshkumar S. Upadhyay

Professor and Head of Agadanttra and VidhiVaidyak Department (Forensic Medicine and Toxicology) CSMSS
AyurvedmahavidyalayaKanchanwadi Aurangabad M.S.India

Corresponding Author-Dr.Amitkumar Nagorao Rode

(PG Scholar)Agadanttra and VidhiVaidyak Department (Forensic Medicine and Toxicology) CSMSS
AyurvedmahavidyalayaKanchanwadi Aurangabad M.S.India.

Abstract-

The crucial Development of Agriculture means that more and more toxic organic and inorganic compounds are entering in the environment they are particularly dangerous in fruits by which people are exposing to them. A largely used in day to day life fruit Cucumber is also exposing to pesticides.It is therefore important monitor pesticide residue in the fruit Cucumber using all available analytical methods. In ayurveda some vishagannadi drugs (anti poisonous drug) mentioned. A analytical study has taken among this drugs Haridra/turmeric or Cucurma longa Linn. Can remove the toxic residence and external toxicity remains on Cucumber after washing by Haridra Siddha jal or Haridrawater.we are present the Results and conclusion this study.

Introduction-

Now a days in rural areas people largely in agricultural field after the Green revolution people highly exposed to poisons, Agro Chemicals and pesticides.

As per Ayurveda pesticides included in krutrim visha.It is the combination of poisonous and nonpoisonous substance.Most of the Indian farmers use pesticides abundantly and blindly farmers are unaware about the health hazards. poisonous Chemicals people are consuming this toxified crops, fruits, vegetables and they are suffering from various poisonous hazards.Cucumber cucumissativus Linn is a widely cultivated plant used all over the world. it absorbs pesticides which are frequently sprayed on it so here the study arises the need to reduce the toxic residues from this fruit cucumber by dissolving the during washing.In Ayurveda some Vishagnadi drugs are mentioned by Charakacharya has mentioned 10 drugs in Vishagnadigana.

हरिद्रामञ्जिष्ठासुवहासूक्ष्मेलापालिन्दीचन्दनकतकशिरीष

सिन्धुवारश्लेष्मन्ताका इति

दशमानि विषघ्नानि भवन्ति ।

According to Acharyacharak all the 10 drugs have the vishagnaproperties.butHaridra is one of the easily available drug and it is also used in our day to day life so here the study is planned to observe that Vishaghna effectivity of haridra on the

toxic residues and external toxicity remains on cucumber after dhawan by Haridra siddha jal.

हरिद्रा रसे तु तिक्ता रूक्षोष्णा विषमेहनुत ।

कण्डुकुष्ठव्रणाहन्तिदेहव्रणाहन्ति देहवर्णाविधायिनी ॥

विशोधिनी कृमीहरा पीनसारुचिनाशनी

|(ध.नि.गुडुच्यदि वर्ग 21|55)

Haridra acts as LekhanDravyaKushtaghna and Vishaghna has been highlighted in Charaksamhita.

Haridra siddha jal preparations

Materials Methodology-

Material

The following materials selected and authenticated for the study.

Fruit- cucumber

Washing drug/Dhawandravya -Haridra siddha jal/
Diluted Haridra Water.

Methodology- Observational analytical study.

1.30 samples of Cucumber has collected from one single Farm only in which pesticide Sprayed

They divided into 3 groups.

2. In each group 10 Cucumber samples selected

Group A- 10 samples had analysed i.e. without Dhawan.

Group B -10 samples had analysed after dhawan by Tap Water.

Group C - 10 Samples had analysed after dhawan by Haridra siddha jal.

Haridra siddha jal has been prepared by standard methodology as highlighted in Sharangdharsamhitamadhya khand.5

We had also conducted physico chemical analysis Ash value, PH,moisture content, volatile fixed oil, determination extractive value,thin layer chromatography.

In the Residual analysis foreign matter, pesticide residue and solvent residues has been determined.

Conclusion-

Conclusion is the determination established by investigating in various ways Of physico chemical analysis and residual analysis detecting by means of various reasons.

1. The present experimental study is observational study.
2. After the conceptual study all classical references prove Haridra is VishaghnaDravya..
3. After the analytical observation it was concluded that the Cucumber was free from pesticides.
4. In this study Haridra siddha jal washed 10 minutes, soaked in Haridra Siddha jal gave highly significant results,however considering the feasibility in day to day practice 10 minutes Soak and washed is the better time saving and efficient option.
5. besides that tap water washed and sample rendered significant results to reduce pesticide residue of chlorpyrifos.
6. Thus, haridra siddha jal is an efficient dhawandravya to wash off pesticides residues of chlorpyrifos.
7. It will be advisable to wash cabbage with 10 minute soaking in haridrasiddh instead of water in household practice.

The mean values of pesticides residue all samples of experimental group are

1. Simple as it is i.e. unwashed -0.01175
2. Sample washed with tap water -0.00542
3. Sample washed with Haridra Siddha jal - 0.005

So it was observed that mean pesticide residue level was least in Haridra Siddha jal washed sample.

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A Case Study Of Arshajanya Pandu Treated With Apamarga Khsar Pratisaran And Amalakyawaleha

Dr.Shubhada R.Lonikar¹ & Dr.Ganesh S.Jojare²

1. Professor And Guide,

2. P.G. Scholar

Department Of Shalyatantra, C.S.M.S.S. Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad

*Corresponding Author:- email:- drgsjojare@gmail.com

Abstract

Arsha is the condition associated with Mans and Rakta Dhatu Dushti¹ (Combine disturbance in blood Vessels and mucosa with musculature of anal canal), and characterized by Mansakur(Protruding Mass), Rakta-Strava(per rectal Bleeding), and Panduta(Pallar)². Acharya Sushruta has described Chaturvidha Arsha Sadhanopay (4 Treatment Methods) for management of Arsha³, Application of Kshar for Ksharan of Arshankur³ is one among the Four upakramas of Arsha. Pratisaarniya⁴ Kshar is indicated for Arsha in Ksharapakavidhi Adhayaya (Sutrasthana chapter 11) of Sushruta Samhita⁵. And Amalkyawaleha has great Antioxidant and Haematinic Property⁶.

Keywords:- Arsha, Pandu, Arsha, Piles, Apamargakshar, Kshar, Amalkyavaleha, Avaleha, Hematinic.

Introduction

The treatment of Arsha is one of the oldest subjects discussed in the medical Literature. The Arsha have four stages in occurrence, every Arsha process regardless of the Age, Gender and racial type if not treated timely along with adjoining sign and symptom of bleeding per rectal which consequences to sever anemia. Knowledge of Arsha Treatment allows Surgeons to manipulate Arsha to achieve optimal results in a short period. Arsha is seen as debilitating and scaring disorder usually seen affecting the human being at any age predominantly in medal age. Arsha is the condition associated with Mans and Rakta Dhatu Dushti (Combine disturbance in blood Vessels and mucosa with musculature of anal canal), and characterized by Mansakur (Protruding Mass), Rakta-Strava (per rectal Bleeding), and Panduta⁷ (Pallar). Acharya Sushruta has described Chaturvidha Arsha Sadhanopay (4 Treatment Methods) for management of Arsha, to achieve good Sclerosing , early healing, without complications, and acceptable anal spinctor tone. Maharshi Sushrut Also called Arsha As 'Mahagada'⁸. Application of Kshar for Ksharan of Arshankur is one among the Four upakramas of Arsha. Pratisaarniya Kshar is indicated for Arsha in Ksharapakavidhi Adhayaya (Sutrasthana chapter 11)

of Sushruta Samhita. Kshar has chhedana (excision), Bhedana (incision), and Lekhana (scraping) properties along with Tridoshhara (equilibrium of Vata, Pitta, Kapha) properties, thus considered as a good curative measure for local treatment of Arsha. And Amalkyawaleha has great Antioxidant and Haematinic Property. A case report of an Anaemic Patient with Abhyantar Arsha with Bleeding Per Rectal successfully treated by local application of Apamarga Kshar And Amalkyawaleha has been presented here.

Case Report

Type of Study: - Observational single case design.

Study centre:- Ksharkarma Vibhag Ayurved Mahavidyalaya,

A 47yrs. Old female patient presented with the complaints of Protruding Anal Mass with per rectal Bleeding with severe Generalized Weakness and Occasional Dyspnoea on Exertion, which was not responding to treatment given elsewhere. Before Four months, the patient was alright then With Occasional Constipation with Protruding anal mass. She Started treatment at Local hospital but had no relief further she had ongoing complaints and developed 2 degree internal Arsha with per rectal Bleeding and Consequently anemia. After few days, patient had generalized weakness and intermittent dyspnoea with exertion. The Arsha was treated with

Local ointment laxative and haematinic by a local doctor but it failed to respond. The patient also went to some Surgical hospitals for treatment where Patient advices for surgical management and blood transfusion for surgical and anesthetic fitness. At last, she came for Ayurvedic management at Shalya dept. OPD of Ayurved Mahavidyalaya.

There was no known co morbidity or any other major systemic disorder.

Local examination: - in Per Rectal Examination with Proctoscope the Abhyantar Arsha with bleeding noticed. The mucosa was Bulged and inflamed. There was no Tenderness.

Materials And Methods:- In this study Apamarga Kshar was used for local application⁹. And Amalkyavaleha gave orally along with triphala Qwath Awagah and Kasisadi Tail Pichu¹⁰.

Contents of Apamarga Kshar :- Apamarga Kshar (Nimbuk Swaras for wash)

Content of Amalkyavaleha:- Amalki, Sharkara, Ksaudra, Pippali, Ghrit, Madhuk, Draksha, Shunthi, Wanshalochan.

Content of Kasisadi Tail:- Kasisa, Dantimul, Saindhav, Karvir mul, Chitrakmul. Til-tail.

Treatment Plan: - PR-Proctoscopy done. Arsha was cleaned with Triphala Kwath after proper cleaning with sterile swabs, Apamarga Kshar was locally applied and open palm kept on Proctoscopes Open End. And 1 to 100 Numbers counted. After that with lemon juice all Khsar applied to Arsha was washed out. In evening Patient discharged with advice of Triphala Qwath Avagah Twice aday. Kasisadi Tail Pichu Once a day, Amalkyavaleha 2tsf daily. Total duration of treatment was 6 weeks.

Results:-

The clinical features of Arsha were improved by the end of 1st week and the Arsha was Shrunked completely at the end of 2^{ed} week. During a follow up for a period of 1 month, her pallor was disappeared and there was no dyspnoea on exertion. At The end of 1 and ½ month her lab report did suggestive of good HB% with no signs and symptom.

Discussion:-

Effect on Arsha masankur :- Ksharan in Protruding mass: Protruding mass was completely

reduced. All contents of Apamarga kshar is Ushna virya with Chedan guna. Hence Arsha Mansankur Ksharan (Sclerosis) done.

Effect on Arshajanya Pandu: At the starting of treatment patient had CBC report showing hemoglobin as 7.2gm% At end of 4th week, there was significant rise in hemoglobin i.e. 9.6 gm% and at the end of 6 week it was 10.2gm% this is due to hematinic properties of Amalkyavaleha.

Effect on Arsha Rakta strava: Active bleeding from Arsha was completely reduced at the end of 1st week after Kshar Application. This may due to Lekhana, Chedan, Ksharan, Puyaupshoshana properties present in Apamarga Kshar. Anal Mucosa became free from congestion at the end of 1st week. This may due to shodhana property of Apamarga kshar. And kasisadi tail.

Effect on constipation: Due to the High Concentration of Pippali and Yashtimadhu in Amalakyavaleha Agnidipan and mal anuloman and wibandhahar effect Constipation relived.

Effect on Arsha Aakriti: At the end of the treatment, Arsha completely Shrunked with Normal anal mucosa. Laghu guna of Apamarga helped to reduce the Arsha size by promoting Scleroses and contraction of vessels.

Conclusion: -

On the basis of this case study, it can be concluded that, local application of Apamarga Kshar was found to be very effective in the management of Arsha. Apamarga Kshar possesses the high efficacy in Arsha Ksaran without producing any adverse effect and relief in signs and symptoms of Arsha. hence it is being used as an alternative herbal approach for management of Arsha.

Kasisadi Tail Pichu after application of Kshar helps to maintain anal sphincters tone. Reduces mucosal congestion and shrunken engorged vessels.

Amalkyavaleha, with its Prime Ingredient Amalaki and Pippali, Possess high antioxidant and hematinic Properties. As well as Agni dipan, Malavashtambahar and wibandhahar. Hence it can be used as an alternative herbal hematinic for management of Arshaj Pandu

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GERD an ayurvedic management : A review article

 Gadve B. N.¹ , Ramesh Pawar*²

1. Associate Professor and Guide
2. PG Scholar

Shalyatantra Dept., CSMSS Ayurveda Mahavidyalya,
 Kanchanwadi, Aurangabad, Maharashtra

*Corresponding author: Email – rameshpawar052@gmail.com

ABSTRACT-

GERD correlated with the disease Amlapitta, described in ayurveda. GERD occurs when digestive juices moves upward from the stomach in to the esophagus causing Acid reflux. Lifestyle eating too late at night , spicy food , alcohol , smoking tobacco, coffee , tea ,causes GERD. heartburn , regurgitation and difficulty swallowing are common symptoms seen in GERD. till date no satisfactory treatment is available for GERD with reflux esophagitis. In the present article an attempt has been made to emphasis on herbal option for GERD.

KEYWORDS –

GERD, Amlapitta, heartburn, regurgitation, laxatives, purgatives, anuloman

INTRODUCTION-

GERD is defined as a “condition that develops when the reflux of stomach

contents causes troublesome symptoms and/or complications.” In addition to heartburn, regurgitation and difficulty swallowing are common GERD symptoms.¹

Till date no satisfactory treatment is available for GERD with reflux esophagitis. In Ayurveda Acharya charak has advocated various treatment modalities such as Langhan, Vaman, Virechan, Bastikarma, Ghritapan, Stambhan and Brihana chikitsa. Among these Virechan is more effective in providing distinct and instant relief². In Charak Samhita Acharya Charak has mentioned the treatment of Urdhvag Amlapitta with Patol, Nimbpatra, Nishottar, Haritaki, Draksha, Yashtimadhu³.

**SAMPRAPTI
 (PATHOPHYSIOLOGY)⁴**

Fundal distension -- stretching of fundus -
 - LOS squamous epithelium exposed to
 acid gastric juice – esophagitis --
 increased stimulus to swallow saliva to
 neutralize esophagitis -- further fundal
 distention -- cycle repeats -- sphincter is
 taken into stretch fundus -- effects like
 erosion, ulceration, fibrosis, mucosal
 metaplasia.

SIGNS AND SYMPTOMS⁵

- 1) Fatty dyspepsia
- 2) Chest pain and heart burn
- 3) Regurgitation
- 4) Hoarseness of voice
- 5) Dysphagia
- 6) Chronic cough
- 7) Shortness of breath
- 8) Nocturnal reflux
- 9) Reflux is return Of gastric content
- 10) Haematemesis
- 11) Post prandial fullness
- 12) Chocking
- 13) Wheezing
- 14) Recurrent Pneumonia.

AIM : To study the role of Ayurvedic
 drug in GERD.

METHODS AND MATERIALS :

Review regarding GERD &
 Amlapitta was done from Ayurvedic
 modern text books, Journals, Internet
 sources .Collected data compiled and
 Classified as mentioned in texts.

Discussion : following common drugs
 are available for the treatment of GERD

1)PATOL⁶

- **Latin name** :- Trichosanthes
 dioica Roxb

- **Local name** :- Parwal
- **Family** :- Cucurbitaceae
- **Gun** :- Laghu, Ruksha
- **Ras** :- Tikta
- **Veerya** :- Ushna
- **Vipak** :- Katu
- **Karma Doshagnata** :- Tridosha
 shamak
- **Prayojyang** :- Patra
- **Properties** :- Improve peristalsis,
 laxatives, antihelminthes⁷.

2)NIMB⁸

- **Latin name** :- Azadiracta Indica
- **Lacal name** :- Nimb, Kadunimb
- **Family** :- Meliaceae
- **Gun** :- Laghu
- **Ras** :- Tikta, Kashay
- **Veerya** :- Sheet
- **Vipak** :- Katu
- **Karma Doshagnata** :- Kapha
 Pitta Shamak
- **Prayojyang** :- Patra
- **Properties** :- anthelmintic and
 stimulant in liver⁹.

3)HARITAKI¹⁰

- **Latin name** :- Terminalia Chebula
- **Local name** :- Harade
- **Family** :- Combretaceae
- **Gun** :- Laghu, Ruksha
- **Ras** :- Pancharas, Kashaya
 pradhan
- **Veerya** :- Ushna
- **Vipak** :- Madhur
- **Karma** :- Vatshamak
- **Prayojyang** :- Friut
- **Properties** :- Laxatives and
 Purgatives¹¹.

4)DRAKSHA¹²

- **Latin name** :- Vitis vinifera Linn.

- **Local name** :- Draksha
- **Family** :- Vitaceae
- **Gun** :- Snigdha, Guru, mrudu
- **Ras** :- Madhur
- **Veerya**:- Sheet
- **Vipak** :- Madhur
- **Karma**:- Vatpitta Shamak
- **Prayojyang**:- Fruit
- **Properties** :- useful in thirst, burning¹³.

5)YASHTIMADHU¹⁴

- **Latin name** :- Glycyrrhiza glabra Linn.
- **Local name** :- Jyeshthamadh
- **Family** :- Leguminosae
- **Gun** :- Guru, Snigdha
- **Ras** :- Madhur
- **Veerya** :- Sheet
- **Vipak**:- Madhur
- **Karma** :- Vatpitta Shamak
- **Prayojyang**:- Mul
- **Properties** :- Antiemetic, Laxatives, Antacid¹⁵.

6)NISHOTTAR¹⁶

- **Latin name** :- Operculina turpethum Linn.
- **Local name** :- Trivrutt, Nishottar
- **Family** :- Convolvulaceae
- **Gun** :- Laghu, Ruksha, Tikshna
- **Ras** :- Tikta, Katu
- **Veerya** :- Ushna
- **Vipak** :- Katu
- **Karma** :- Kapha Pitta Sanshodhan
- **Prayojyang** :- Multwak
- **Properties** :- Purgative¹⁷.

7)SHATAVARI¹⁸

- **Latin name** :- Asparagus racemosus
- **Local name** :- Shatavari

- **Family** :- Liliaceae
- **Gun** :- Guru, Snigdha
- **Ras** :- Madhur, Tikta
- **Veerya** :- Sheet
- **Vipak** :- Madhur
- **Karma** :- Vatpittashamak
- **Prayojyang** :- Kand
- **Properties** :- Enhances digestion, laxative, Astringent¹⁹
- **Strotogamitva Organ** :- Stomach
- **Satmikaran** :- Balya

8)BHRUNGARAJ²⁰

- **Latin name** :- Eclipta alba
- **Local name** :- Bhrungaraj
- **Family** :- Compositae
- **Gun** :- Ruksha, Laghu
- **Ras** :- Katu, Tikta
- **Veerya** :- Ushna
- **Vipak** :- Katu
- **Karma** :- Kaphavatshamak
- **Prayojyang** :- Mul
- **Properties** :- Excellent Appetizer, digestant, and liver stimulant.

9)SHATI²¹

- **Latin name** :- Hedychium Spicatum
- **Local name** :- Sati
- **Gun** :- Laghu, Tikshna
- **Ras** :- Katu, Tikta, Kashay
- **Veerya** :- Ushna
- **Vipak** :- Katu
- **Karma** :- Kaphagna, Vatagna
- **Properties** :- Appetizer, Digestives, Analgesic and astringent.

10)MUKTASHUKTI²²

It is useful as Ruchikar and Agnideepak.

CONCLUSSION

GERD is common clinical problem with significant morbidity and potentially decreased quality of life. Early recognition of symptoms is integral to preventing complications of GERD. Behavioral changes and advances in acid suppression remain integral to its treatment.

GERD is a chronic disease that typically requires long term management in the form of lifestyle modification, medicinal therapy and for a subset of patients, surgical management. A recent study aimed to compare the recurrence rates of GERD and determine the risk factors related to the recurrence. Recurrence was diagnosed when patients complained of GERD symptoms requiring additional medication after initial recovery with 4-8 weeks of PPI treatment. In this article Some drugs are useful to improve peristalsis movements. Some drugs are good appetizer which are useful in Pachan Chikitsa. Some drugs are useful in improving strength of stomach. Some drugs having laxatives and purgatives properties which are useful in Anuloman Chikitsa. Study was concluded that ,By using above ayurvedic Drugs we can overcome from GERD without surgical interventions.

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A Clinical Study To Evaluate The Efficacy Of *Kayyonyadi Tail Shirobhyanga* In The Manage Ment Of *Akal Palitya*

Ashwini Vitthalrao Banbare*¹, Ramesh Dnyanoba Sonwane²

1.PG scholar ,Panchakarma Department.

2.PG Guide And Associate Professor ,Panchakarma Dept.

CSMSS Ayurvedic Mahavidyalaya ,Kanchanwadi, Aurangabad,Maharashtra

Abstract

Premature greying of hair i.e. *Akal Palitya* is a burning cosmetic issue in present era.. Hair colour contributes immensely in physical appearance and self-perception. Nowadays, the incidence of *Palitya* is common in young age. In Ayurvedic system of medicine it is described as “*Akalapalitya*” means graying of hairs before 32 years of age (*Tarunastage*), which is caused by excess of *Ushnaguna* of *Pitta*. Hair follicle melanocytes depletion leads to hair greying affected by bulb & outer rootsheath. Unfortunately contemporary medical science does not offer any satisfactory Treatment. *Shiroabhyanga* comes under one of the four *Murdnitail*, which are basically used for the management of *Shiroroga*. It is best among four *Murdhni tail* procedures. So, there is need to find a safe and effective remedy in the management of *Akal Palitya*, which initiated for the study.

Introduction

Premature greying of hair i.e. *Akal Palitya* is a burning cosmetic issue in present era. Hair colour contributes immensely in physical appearance and self-perception. The onset and progression of greying or canities correlate very closely with chronological aging and occur in varying degrees in all individuals, eventually regardless of gender or race. Nowadays, the incidence of *palitya* is common in young age between 20-30 years age group. Even in children the incidences are increasing day by day. Premature greying aids to embarrassment and social stigma. Ayurveda premature or graying of hair is called as *Palitya*¹

The main aetiology of *palitya* is vitiation of *dehoshma* and *ushnaguna* of *pitta* circulates to *romakoopa* and causes *paka* of hair². It is not a serious disorder but any changes in body abnormally are not good for health. It is counted as *Kshudraroga*³. *Palitya* has two phenomenon one is normal and other is abnormal.⁴ In Ayurvedic system of medicine it is described as “*akalapalitya*” means graying of hairs before 32 years of age (*Tarunastage*), which is caused by excess of *ushnaguna* of *pitta*. Color of hair is mainly due to melanocytes present in hair cells. Hair follicle melanocytes depletion leads to hair greying affected by bulb & outer rootsheath⁷

Unfortunately contemporary medical science does not offer any satisfactory treatment other than artificial coloring of hair (dyeing). This regular dyeing will lead to many adverse effects like hair fall and other scalp diseases. Understanding hair and related problem reflects the psychological and pathological conditions of whole body system. In lexicons of *Ayurveda* concept of *Akala Palitya* has been explained and different types of satisfactory treatment without any side effects have also been discussed by different authors.

Abhyanga has been mentioned as a regular procedure to be performed for maintenance of health and prevention of certain non-manifested and upcoming disorders⁸. The *Shiroabhyangais* coming under the classification of the *Murdhni tail*. *Kayyanyadi Tail* is one of the best drugs used in the management of *palitya*⁹. It is easy for external application, easily available and very cost effective.

A case report

A 21 years old girl, reported to the CSMSS College of *Ayurveda* and hospital, Aurangabad with the complaints of white hairs, Dry split hair, Unctous thick hairs, burning sensation of scalp since one year. Patient was apparently normal before 1yr month. Gradually he developed Burning in her scalp along with hair fall. For that she approached contemporary medical sciences for treatment. But his complaints did not subside and which were aggravated in hot climate. So she came

to our hospital, *Shiroabhyang* treatment with administration of lukewarm *kayyanyaditaila* for 15 minutes for 90 days.

Aim

- A Clinical Study To Evaluate The Efficacy of *KayyanyadiTailaShiroabhyanga* In The Management of *Akalapalitya*.

Study Type:

Clinical study: Source of Data: Patients of *AkalaPalitya* was selected randomly from OPD and IPD of *Panchakarma* department in our *Ayurvedcollege*, Hospital, urban and city of Aurangabad. Criteria for diagnosis of *Palitya* were selected on the basis of sign and symptoms described by *Vagbhat in Samhita*.¹⁰ Patients have been given *Shiroabhyanga* of *Kayyonyaditail* up to 15min that is 900 *matra* or 285 sec.

Duration Of Study: daily up to 90 day.

Follow-up: Baseline, Day 30

Material: *Kayyanyadi Tail*.

Method:

Kayyanyadi Tail was prepared as per *Tailpakvidhi* as per *Shrangdhar samhita*¹¹. This lukewarm *Taila* was applied on scalp gently with finger tips up to 15 minutes and then washed the hairs with lukewarm water. This tail was applied up to 90 days.

Procedure of *Shiroabhyanga*

The *Shiroabhyanga* is one among the *Bahrparimarjana chikitsa*¹² which is done in following methods.¹³

Poorvakarma:

The patient was made to sit on a knee high chair. The body of the patient was wrapped with a cloth below the neck then the procedure was followed by standing behind the patient; it is ideal position to perform *Shiroabhyanga*.

Pradhankarma

The technique included smearing the oil to the portions of the scalp above the neck and specific strokes were placed.

1. Smearing the oil –

The oil for application was first heated on a water bath to make it lukewarm. Then the oil was

applied in to the head of the patient and spread all over the head including the neck and ear pinna.

2. Massage from before backword (*Gharshan Hasta*) After smearing the oil massage the whole head and then neck, moving palmer surface of the hand from before backwards applying gentle as well as firm pressure. complete area of the scalp were covered.
3. Picking strokes (*MridvanguliTadana*) – Fingers of the both hands were moved as if picking up tuft of hair. The fingers were partially approximated and then gently and firmly placed on the scalp. This procedure was gentle producing mild traction effect on hair. By this way each area of the head was similarly treated.
4. Flat palm strokes (*DvihastaTadana*) – Gentle strokes were placed with the palmer surface on the scalp by both hands. Strokes were followed on vertex, occipital and temporal region.
5. Fist strokes (*MriduMushtiTadana*) – In this gentle strokes were placed on all areas of the head with the closed fist through the ulnar border.
6. Pressing (*Ghatita Hasta*) – Flat of the palm were placed on the patient's head and moulded in to the shape of the scalp so that every portion of the palmer aspect of the palm and fingers comes in contact of the head.

Pascchatkarma:

After following this procedure the patient was asked to rest on the chair for about 15 minutes and then advised to take head bath with hot water.

Criteria for inclusion

- Sex- either
- Economical status- All Class
- Age 15-30
- Patient having classical sign and symptoms of *Palitya* and mentioned in *samhita* like *Keshavarna* (color of hairs), *rookshasphutit* (Dry split hair), *Snigdhaschoola* (unctuous thick hair), *daha* (burning sensation)

Criteria For Exclusion

- Patient suffering from skin diseases and any of the systemic diseases.
- Patient with pernicious anaemia and any other autoimmune diseases.
- Patient with hormonal diseases and hereditary disorders.
- Patient with age below 15 years, above 30 years

Criteria for assessment

- 1.Colour of hair(*Keshavarna*)
- 2.Drysplitted hair(*Rookshasphutit*)
- 3.Unctous Thick hairs(*Snigdhasthoola*)
- 4.burning sensation of scalp(*Daha*)

1.Colour of hair(*Keshavarna*)

Features	Grade
Krishna varna	0
Ash colored	1
Yellowish	2
White hairs	3

2.Dryspilted hair(*RookshaSphutitaKesh*)

Feature	Grade
Normal	0
Dryness visible	1
Dryness felt by touch	2
Dryness felt with spilled hairs	3

3.Unctuous thick hair(*Snigdhasthool*)

Features	Grade
Normal	0
Unctuous visible	1
Unctuous felt by touch	2
Unctuous Felt with spilled hairs	3

4.Burning sensation(*Daha*).

Features	Grade
No burning sensation	0
Mild(localized burning without disturbed sleep)	1
Moderate(localized burning with disturbed sleep)	2
Severe(burning all over the scalp with disturbed sleep)	3

Scoring

Absent	0
Mild	1-3
Moderate	4-6
Severe	7-9
Very severe	10-12

Overall effect of Therapy *snehan*

Severity of *palitya*: For assessing the severity of *palityain* each patient the above adopted scores and assessed as follows.

GRADE score

- Absent -0 (0)
- Mild -1(1-4 score)
- Moderate- 2 (5-8 score)
- Severe- 3 (>8 score)

Content of *Kayyanyadi Tail*¹⁴

- *Kayyoni*
- *Amalaki*
- *Guduchi*
- *Madhuk*
- *Payasa*
- *Anjana*

Symptoms	Before treatment	After treatment
Colour of hair(<i>Keshavarna</i>)	3	1
Dry splitted hair(<i>rookshasphutit</i>)	1	0
Unctousthick(<i>snigdhasthoola</i>)	2	1
Burning sensation of scalp(<i>daha</i>)	3	1
Total	9	3

Results:

Before starting the treatment his score was 9 which came under the severe, but after taking of treatment and 30days follow up score was reduced to After treatment patient got relief from his complains, but unctuous thick hairs was present in the patients with Grade2. And after follow up of 30 day, the score was the remains same that which was after the treatment by applying the *Kayyanyadi tail* as local application with light massage at night time once in whole day before going to bed.

Discussion:

As *Palitya* is one among the *Ksudra Roga*¹⁵. In classics with *Vikrit Pitta Dosh* predominance and *Shiroabyangais* mentioned as the treatment for curing the disease. Most of the contents of *Kayyanyadi tail aresheet viryatmak, keshya, Pittashamak* properties, works as *Rasayan* by which the effect of *Kayyanyadi Tail* on *Palitya* is considerable. *Shiroabhyanga* is maintained to having *keshya karma*¹⁶. It was advised for the patient in *Shiroabhyanga*.

Conclusion:

This study it reveals that *Shiroabyangais* an effective treatment for its management. It also proves that *Kayyanyadi Tail* is effective for used as *Shiroabyanga* along with local application for scalp. As it was said to the patient to apply the *Tail* during night hour before going to bed shows the time of contact of oil with the scalp, which gives the *Snehana* effect for long time. By virtue of *Snigdha, Sukshma, Vyavayi, Vikasi* and *Tikshna* property of *Tail* it penetrates the scalp and pacifies the *Pitta* and *Vatadosha*. Hence use of *kayyonyadi Tail* is very good choice of treatment.

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Randomized Control Trial to Evaluate Efficacy Of Nirgundi Kwatha Gandush (Nirgundi decoction Gargling) On Mukhagat Vishalakshan Aasya Daah W.S.R to Tobacco Chewing

* ¹Dr. Rajeshkumar S. Upadhyay

* ²Dr. Kuldeep Housrao Pawar

¹Professor and HOD Agad Tantra Avum Vidhivaidyak,
C.S.M.S.S. Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra, India.

²Post Graduate Scholar Agad Tantra Avum Vidhivaidyak
C.S.M.S.S. Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra, India.

Abstract:

Smokeless tobacco goes by many names, such as dip and chew, snuff, chewing tobacco or spit tobacco. Amongst them smokeless tobacco is highly addictive and can harm one's health. Like cigars and cigarettes, smokeless tobacco products contains a variety of toxins associated products. Tobacco chewing is most common all over India and is a big problem in india which causes many harmful effects on body. The most common is imflamation of oral flora. According to Ayurveda tobacco it is a Visha Dravya. When Visha get contact with body shows symptoms called as Visha Lakshanas. Tobacco cause initially such local oral symptoms called as Mukhagat Vishalakshnas. In this Aasya Daah is most common . Oral cavity is get imflamation is seen in Ayurveda we can corelate it with Aasya Daah .According to Ayurveda for oral disorders Gandusha is most useful Karma. We can use it with Vishaghna Dravya Nirgundi Kwath i.e Nirgundi decoction. Nirgundi is Krimighna (Anti microbial), Vedanasthapan (relieves Pain), Shothaghna (Anti inflammatory) & a Special property of Vishaghna. We can use Vishaghna+Shothaghna property for Aasya Daah. We can see Effects of Nirgundi Kwatha Gandusha (Gargling) in randomized control trial. Purpose of this trial is see the efficacy of Nirgundi drug Which is described in various Samhita about its Vishaghna. Most of research done with Nirgundi in Musculoskeletal disorders but very few of them used it in locally oral manefestation like Aasya daah. I hope this study can help to derive new medicine for tobacco caused oral imflamation i.e Aasya Daah.

Key Words: Vishaghna , ,Gandusha ,Aasya Daah,Doshghnata

Introduction:

Ayurveda is Upaveda of Atharvaveda & it is divided into the eight main branches. Agadtantra is the most important branch of Ayurveda among the eight branches, which deals with the various poisons. The Acharyas divided the type of Poison (Visha) mainly into the two groups i.e Sthavar & Jangam which are also called Vishayoni I.e origin of the poison.^{1,2}

स्थावर जगडमं चैव द्विविधं विषमुच्यते।

दशाधिष्ठानमाध्यं तु षोडशाश्रयम्॥३॥ सुक२

जगडमस्थावरायाम् तद्धोनौ ब्रह्मा न्ययोजयेत्।

तदम्बुसम्भवं तस्माद् द्विविधं पावकोपमम्॥६॥ चचि२३

In sthavar visha there are brief description of plants poison & non living things. The living things

comes under the Jangam visha .According to the Agadtantra the tobacco (Tamparna) comes under the

Sthavar visha, in the form of Patra Visha. Tobacco has been used in India From many years in the form of smoking, chewing, snuffing, Guthkha, Mava ,Paan.

The smokeless Tobacco is available in many forms in India & widely used by all social groups. It is more prevalent among the disadvantaged & people who lives in rural areas & it is common among woman of all ages including reproductive ages. There is a wide spectrum of morbidity & mortality related to smokeless tobacco used. But smokeless tobacco has not yet the attention .It deserves a public health problem. Tobacco control policies have not been sufficient to curb its use. Smokeless tobacco used in high not only in India but also in many other countries globally.³

Tobacco is one of the greatest public health challenges the world faces today. Every year 4.9

million deaths are caused by tobacco. By 2030 unless there are dramatic reductions in tobacco use, that number will rise to 10 million deaths annually.⁴

The tobacco chewing is dangerous for health. It is commonly used in young male. It causes various diseases systemic and local like Ca mouth , Ca tongue, mouth ulcers, bad odor of mouth , dental caries & many oro-dental disorders. Ayurveda is helpful in reduction of the side effects of tobacco chewing in various ways, such as Gandush (Gargle). The Gandush is very useful in Oro-dental disorders. Advantages of Gandush described in Ayurveda Samhitas.

The Nirgundi (Latin Name –Vítex negundo) having various medicinal properties such as Krimighna (Anti microbial), Vedanasthapan (relieves Pain), Shothaghna (Anti imflamatory) & a Special property of Vishaghna.^{5,6,7,8}

The Nirgundi is described in Eksar Gana in Sushrut Samhita & also described in Vishaghna Mahakashaya in Charak Samhita.^{9,10}

सोमराजीफलं पुष्पं कटभी सिन्धुवारकः।

चोरको वरुणः कुष्ठम् सर्पगंधा सप्तला ||84||

पुनर्नवा शिरीषस्य पुष्पमारग्वधार्कजम्

श्यामाऽम्बुष्ठाविडंगानि तथा ऽऽमाशमन्तकानि च||85||

भूमी कुरबकश्चैव गण एकसरः स्मृतः।

एकशो द्वित्रिशो षाऽपि विषापहः||86||सुक5

हरिद्रामंजिष्ठासुबहासुक्ष्मैलापालिन्दिचन्दनकतकशिरिष

सिन्धुवार श्लेश्मान्तक इति दशोमनि विशघ्नानि

भवन्ति ॥ (च.सु.4/11)

Mukhagat Visha Lakshanas

मुखगेत्वोष्ठचिमचिमा जिह्वा शूना जडा विवर्णा च।

द्विजहर्षहनुस्तम्भास्यदाहलालागलविकाराः||113||चचि23

सचेत् प्रमादान्मोहाद्वा तदन्नमुपसेवते।

अष्ठीलावत्ततो जिह्वा भवत्यरसवेदिनी||38||

तुध्यते दह्यते चापि श्लेष्मा चास्यात् प्रसिच्यते।

तत्र बाष्पेरितं कर्म यच्च स्यादान्तकाष्ठिकम्||36||सुक1

The Nirgundi having the properties antimicrobial, anti inflammatory , Pain reliving &

having a special property of Vishaghna. So, in the Mukhagat Visha Lakshanas Nirgundi kwath can be useful. This study was planned to see the effects of Vishaghna Dravya Nirgundi (Latin Name-Vítex negundo) in the Randomized control study of Efficacy of Nirgundi Kwath Gandusha in Mukhagata Visha lakshana Aasya Daah W.S.R. to Tobacco Chewing.

Nirgundi Gun Karma

सिन्धुवार श्वेतपुषः सिन्दुकः सिन्धुवारकः।

निलपुष्पी तु निर्गुण्डी शेफाली सुवहा च सा।

सिन्दुकः स्मृतिदस्तिक्तः कषायः कटुको लघुः।

केश्यो नेत्रहितो हन्ति शूलशोथममारुतान्।

कर्म कुष्ठारुचिश्लेष्मज्वरान्नीलापि तद्विधा||113|| भाप्र

गुडूच्यादि वर्ग

Type Of Study Design- Randomized control study

Methods of selection of study subjects –

Sample size-100

Sampling technique -Patients who are having Mukhagat Visha Lakshana AasyaDaah, randomly divided into Group A- Trial group - 50 & Group B- control group -50 for 30 days. Goup A treated with Nirgundi Kwatha Gandush & Group B treated with Placebo

Study setting –Patients were selected from Opd & Ipd of Ayurved Mahavidyalaya

Inclusion criteria-

1. Male patient having addiction of only crude tobacco chewing .
2. Patients of age between 15 to 55 years.
3. Patient having Aasya Daah described in Mukhagat Visha Lakshnas .

b.Exclusion criteria-

1. Having addiction of Gutkha, Smoking, Mava, Paan.
2. Patient having having Aasya Daah described in Mukhagat Visha Lakshanas without H/O Chewing tobacco .
3. Known case of all malignancies.
4. Ulcers or lesions having known underlining pathology as like DM, syphilis, SLE, TB.

Objective:

1.To study the effects of Nirgundi Gandush on Mukhagata Visha Lakshana Aasya Daah

Material

Drug- Nirgundi & Madhuk Churna was collected from GMP certified Ayurved medical Agency.

Kwath Preparation-¹³

It was made in Rasashastra Lab.

40 gm Churna(1 pal) + 16 part of Churna water (640)(Shodash Gun) Boiled till 1/8 of total liquid remained (80ml)

(as described in Sharangdhar Samhita)

Gandush vidhi-^{14,15}

Time – Once , only In sunny morning .

Purvakarma:

1. Mrudu Snehan & Swedan of neck ,forehead , scapular region of patient was done.

Pradhankarma:

Position of patient –Sitting , tilting slightly upright of head.

Vidhi-

Luke worm Kwatha (room temperature) was given to patient which will fulfill ½ of mouth of patient(Uttam matra) & toldto hold till Samyak lakshans will be seen then to spat out.

Samyak Lakshana-

Sweating from fore head, temporal & watering from eyes, nose.

Frequency-

3time cycles of this Gandush Dharan at one sitting.

Paschat karma-

Gargling mouth wash Swith Luke worm water.

Follow up:

Both groups were Examined 2 times for 30 days

1st Follow up - 7th day

2nd Follow up - 28th day

Observations –

Aasya Daah (VAS scale)

Grade 0- No

Grade1-Mild (Occasionally)

Grade2-Moderate (Intermittent)

Grade3-Severe (Continuously)

With Nirgundi Kwatha Gandush treatment-

	Lakshana	7 th day follow up	28 th day follow up
1	Aasya Daah	++++	++++

With Placebo treatment-

	Lakshana	7 th day follow up	28 th day follow up
1	Aasya Daah	++++	++++

Total effects of treatment-

At the end of study , results was made as following-

Grade	Improvement	Score in %
Grade2	Markedly improved	25-50%

Conclusion-

The drug Nirgundi which is having Vishaghna property also having healing property which is useful in Aasya Daah. Aasya Daah can be corelate with mucus membrane imflamation. Doshagnata is act as Pittaghna.Daah is a symptom of Pitta Dosh .Gandushaof decotion of Nirgundi is having medicinal and Vishaghna property.

Randomized control trial done which shows which are treated with Nirgundi Kwath Gandush their Aasya Daah Lakshana Markedly decreased with 50%.

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Importance Of Breast Milk, Breastfeeding Related To W.B.W (World Breastfeeding Week).

Dr. Lalita Nivrutti Patole

Associate Professor, Dept-Kaumarbhritya
C.S.M.S.S. Ayurved College
Kanchanwadi Aurangabad

Abstract-

India is a country with large population. Food, shelter, and clothes are the three basic needs of mankind. In a world filled with inequality, crisis and poverty, breastfeeding is the foundation of life for long good health. In this article, I have covered all information about breast milk/ breastfeeding, and W.B.W. i.e world breastfeeding week.

Keywords-Breastfeeding, breast milk, and world breastfeeding week(WBW).

Introduction-

In this article, I will focus on what is breastfeeding, breast milk (contents, advantages) and WBW step-by-step.

Definition of breast feeding:

Feeding of an infant or young child with breast milk directly from breasts is called breast feeding.

It is the optimal source of nutrition.

Statistics

Globally, only 38% of infants are exclusively breastfed.

Suboptimal breastfeeding contributes to 800,000 infant deaths.

Milk ejection basics: -

Prolactin & Oxytocin hormone release

Hormones trigger mammary gland to stimulate milk production & ejection.

Infant suckles at the breast

Stimulation of nerve ending in mother's nipple.

Contents of breast milk

- Breast milk is the only food that baby needs up to first six months.
- Exclusive breast feeding means neonate gets only breast milk & nothing else such as honey, water, juices or any other animal milk.

- Output & composition of BM changes throughout the lactation period to meet changing needs of growing infant.
- BM is easily digestible.
- BM contains all essential nutrients in the right quantity & quality as per body's requirement.

Colostrum:

- It is the milk secreted during the initial 3-4 days after delivery.
- It is in small quantity.
- It is yellow, thick & contains large amounts of antibodies, immune competent cells & vit. A,D,E & K.

Transitional Milk

- This is the milk secreted between 3rd to 15th day.
- In this the fat & sugar contents increases.
- The immunoglobulin & protein content decreases.

Mature milk

- It is secreted from 15th day onwards.
- It is thinner & watery but contains all the nutrients essential for optimal growth of the baby.
- It has lesser protein content than transitional milk, but more fats & caloric value.
- Composition of this milk also varies according to maternal diet.

Fore milk

- It is the milk secreted at the start of the feed.
- It is watery & is rich in proteins, sugar, vitamins, minerals & water that satisfy baby's thirst.

- It is with lesser fat content.

Hind milk

- It is secreted at the end of feed.
- It is thicker than fore milk & with higher fat content to satisfy baby's hunger & caloric needs.

Preterm milk

- It is the milk of a mother who delivers before 37 weeks.
- It contains more proteins, sodium, iron, immunoglobulins & calories as per the requirement of the preterm baby.

Advantages of breast milk

BM is species-specific i.e quantitatively & qualitatively most appropriate for human body.

There are many advantages which can be classified as follows-

1. Advantages due to Nutritional Superiority.
2. Advantages due to Anti-infective Properties.
3. Advantages to mother.
4. Advantages to baby.
5. Advantages to Family.
6. Advantages to the Community.

Advantages due to Nutritional Superiority

1. B.M. is easily digestible. Baby gets energy from easily digestible Carbohydrates.
2. As compare to cow's milk there is less protein content in B.M. till it is qualitatively superior due to easily digestible proteins in B.M.
3. Essential Amino Acids (EAA)
B.M. contains all the EAAs in appropriate concentration which is very useful for proper cognitive development.
4. There is high protein content in animal milk which increases risk of allergic disorders. It is due to absorption of macromolecules through immature gut mucosa.
5. Fat content of human milk & cow milk is same.

6. Vitamin contents in human milk is adequate (except vit K) while cow milk is deficient in vit C & D.

Due to low vitamin K content in B.M. there is risk of hemorrhagic disorders in newborn, so to prevent that Inj.Vit K should be given to new born baby.

7. Mineral level is much lower in B.M. as compare to Cow milk. Due to cow milk there is additional burden over developing kidneys of baby.
8. B.M. contains an adequate amount of water so no additional water is required in exclusively breast-fed babies.

Advantages due to Anti-Infective Properties

- Breast milk is basically sterile, except in presence of systemic or local (breast) maternal infection.
- Breast milk contains various anti-infective substances, so there are lower chances for G.I.T. & R.T. I. in breast fed infants.
- Breast Milk contains following anti - infective factors:

1. Humoral factors.
2. Cellular factors.
3. High Complement activity.
4. Organism-specific protective factors.
5. Others.

Advantages for the mother

- Breastfeeding helps to create a unique emotional bond between a mother and child.
- It is always available and is cheaper compared with bottle feed.
- Breastfeeding helps to reduce the post delivery depression.
- Breastfeeding releases oxytocin, a hormone which helps the uterus contract and return to its normal size more quickly and thus helps in reducing excessive bleeding after delivery.
- It helps lose weight faster.
- Breastfeeding reduces the risk of developing breast cancer, uterine and ovarian cancer also.

Advantages for baby

- Breast milk is the healthiest form of milk for babies.
- Breast milk is easily digestible and breast-fed babies tend to have less constipation and fewer

Human Milk	Cow Milk
Contains higher level of PUFA (Polyunsaturated Fatty Acids) and EFA (Essential Fatty Acids). It also contains lipase enzyme which is essential for fat absorption.	Cow milk is richer in saturated fats, are difficult to digest & also increase risk of heart disease, hypertension in adult life.

feeding problems compared to bottle-fed babies.

- Breast milk is useful in developing cognitive skills. The fatty acids in the breast milk help to develop baby’s brain.
- Breastfed babies are at lower risk of infections, diarrhoea, asthma, obesity, allergies, and colic.
- The antibodies in the breast milk develop baby’s immunity, which is responsible to fight sickness.
- Breast-fed babies have a significantly lower risk of a condition referred to as sudden infant death syndrome (SIDS) where typically the infant is found dead after having been put to bed, and exhibits no signs of suffering

Advantages to Family

- Breastfeeding is good from the economic point of view because of negligible cost except the hidden expenses for nutrition to mother.
- Less health care expenses due to less morbidity. Natural family spacing.
- **Advantages to the community**
Ecological benefits due to less consumption of natural resources for animal milk production i. e. fodder, boiling (fuel) & washing the utensils (water).
- Lesser morbidity & public health expenses.
- Population control.

Introduction of W.B.W.

- On 14th Feb. 1991, W.A.B.A. (World Alliance for Breastfeeding Action) was established.
- W.B.W. was first started & celebrated by W.A.B.A. (world Alliance for Breastfeeding Action) in 1992.
- Later it is being celebrated in more than 170 countries by UNICEF, W.H.O. & their participants such as individuals, associations & Government.
- W.H.O & W.A.B.A had decided a day committed to the breastfeeding & which is now the important international event.

W.B.W. is an annual celebration

Starts -----1st August.
Ends ----- 7 August.
Freq. ----- Yearly.
Locations ----- Worldwide.

- It is the global network of individuals & organizations which concern with protection, promotion & support of breast feeding worldwide.
- WABA co-ordinates the annual W.B.W. campaign.

Aims of the breastfeeding campaign.

- To make aware the peer group to support mothers in order to establish and carry on the breastfeeding.
- To initiate the breastfeeding supporters to be trained to provide support to mothers and babies in more effective ways.
- To make aware the people to attend and expand the Peer Counselling programmes by letting them know the effective and efficient benefits of the Peer Counselling.
- To call in the governments to get more and worldwide maternity facilities in order to increase the rate and duration of breastfeeding.

Objectives of W.B.W

- Inform - To inform people about the links between good nutrition, food Security, poverty reduction & breast feeding.

Anchor - Breast feeding as the foundation of life.

Engage - To engage with individuals & organizations for greater impact.

Galvanise - Action to advance breast feeding as a part of good nutrition, food security & poverty reduction.

W.B.W. THEMES

As W.B.W. had started from 1992, the theme for every year.

I have taken last five years theme.

2014 -- “Breastfeeding: A Winning Goal -- For Life.”

2015 -- “Breastfeeding & Work -- Let's Make it Work.”

2016 -- “Breastfeeding -- A Key to Sustainable Development.”

2017 -- “Sustaining breastfeeding together.”

2018 -- “Breastfeeding: Foundation for life.”

2019 -- “Empower parents, Enable breastfeeding.”

Goals of W.B.W

- To protect, to promote, to support.
- These are the three main pillars of W.B.W. campaign.

How can we achieve these goals?

For this WHO & UNICEF advised ten steps for successful breast feeding

1. Hospitals should support mothers to breastfeed by -
Not promoting infant formula, bottles or teats, making breast feeding care standard practice, keeping track of support for breast feeding.
2. Staff Competency -
Hospitals should support mothers to breastfeed by - Training staff on supporting mothers to breastfeed, Assessing health workers knowledge & skills.
3. Antenatal care -
Hospitals should support mothers to breastfeed by - Discussing the importance of breastfeeding for babies & mothers, preparing women in how to feed their baby.
4. Care Right After Birth -
 - a. Encouraging skin-to-skin contact between mother & baby soon after birth, helping mothers to put their baby to the breast rightaway.
5. Support mothers with breastfeeding -
Checking positioning, attachment & sucking, giving practical breastfeeding support, Helping mothers with common breastfeeding problems.
6. Supplementing -
Giving only breast milk unless there are medical reasons.
Prioritizing donor human milk when a supplement is needed.
Helping mothers who want to formula feed to do safely.
7. Rooming - in -
Letting mothers & babies stay together day & night.
Making sure that mothers of sick babies can stay near their baby.
8. Responsive Feeding -
Helping mothers to know when their baby is hungry.
Not limiting breast feeding times.
9. Bottles, Teats & Pacifiers -
Referring mothers to community resources for breast feeding support.

Counsel mothers on the use & risks of feeding bottles, teats & pacifiers.

10. Discharge -
Referring mothers to community resources for breast feeding support.
Working with communities to improve breast feeding support services.

These are all about 10 important steps for

boosting of breast feeding up to discharge. But work is not completed. There is other information for family members & community.

1. When mother go home -

- Your health worker is there to give you confidence & support to continue breast feeding.
- Reassure to mother that breast milk is all that your baby needs for healthy growth, for the first six months.
- Help to mother to resolve any problems or concerns so that breast feeding is a positive experience.
- While breast feeding is natural, it can take time to learn & it really helps to get ongoing support from health workers or peer counsellors.

2. What family & friends can do -

- Provide emotional support & practical help e.g. to deliver groceries, cook meals, to clean the house etc.
- Take care of big brothers & sisters.
- Listen & be supportive, Boost mother's confidence in breast feeding.

3. What mother can do -

- Before your baby arrives, get all information about breast feeding.
- When your baby is born, try to give first breast feed within an hour.
- You will need help about breast feeding. Don't be afraid to ask for it.
- Make sure you get plenty of healthy food, water & rest.

4. What Dads can do -

- Help around the house. Reduce stress for your partner & make sure she gets enough rest.
- Burp the baby after a feed. Dad's chest is great for this.
- Care for the baby in ways other than feeding (Baths, Diaper changes, walks etc.)

5. What Law Makers Can Do -

- Ensure a minimum of 4 months paid maternity leave.
- Require employers to provide places & protected time for mothers to express (Pump) milk at work.
- Prevent discrimination against women & mothers in the work place.
- Breast feeding support at work helps to build a healthy society.

6. What Trade Unions Can Do -

- Inform women about their rights.
- Ensure breast feeding women's voices are heard through consultations & negotiations.
- Advocate for maternity provisions through collective agreements.
- Breast feeding support in the work place boosts staff morale.

7. What Employers Can Do -

- Respect national laws on paid maternity leave.
- Provide place & time to express (pump) milk.
- Provide options for mothers
 - On-Site child care
 - Flexible work schedules
 - Tele working
 - Part-Time work
 - Let mothers bring their babies to work.
- Breast feeding support in the work place saves business Money.

8. What Co- Workers Can Do-

- Be supportive of the mother who needs time & flexibility to Breast feed.
- Encourage new mothers with a positive, accepting attitude.
- Recognize that the months, after having a baby are special.
- Breast feeding support in work place makes a difference to a Working parent.

In this way WHO organized some strategies to support mother to breastfeed anytime, anywhere so that we can all help to make Society Breast Feeding Friendly.

Conclusion-

Really, breast milk is very important for an infant. Breast milk is the foundation for the coming generations to be healthy physically as well as mentally. Not a single formulated milk can be substituted for breast milk. Organizing W.B.W is the best and the most social way to spread awareness about breastfeeding among people.

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A review on Ayurvedic and modern recent treatment modalities on hemorrhoids

Gadve B. N¹ , Swapnil Patil*²

1. Associate professor and guide
2. PG Scholar,

Shalyatantra Dept., CSMSS Ayurved mahavidyalaya,
 Kanchanwadi, Aurangabad, Maharashtra.

*Corresponding Author: email: swapnilpatil3831@gmail.com

ABSTRACT:

Ayurveda is an ancient science which protect health in healthy individuals and cures the condition in diseased population. Ayurveda is the science of life and Shalya Tantra is important branch, Which represent the surgical field.

One of the prime important disease from Ashtamahagad is Arsha defined as a disease which torture patients vital force as enemy is called as Arsha. Arsha correlated with hemorrhoids described in modern science. (Haema-blood & rhoos-flowing).

In Ayurveda our Acharya described four type of treatment for Arsha, which is Bshhaj (conservative), Kshar, Agni, Shastra (surgery). In modern science hemorrhoids are defined as the protrusion of varicose vein from the rectal mucosal membrane in the rectal area which can grow to quit large size if not checked in time.it is one of the commonest diseas.Its incidence increases with advancing age. There are various kind of treatment

Dietary Lifestyle modification, Tropical treatment, Oral medication, Parasurgical and Surgical treatment and modality is used to care. Sclerotherapy, Cryotherapy, Electriccoagulation, Infracoagulation, Radiofrequency coagulation & excision, Doppler guided hemorrhoidal artery ligation, Stapled hemorrhoidectomy, these are parasurgical procedures on hemorrhoids. Closed and Open hemorrhoidectomy, Harmonic scalpel and literature, Atomizer ward, these are surgical treatment on hemorrhoids. In this review article on attempt has been made to review the study carried out on Arsha.

Keyword: *Arsha, Kshar, Agni, Shastra, hemorrhoids*

INTRODUCTION:

Ayurveda is and Asian science which protect health. In healthy individual and cases the condition in the diseased population¹. Sedentary Lifestyle, excessive stress i.e apathya sevan and vehicle vegadharana (i.e holding of

natural urges) the prolonged standing work, improper food habits, all these causes result in Agnimandya (i.e. indigestion) which is the root cause of various diseases. Agnimandya is one of the main root causes.

Ashtomahagad is graveyard diseases were described by Acharya Sushruta. Arsha is one of them. The worldwide overall prevalence of hemorrhoids in general population is estimated to be 4.4%²

Arsha can be correlated with hemorrhoids described in modern science. It is derived from Greek word (Haema-blood & Rhoos-flowing). Acharya stated that guda is formed in embryonic stage and it is a part of kapha and rakta which is digested by pitta with the participation of vayu⁴. The layman called them mulvyadh, bawasir, kumbh etc. Whatever is the terminology we should treat because it hampers day to day life of patient. Due to its bleeding tendency complication like anaemia and many more can happen to the patient which can be fatal too.

In Ayurvedic view Guda Sharir is the last part of Bruhadantra (large intestine) which facilitates excretion mala and apan vayu.

Sushruta said that Guda measurement about 4 ½ Anguli in length⁵. Acharya Sushruta has stated that other valves present in gud at the distance of one and half anguli in spiral pattern like concha. Gudashtha is situated from romanta at a distance of 1 ½ yava.

Function of valves-

- a. Pravahini- It is uppermost valley it is about one and half rangoli in length the Dalhana says that it brings faeces down.
- b. Visarjani- It is the middle Valley it is about one and half anguli in

length by relaxing the anus it helps in evacuation.

- c. Samvarni- It is the lowermost valley, it is also same in length as described above two. At the time of defecation it opens and at other time it covers the anus.

Acharya Charak mentions that Koshta have 15 organs and Guda is one of them, it is further divided into two parts: Uttraguda & Adhoguda

Classification as per Ayurveda-

- i. According to Dosha-5 by Sushruta & 6 by Charak & Vangbhat. Vataj, Pittaj, Shleshmaj, Raktaj, Sannipataj, Sahaj.
- ii. According to bleeding nature- Stravi & Shushka⁵
- iii. According to Prognosis- Sadhya, Yapyasa Adhya.
- iv. According to treatment- Bhesaj, Sadhya, Ksharasadya, Agnisadya, Shatrasadya⁶.
- v. According to Origin- Sahaj, Janmottar, Kalaj, vein⁵.

As per modern view

On the basis of the origin

- i) Internal hemorrhoids-

It is present above dental line and covered with mucus membrane. It bulges into human of anal canal. Does when are specifically branches of submucous or internal hemorrhoid plexus which are radical of superior hemorrhoidal vein

- ii) External hemorrhoids-

These are covered with skin and placed below the dentated line and around the perianal region.

- iii) Internal-external hemorrhoids-

Both above type of hemorrhoids combine from internal called internoexternal hemorrhoids.

In relation to pathological anatomy¹³

Primary hemorrhoids were found in position indicated by the face of the clock 3,7,11 o'clock position. The superior hemorrhoidal artery divided into left and right main branches among which left passes down the rectal wall. Right branches divided into anterior and posterior division.

Secondary hemorrhoids may develop in between the primary hemorrhoids.

In relation to manage

Goligher's classification⁷

- i. First degree hemorrhoids this is bleeding but no prolapse and can be seen only proctoscopy.
- ii. Second degree hemorrhoids Main prolapse beyond the external sphincter and the visible during evacuation but reduced spontaneously.
- iii. Third-degree moives protrude outside the anal canal and required manual reduction.
- iv. Fourth degree hemorrhoids reducible and are constantly prolapsed.

Symptomology:-following symptoms present in hemorrhoids.

Bleeding per rectum(sarakta purisha), Painless bleeding, Mucous discharge, Prolapsed, Anal irritation (gudapradeshi kandu),Incomplete evacuation (Badha pakwa purisha),Secondary anaemia.

Examination:-

- **Inspection** -It seen at outside the anal canal prolapsed masses lie at 3,7, 11 o'clock.

- **Palpation-** localised pain,tenderness, induration swelling or growth option is the key to diagnosis.
- **Digital rectal examination-**Used to evaluation for any patient with anorectal pathology it can localised pain,and identify mass, identify abscess ,evaluate spinctertone.
- **Anoscopy/Proctoscopy-**When instrument will be withdrawal then the hemorrhoids will prolapse into the proctoscope by the deposition, which are situated at 3,7,11th o'clock identification of hemorrhoids can be done by it's pink or red covering of mucous membrane.
- **Laboratory study** CBC may be useful as mark for or infection.
- **Imaging studies-**defecogram may indicate rectal prolaps.

TREATMENT:-

***AS PER AYURVEDA:-**

Various type of Arsha Chikitsa Abhyanga, Dhuma, Sweda, Avgaha, Lepa, Raktamokshan, Deepan, Pachan, Vatanuloman, Basti, Takrapan, use of Raktasangrahi dravya.

Acharya sushruta has been explain all type of treatment modality for management Arsha

1)Bheshaj Cikitsa-

Indication

Arsha, which are newly occurred.In which symptoms are not fully developed,having less dosha drishti,no complication⁶.

Chikitsa-

*Vataj Arsha-In Ayurveda Snehana,Swedan for whole body or local

as per need. Vamana, Virchna, Asthpana, Anuvana basti chikitsa to reduce vataj dosha¹⁷.

*Pittaj Arsha-Virechan chikitsa to reduce pittaj dosha¹⁷.

*Raktaj-Sanshaman chikitsa to stop the bleeding and reduce the hemorrhoid size¹⁷.

*Kaphaj-Ardrak, Kulathya sevan help full to treat agnimandya and also reduce kaphaj dosha¹⁷.

*Tridosha Arsha-All dosha chikitsa and Siddha milk¹⁷.

2) kshar karma¹⁵-

Indication

Arsha which is widely spread, deeply situated, soft consistency, protruded out of anal canal⁶.

Chikitsa:-

- **Purvakarma-Snehan, Svedan.**
One day prior to kshar karma mruvu virechan must be given to the patient for the clear emptying of the bowel.
- **Pradhan karma**-In lithotomical position Grhita or jatya ditaila applied at anas and on the arsha gudayantra should be introduced into the anus as per instruction to see the arsha clearly. Application of khara should be done by shalaka. Arsha yantra kept as it is in the anus for few seconds. when the colour of arsha is appeared like a colour of Pakwa Jambuphala, the kshara should be washout by amla dravya like kanji etc. application of khara can be repeated till the pakwa jambu like colour is not achieved.
- **Pachatkarma**- Yashtimadhu churna along with ghrita, this mixture should be applied at the

site of Arsha. when two or more arsha present, right side arsha treat first then left side arsha.

If pratisarniya of kshara is needed for more than one time then it should be repeated after seven day gap for multiple arsha.

- Pittaj Arsha -Nakhotsedha praman for local application,
- Kaphaj Arsha -Double Nakhotsedhan
- Vataja Arsha- Triple Nakhotsedhan.

3) Agni karma -

Indication-

Arsha, which is hard in consistency, fixed base, thickened, rough surface⁶.

Chikitsa-

Pre procedure images are same as for that for kshara Karma Hot panchdhatu Shalaka has been used instead of kshara karma. Sushrut Acharya has recommended agnikarma after the excision of arsha.

4) **Sharstra karma**-In lithotomy position direction arsha should be excised, bleeding point are cauterized¹⁶.

Pathya-Apathya

Pathya-

Kulathya, Godhuma, Yava, Punarnava, Jeevant, Dhatri, Chitraka, Lashuna, Raktashali, Sashthishali, Jangalmamsa, Suran, Milk, Takra, Cow ghee, Green vegetable can be take as a pathya.

Apathya-

Vishtambhi, Sheeta, Vidagdha, Amla padartha, Taila, Sheeta mamsa, Heavy food, Vishtambhi, Viddahi dravya.

Vihar-

Sleep in day time, Straining during defecation. Sitting and Standing on hard place constantly.

***AS PER MODERN:-**

The treatment of hemorrhoid can be divided into three parts according to their degree and local condition

- 1) Medical treatment
- 2) Para surgical treatment
- 3) Surgical treatment.

1) MEDICAL TREATMENT¹⁰:-

symptomatic treatment with tropical preparation

Oral vasotopic drug, purified flavonoid fraction (natural phlebotonic), calcium dobesilate (synthetic phlebotonic) anti-inflammatory agent like baclofen sodium, steroids like hydrocortisone, anaesthetic preparation like ointment lidocaine, hot sitz bath, various laxative like liquid paraffin, milk of magnesia and lactulose solution along with bulk forming agent like isabgula, antibiotics, local antiseptic solution and ointment. These above treatment we use to treat hemorrhoids by oral and local application medicine.

2) PARASURGICAL TREATMENT^{8,11}:-

a) Sclerotherapy- This procedure is to cause Fibrosis of vascular cushion. edema, inflammatory reaction with proliferation of fibroblast and intravascular thrombosis are produced by the injection of an irritant sclerosant, this is into submucosal Fibrosis and scarring. Used in 1st and 2nd degree hemorrhoids.

b) Rubber band ligation

Ligation of hemorrhoidal tissue with a rubber band causes Ischemic necrosis, Ulceration fibrosis and Scarring which result in fixation of the connective tissue to the rectal wall. thereby reducing the prolapse use in 1st 2nd 3rd degree hemorrhoids.

c) Cryotherapy

-Cryotherapy use for cold coagulation to destroy hemorrhoidal tissue by necrosis of the vascular cushion. the instrument which is to be used for this technique is being cooled by nitrogen oxide or liquid nitrogen named as cryoprobe. necrosis occurs over 10-14 day followed by sloughing and ulcer formation.

d) Electrocoagulation- Bipolar dietary and direct current electricity cause coagulation and fibrosis after local application of heat require around 10 minute per hemorrhoid for effective treatment Day care procedure. Used in first and second degree hemorrhoids.

e) Infrared coagulation

The basic principle lies in population of the hemorrhoidal vessels with the help of infrared rays with tissue destruction, Ulceration and fibrosis Limited for a depth of 3 mm, It is a smoke free and for defeat the main use of photocoagulation is for first and second degree hemorrhoids.

f) Radiofrequency coagulation and excision.

The principle of radiosurgery involves using radio waves as 526 megahertz deliver at low temperature through radiofrequency electrode. The output current is used for both coagulation and cutting. Time selection

1/8 th of sec to 1 sec

used for 1st to 4th degree hemorrhoids

g) Doppler guided hemorrhoidal artery ligation

Popular transducer used to identify and ligate the hemorrhoidal arteries by placing a suture around them Which produced promote resolution of bleeding and protrusion, used in 1st to 4th degree hemorrhoids.

h) Rectoanal repair-This technique is to obliterate the branches of superior hemorrhoidal artery and do a mucopexy for the prolapsing mucosa in one sitting under spinal anaesthesia.

i) Stapled hemorrhoidectomy

Stapled hemorrhoidectomy is one of the Newer surgical technique for treating hemorrhoids and along with dopplertomorrow idle Artery ligation it has a rabbit become the treatment of choice for 3rd and 4th degree hemorrhoid.

3)SURGICAL TREATMRNT:-

Sugical hemorrhoidectomy^{9,12,14}:-

a)Ferguson(closed) hemorrhoidectomy

The hemorrhoidal bundles excised with any internal and external component, excision of of humour Idol bundle with mucosal wound and skin are closed completely. use in internal and external hemorrhoids.

b) Miligan morgan (open)hemorrhoidectomy

hemorrhoidal tissue and vessels involved are excised in this procedure.

suture is also placed at the hemorrhoidal pedical but incision are left open.

c)Harmonic scalpel and ligasure

Harmonic scalpel use ultrasonic wave that allow cutting and coagulation of hemorrhoidall tissue causing less discomfort and fast healing.

This method can be used either with open and closed hemorrhoidectomy.

d)Atomizer ward¹⁸

This is Innovative waveform of electric current and a specialised electric probe, which actually reduced to minute particles into a fine Mist or spray.Which can be immediately vacuumed away this results into who this integration of hemorrhoids into an aerosol of carbon and water molecules.The tissue is

sculpted into a desired shape and smoothness using the atomizer.

CONCLUSION:-

Arsha (hemorrhoid)Is a major problem in today's society related to Lifestyle ,age, occupation ,dietary factor. it affects the physical and well as mental health of people.

patient suffering from this disease do not take proper diet due to a fear of of pain with bleeding per rectum during defecation more over patient become very anxious after observing painful of blood improper diet further vitiates dosha and condition become worsen.

Thus ayurveda and modern new technology.

Definitely can play a great role in treatment of arsha and its complication without any side effect. More poover by following the principle of ayurveda one can avoid the acceerancee of this disease.

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A review on Ayurvedic and modern recent treatment modalities on hemorrhoids

Gadve B. N., Swapnil Patil

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Visha Gunas: An Ayurvedic Perspective, A Review Article**Author- Dr.Mangesh Patil**

(PG Scholar)

(Dept.Of Agad Tantra & V.V. Csmss Ayurved College,
Kanchanwadi ,Aurangabad**Co-Author- Dr.P.G.Maske**

Guide & Asso.Prof.

(Dept.Of Agad Tantra & V.V. Csmss Ayurved College ,
Kanchanwadi ,Aurangabad**Co-Author - Dr.R.S. Upadhyay**

H.O.D. & .Prof.

(Dept.Of Agad Tantra & V.V. Csmss Ayurved College ,
Kanchanwadi ,Aurangabad**Co-Author- Dr.R.P.Kulkarni**

Asst.Prof.

(Dept.Of Agad Tantra & V.V. Csmss Ayurved College ,
Kanchanwadi ,Aurangabad**Abstract-**

Agad tantra is a branch of ashtang ayurved which deals with the study of visha(poisons) and its treatment.visha is defined as a substance which causes vishannata (sadness)and is destructive to life .It is a substance that detereats well being and health of the body. it vitiates doshas after entering in to the body.it is the properties (gunas) of vishas that makes it fatal or lethal even if came in contact of lesser amount.ayurvedic ancient texts have given a detailed description of visha gunas (properties of visha) and mentioned the cause of its faster effectiveness or acute action on the body. These ayurvedic ancient texts differ about the number of gunas and their properties.

This is a article is an effort to review these visha gunas. All the gunas present in visha are very much penetrative and fatal and vitiates doshas.this is why study of visha gunas is necessary for its treatment.we need to know the visha gunas if we hahe to use it for medicinal purpose.Charaka states that a poison will be a good medicine if applied ,processed and used properly.

Key Words-Visha, Gunas, Properties, Poison**Introduction –**

Agad Tantra Deals With The Study Of Vishas

(Poisons) In Evry Aspect.It Also Deals With The Treatment Of Poison.It Is The Properties Or Visha Gunas That Makes It Fatal. It Is Quite Rightly Said That That A Poison If Used Properly ,After Scientific Processing Can Be Used As Medicine And A Medicine If Used Improperly May Produce Fatal Results. To Use Visha (Poison) For Medicinal Purposes We Need To Know Their Properties .

Aim And Objective –To Study Visha Gunas Accordin To Different Ayurvedic Texts

Materials And Methods

The whole study is based on literary review collected from classical ayurvedic texts .this study is carried out under following heads.

1. Defination Of Visha
2. Definationofguna
3. No.Ofgunas As Stated In Different Ayurvedic Texts
4. Number Of Visha Gunas Mentioned In Different Texts
5. Visha Guna Comparison According To Different Texts

6. Visha Guna And Their Probable Action
7. Visha,Madya,Oja Comparison
8. Discussion
9. Conclusion
10. References

Guna Nirukti –

Guna aamantrate –which attracts substances having diffrent properties are gunas. ayurvedic ancient textts differ as far as number of guna is concerned .according to vaisheshik darshana it is 24 according to nyay darshana also it is 24 while according tocharak samhita it is 41. these charakokt 41 gunas are further divide as 5 vaisheshik gunas ,20 gurvadi gunas, 10 paradi gunas and 6 aatma gunas. the gurvadi gunas are a pair of 10 properties that are opposite to each other e.g.guru-laghu.

The 10 visha gunas described by charaka are laghu,ruksha,aashu,vishad,vyavayi,vikasi,tikshna,su kshma,ushna,&anirdeshya rasa¹. while sushruta also mentioned 10 visha gunas which excludes anirdeshya ras and includes apaki guna as compared to charakokt gunas². Yog ratnakar also re-iterates sushrutokt 10 gunas.ashtang sangrah quotes 10 while ashtang hriday describes 11 visha gunas with different name as avyakt rasa to anirdeshya rasa of charak . Bhav prakash quotes 7 while sharangdhar

samhita tells 8 visha gunas. the 8 visha gunas ,sukshma,vyavayi,vikasi ,agneya,chhedi& jivithar³. described by sharangdhar are yogwahi,madavaha

Guna	Brihat Trayi				Laghu Trayi	
	Su.Samhita yogratanakar ⁴	Charak ⁵	Asht.Sangrah ⁶	Asht.Hriday ⁷	Shar.Samhita ⁸	Bhavprakash ⁹
Ruksh	✓	✓	✓	✓	X	X
Ushna	✓	✓	✓	✓	Aagney	Aagney
Tikshna	✓	✓	✓	✓	X	X
Sukshma	✓	✓	✓	✓	✓	✓
Aashu	✓	✓	✓	✓	X	X
Vyavayi	✓	✓	✓	✓	✓	✓
Vikasi	✓	✓	✓	✓	✓	✓
Vishad	✓	✓	✓	✓	X	X
Laghu	✓	✓	✓	✓	X	X
Apaki	✓	X	X	Visham Paki	X	X
Anirdeshya Rasa	X	✓	Avyaktarasa	Avyaktarasa	X	X
Chhedi	X	X	X	X	✓	✓
Madavaha	X	X	X	X	✓	✓
Jivitahar	X	X	X	X	✓	✓
Yogvahi	X	X	X	X	✓	✓
Total	10	10	10	11	8	7

vYavayi,vikasi,sukshma,&ushna (aagney) are the common visha gunas described by brihat trayi and laghu trayi. For treating poison or to use them for medication ,it is very important to know how these visha guna acts. following chart gives an idea of how all gunas acts .

Visha Gunas And Their Action-

Some other visha gunas like yogwahi described by bhavprakash & sharangdhar needs to be elaborated. the yogwahi guna carries or increases the effectiveness of other gunas beside him. Madavahi guna effects brain function s & increses tamo guna. These visha gunas are exactly opposite to oja gunas and similar to madya gunas.

Sr. No.	Guna	Su.Samhita (Kalp.Sthan 2/19)	Charak Samhita (Chi23/24)	Asht. Sangrah (Utt.4/14)	Shar.Samhita (Purva Khandha 4/12)
1	Ruksh	Vaat Prakopa	Vaat Prakopa	Vaat Prakopa	-
2	Ushna	Rakta,Pitta Prakopa	Pitta Prakopa	Pitta Prakopa	-
3	Tikshna	Sarva Dosha Prakop,Matimoha Utpatti	Marmaghna	Rakta,Pitta Prakopa	-
4	Sukshma	Sharer Avayay Pravesch	Asruka Prakopa		Dehasya Sukshma Chhidra Pravesch
5	Aashu	Sheeghra Mrityu	Deha Vyapti	Aashu Deha Vyapti	-
6	Vyavayi	Prakritim Bhajet	Deha Vyapti		Purva Vyapyakhil Kaya Tatra Pakam Gachhati
7	Vikasi			Marm Chhedan	Sandhibandh Shithilkar
8	Vishad		Gati Dosha		-
9	Laghu	Dushchikitsya	Durupkram	Durnirharan	-
10	Apaki	Durhara,Pran Ghatak		Avashya Mrityukarak	-
11	Anirdeshya Rasa	-	Kapha Prakopa	Rasashch Sarvanuvartate	-

A Comparitive Chart Of Madya, Visha ,Oja ,Ghrita Gunas

Ojas ¹⁰	Ghrita ¹¹	Madya ¹²	Visha ¹³
Guru	laghu	Laghu	Laghu
Sheeta	Sheeta	<i>Ushna</i>	<i>Ushna</i>
Mrudu	Mrudu	Teekshna	Teekshna
Shlakshna	Shlakshna	Sukshma	Sukshma
Bahala	yogvahi	<i>Vishada</i>	<i>Vishada</i>
Madhura	Madhura	Amla	Anirdeshyarasa
Sthira	Soumya	Vyavayi	Vyavayi
Prasanna	Prasanna	Aashu	Aashu
Picchila	Alpa abhishyandi	Vikasi	Vikasi
Snigdha	Snigdha	Ruksha	Ruksha

Discussion-

Agad tantra is a branch of ayurved which deals with study of poisons and their treatment, visha is defined as a substance which produce vishannata sadness and is destructive to life .It is the visha gunas that make it fatal even if consumed in less amount.visha gunas are elaborated in different texts .In all these ayurvedic texts visha gunas differ in number and properties.we have seen that though all ayurvedic texts differ in properties they quote 4 properties in common i.e.vyavayi,vikasi,sukshma and ushna (aagneya)a comparison of visha gunas stated by different ayurvedic texts is carried out .Their mode of action according to different acharyas is also mentioned .All the gunas (properties) mentioned in visha are fastlyand acutely penetrative and fatalas they vitiates all doshas.

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Conclusion-

Properties of a substance decide how is it going t affect on the body. Agad tantra deals with the study of vishas (poisons) in evry aspect.It also deals with the treatment of poison.It is the properties or visha gunas that makes it fatal .It is very important to study visha gunas to treat them or if they have to be used as medicines.The properties of vishas and their action on the body is literarily studied here

Effect Of Ayurvedic Sanskar On Child's Development In This Modern Lifestyle**Vd. Vaibhav Jagannathrao Joshi¹ and Vd. Lalita Patole²**¹PG Scholar Dept. of kaumarbhriyac.s.m.s.s. Ayurvediccollege Aurangabad²Guide, Asso. Professor Dept. of Kaumarbhriyac.s.m.s.s. Ayurvediccollege Aurangabad**Abstract**

Sanskar are important ceremony of child's life. Sanskar mark different stages of child's life. Every child should follow ayurvedic Sanskar for acquiring new skills and good habits.

"SANSKARO HI GUNANTARADHANAM"

It means by following Sanskar child can improve his good qualities. In this modern life style everyone is running behind western culture which is harmful for their health and future. Sanskar gives us purification of soul. Sanskar also provides immunity against diseases. Sanskar helps child in proper growth and development.

Key words – Sanskar, Gunantaradhanam

Introduction

Childrans are future of Nation. If child is physically and mentally sound then his Growth and development will be proper. Every parent expects that their child should be healthy, intelligent and beautiful but they are not awake of taking special care while child is growing up. Ayurvedic Sanskar helps in child's health and purify his mind. Sanskar teaches child importance of sacrifice.

We can not change child's character and nature totally but by following Ayurvedic Sanskar growing child acquires new skills.

Sanskar provide required mental support during process of maturity. Sanskar also provides immunity against diseases due to modern life style.

Material and Methods :-

Literary material is collected from classical 'Ayurvedic Grantha', different text books of pediatrics.

Numbers of Sanskar :-

Numbers of Sanskar varies within different Granthas. It is about 16-40. But at present 16 Sanskar are in practice. These Sanskar are useful for normal Growth and development of child.

Classification of Sanskar :-

- 1) Garbhavastha
- 2) Balyavastha
- 3) Kumaravastha and Praudhavastha

1) GARBHAVASTHA

These sanskar are performed during prenatal period-

- a) Garbhadhan Sanskar
- b) Punsavana Sanskar
- c) Simantonayan Sanskar

a) Garbhadhansanskar :-

This Sanskar is performed on parents. The Aim of this Sanskar is to obtain a better progeny. Parents should purify their body by taking shodhana procedures. In this Modern day-to-day life style parents eat junk food, their schedule is hectic which is not good for quality progeny. 25 years old male and 16 years old female with good health and complete viryatva should follow this sanskar¹. Acharyacharak & Kashyap described method of 'Putresti Yagna'².

Significance in modern Life style :-

'Shodhana Karm' helps in purifying woman's reproductive system and improving quality of sperm for better progeny.

a) Punsavan Sanskar :-

This sanskar is done to achieve healthy progeny. This sanskar is done in or before 'vyakt bhav'³ i.e. in second month of pregnancy. According to charakadhanyamasha & gaurasarshapa should be taken with curd during pusya-nakshtra⁴.

According to sushrutajivaka, rishabhak, apamarga & sahachara paste should be taken with milk⁵.

Significance in modern life :-

This sanskar will develop excellent qualities in child.

b) SimantonayanSanskar :-

This sanskar is related to brain development in fetus which takes place in 5th or 6th month of pregnancy. Aacharya's have advised lifestyle for pregnant lady. If she follows those instructions fetal development will be normal with good health, strength, voice⁶ otherwise there might be some abnormalities in newborn.

2) BALYAVASTHA

a) JatkarmaSanskar :-

According to charakjatkarmasanskar should be performed after cutting umbilical cord. Firstly neonate should be given feeding of 'honey &ghrita' (ghee), then milk from right breast should be given⁷. Sushrutaacharya says to give honey &ghrita mixed with ananta powder three times on first day. Ghrita with lakshmana on second & third day. Honey on fourth day after that breast feeding should be started⁸.

Significance in modern life :-

- The rooting & sucking reflex is evaluated by giving honey & ghee.
- Honey &ghrita are rich in carbohydrates & destiny so they will give energy to baby.
- It promotes breast secretions and helps mother in reducing post partum hemorrhage.
- We can examine baby in this sanskar for any anomalies like cleft lip- cleft palate , fissured tongue, undescendedtesties.
- First feed initiates movements of gastro intestinal tract.
- Ghrit increases smriti, medha, kanti, oja.
- Suvarnaprashan increases intellectual, digestive power and it is grahapahum⁹.

a) Namkaran Sanskar :-

According to charak this sanskar should be done on 10th day of life life.

According to charakaacharyanamkaran is of two types –

1. Nakshatrik
2. Abhiprayik

Name should consist of two or four letters¹⁰. It should start with 'Ghoshwant' alphabets and end with 'Ushmawant'.

Aacharyasushrut and vagbhat also says that this ceremony should be on 10th day¹¹.

Ashtangsanghrah says it can be done on 10th day, 12th day, or 100th day or 1 year later¹².

Significance :-

It provides unique identity, name has impact on person for whole of his life.

b) NishkramanSanskar :-

In this sanskar infant is taken out of the house for first time in fourth month¹³.

Significance :-

Reaction of baby to various stimulli can be observed.

Morning exposure to sunlight increases vitamin D synsythesis.

c) Upaveshansanskar :-

According to kashyapa it should be done on sixth month. In this sanskar baby is not allowed to sit for longer period of time as he may develop kyphosis, lumbar region weakness, constipation, urine retention¹⁴.

Vagbhata said baby should be placed on ground in 5th month.

Sushrut also says baby should gradually increase time of sitting.

Significance :-

It is useful for evaluating child's physical, neurological growth.

d) Annaprashan / Phalprashansanskar :-

- According to kashyapphalprashan (fruit juices) should be started at 6th month &annaprashan should be started in 10th month¹⁵.
- According to sushrut light & health food should be given to child at six months.
- According to vagbhat on 6th month solid food should be gradually given to child and breast feeding should be stopped¹⁶.

Significance-

- Fruit juices contains Vitamin C which is absent in mothers milk.
- As child is growing his appetite also increases which is not fulfilled by breast milk, so fruit juices should be given.
- It provides essential nutrients such as iron.
- Different types of tastes are introduced to child.
- Digestive system attains maturity.
- Juices acts as laxative.

e) Karnavedhansanskar :-

According to sushrut this sanskar is done in 6th or 7thmonth¹⁷.

Sthan- Daivkrut hole

Karnavedhan post care- Aaam tail parishek

During karnvedhan following 3 sira should not be pricked-

- Kalika
- Marmarika
- Lohitika

Significance-

- Rakshakarm (protection)
- Aabhushan (wearing ornaments)

It also provides artificial active immunity

f) Chudakarmsanskar

This sanskar is explained by aacharyakashyap in sutrasthan 21. In this sanskar hairs of child's scalp are treated.

Age – 1 to 3 years

Significance-

This sanskar will help in examining child's anterior fontanel which closes approximately at the age of 2 years.

For examining any structural abnormality of head.

3) Kaumaravstha & Praudhavastha**Upanayan sanskar :-**

After this sanskarchid enters into Aadhyatmikjivan.

Age- 7 to 8 years

Vedarambh Sanskar :-

In this sanskar writing and reading skills of child are improved.

Age- 5 years

Samavartan Sanskar :-

After completing education send off is given.

Vivah Sanskar :-

In this sanskar marriage is done.

This is important ceremony of life.

Vanprasth Sanskar :-

After achieving goals of life when persons son become educated and having job, that person should give whole responsibility to his son and he should do 'aadhyatmchnitan' and 'samajkalyan'.

Sanyas :-

After particular age of life one should sacrifice all 'moh-maya' and he should try for 'Moksh-prapti'.

Anyeshthi Sanskar :-

In this sanskar After death body is converted into 'Panch-tatva'.

Conclusion :-

Sanskar are useful for child not only in modern day to day life but also intra uterine life. Because of sanskars child develops proper habits

,he also learns to sacrifice things in life.it gives him a unique identity and educate child.

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Vishada (Depression) in Ayurveda: A Literary Review

Jabeen G. Shaikh¹, Shrikant G. Deshmukh^{2*}

¹Dept. Kayachikitsa. C.S.M.S.S Ayurveda Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra, India.

*Corresponding Author: Email: dr.shrikantgdeshmukh@gmail.com

Abstract: Ayurveda is the science which mentioned various principles for prevention and treatment of disease. Ayurveda has adopted holistic approach to maintain healthy and long life. Ayurveda has also recognized the role of psychosocial stress in maintenance of physical and mental health. Ayurveda explores the symbiotic relationship among the mind, body, soul, the senses and their workings. Sharira and Mana both are the places of disease formation. Now a days psychological or mental disorder are increasing as stress, anxiety, insomnia & psychological factors. In all diseases Vishada (Depression) is common among all ages. Which is a fourth leading cause of disability worldwide?

Keywords: Vishada, Depression, Mana, Mind, Body, Soul, Senses.

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Introduction

Mana is constituent of human body does not only represent the behavior of a person but also it helps to recognize a healthy state of a person. Increase incidence of Manasika Vikara or mental illness is the main concern in today's world. Manasika dosha generally vitiates the mind and causes different psychological conditions.

In Bhagvat Gita lord Krishna says that, our Aatma is our real friend but positive thinking and control over mind is very important otherwise it becomes our enemy and at that time mental disorders occur [1].

Manasa is made up of three qualities i.e. Satva, Rajasa, and Tamasa. In which Rajasa and Tamasa are the Manasa doshas [2]. Acharya Sushruta explained the various Manasa rogas like Krodha, Shoka, Bhaya, Harsha, Vishada, Irshya, Asuya, Dainya, Matsarya, Kam, Lobha, Iccha, Dvesha and Bheda [3]. Vishada is also one of the Manasa Vikara in which Rajasa and Tamasa doshas are increases.

In modern science, Vishada can be correlated with Depression. Depression is extremely common, with a prevalence of approximately 5 % in the general population. Depression is

at least twice as common in the medically ill [4]. According to W.H.O. has ranked fourth leading cause of disability worldwide and projects that by '2020' it will be the second leading cause [5].

It is subdivided into mild, moderate and severe with the degree of severity. Depression may occur in reaction to some identifiable stressor / adverse life situation. It may be the final expression of [6].

- Genetic factors (neurotransmitter dysfunction)
- Developmental problems (personality problems, childhood events)
- Psychological stresses (Divorce, unemployment, loss of person by death, financial reversal etc.)

Aim

To study the concept of Depression according to Ayurveda.

Objectives

- To review concepts of Depression according to Ayurveda.
- To review Nidanapanchaka and Chikitsa of Vishada.

Literary Review

Vishada is one of the Vata nanatmaja Vikaras [7] and it is further said that

Vishada is the factor that increases the range of all the disease [8]. Acharya Sushruta has mentioned it under the Manovikaras.

Table 1: Symptoms of depression [4]

A) Psychological symptoms :	Depressed mood, reduced self-esteem, pessimism, guilt, loss of interest, loss of enjoyment (Anhedonia)
B) Emotional symptoms :	Hopelessness, unhappy, sadness, less social conversation, anxiety.
C) Cognitive symptoms :	Negative thoughts, guilt, confusion, low intellectual ability.
D) Motivational symptoms :	Less drive, suicidal thoughts, less initiative.
E) Behavioral symptoms :	Slow movements, less productive monotones, avoiding eye contact.
F) Somatic symptoms :	Reduced appetite, weight change, pain at various places, loss of libido, disturbed sleep, fatigue, bowel disturbance, motor retardation (slowing of activity).

Further he mentioned that Vishada is common among the Tamasika Manasa Prakruti [9]. Whereas Vagbhatta has stated that person with predominant Tamasa guna are more prone to suffer from Vishada commenting on Anumanagamy bhavas in Charaka Samhita says ; ‘Bhayam Vishaden’ i.e. understanding the feeling of fear in a person seeing his depressed state or behavior [10].

The symptoms of Vishada which are found in various references when compared to Depression appear similar, so Vishada can be correlated with Depression i.e. state of emotion (Manasika bhava) as well as a disease (Manasika Vyadhi). In Ayurveda there are various references among the Vishada which can be correlated to Depression.

Table 2: Reference of Samhitas and explanation

S. No	References in Samhitas	Explanation
1	Charaka Samhita	a) Mentioned as 80 Vata nanatmaja Vikara [7] b) Lakshana of Vataj jwara [11] c) In Agreya Sangraha : ‘ Vishado-Rogavardhananam [8]’ d) Lakshana of Hina Satva Vyakti [12].
2	Sushruta Samhita	a) Described as Manasa Roga [3] b) Lakshana of Tamasa Prakruti [9]. c) Development through the anger of Lord Brahma [13].
3	Ashtang hrudaya	a) Lakshana of Vataj jwara [14]. b) Vishada explained as one of the Garbha bhava which is developed due to Tamasa guna [15].
4	Ashtang Sangraha	a) Mentioned as 80 Vata nanatmaja Vikara [16]. b) Hetu of Vyana Vayu vitiation / Dushti [17].
5	Kashaypa Samhita	Mentioned as 80 Vata nanatmaja Vikara [18].

Now days we are facing a pandemic disease. So therefore all peoples goes through the lots of stress, anxiety, anger etc. about there work, future and health.

According to W.H.O. after this pandemic disease the whole world is might be going through the Mental disorders.

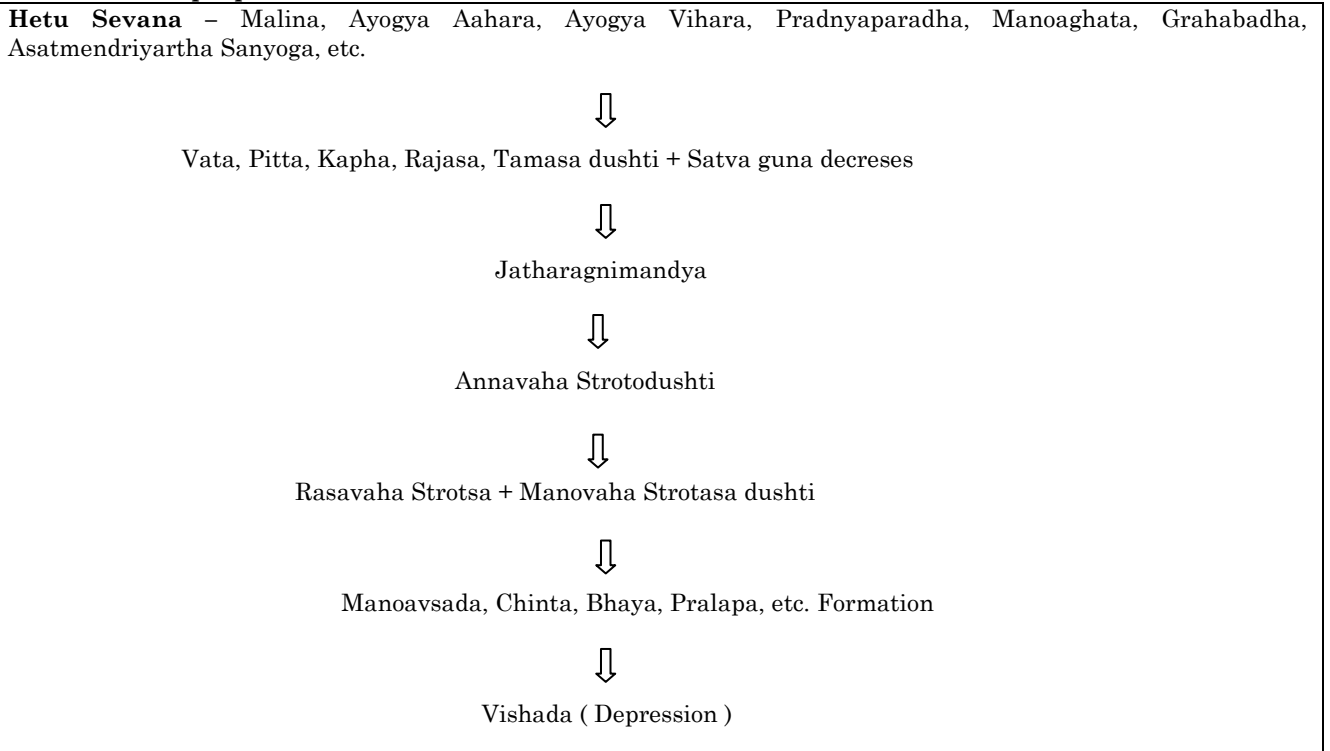
Introduction of Vishada

- **Nirukti:** Vishada means Sadness or fearful in which Rajasa and Tamasa doshas are increases.
- **Lakshanas:** Lakshanas of Vishada in ayurveda can be Kayika, Vachika and Manasika lakshanas.

Table 3: Properties of Lakshanas

1	Kayika lakshanas	Anidra, Atinidra, Aruchi, Hrutspandana, Aplacheshta, Aalasyata, etc.
2	Vachika lakshanas	Irrelevant talk, Alpavaka, Ativaka, etc.
3	Manasika lakshanas	Atichinta, Bhaya, Dukha, Asthirata of Mana, Loss of self confidence, Arati, Smrutinasha, etc.

Table 4: A Samprapti



Chikitsa of Vishada

Vishada is not only a Manasika Vikara, it is also a Sharirika Vikara. So therefore Chikitsa of Mana and Sharira both are important. It is one of the Vata vyadhi so Vatagna Chikitsa, use of Madhura- Amla

rasa, Snigdha dravyas can be used. Acharya Charaka explained Manasa roga Chikitsa under the three types which are [19].

- Daivavyapashraya (Divine therapy)
- Yuktivyapashraya (Rational therapy)
- Satvavajaya (Psycho therapy)

Table 5: Chikitsa of Vishada

Daivavyapashraya Chikitsa	Yuktivyapashraya Chikitsa	Satvavajaya Chikitsa
a) Mantra Uccharana b) Aushadha Sevana c) Mani Dharana d) Mangala Vachana e) Bali f) Homahavana g) Yagyapujana h) Devatarchana i) Upavasa j) Pranipata (Devatadinam Namaskara)	It includes ; Shodhana & Shamana Chikitsa a) Shodhana Chikitsa : Vamana, Virechana, Nasya, Basti, Raktamokshana. b) Shamana Chikitsa: It is a type of ‘Vyadhiviparita Chikitsa’. <ul style="list-style-type: none"> • Abhyanga – Shirobhyanga, Sarvang abhyanga. • Shirodhara – Jatamansi, Brahmi, Yashtimadhu etc. siddha taila. • Ghrita – Brahmi ghrita, Saraswata ghrita, Kalyanaka ghrita, 	‘Satvavajaya’ comprises two words ‘Satva’ and ‘Avajaya’ where, Satva refers to intellect, consciousness or mind, while Avajaya is control over it. a) Manonigraha – Avoid Krodhadi bhavas. b) Santawana – Speak with good & Kind words. c) Ashwasana Chikitsa – Manobodhana / Hitopdesha. d) Chittaprasadana/ Praharshana e) Practice of Ashtang Yoga.

<p>k) Prayah:schitta</p> <p>l) Tirthagamana</p>	<p>Panchgavya ghrita, Purana ghrita, Ashtang ghrita, Kushmand ghrita, Chaitsa ghrita, etc.</p> <ul style="list-style-type: none"> • Aarishta – Saraswatarishta, Ashwagandharishta. • Kwatha – Arkadi kwatha, Mansyadi kwatha. • Ekala dravya – Jatamansi, Brahmi, Yashtimadhu, Vacha, Mandukparni, Parasika yavani, Jotishmati, Shankhpushpi, Guduchi, Kushmand, etc. • Rasakalpa / Vati – Vasantkusumakara rasa, Anandabhairava rasa, Makardhvaja rasa, Smritisagara rasa, Amar sundari vati, etc. 	<p>f) Meditation</p> <p>g) Aatmavigyana – Feeling & appreciation of self knowledge.</p> <p>h) Manovyayama – like Chintana, Manana, Uhapoha, etc.</p>
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Conclusion

In presence era, Sharirika as well as Manasika Vyadhis are also important. In ayurveda Vishada is explained which can be correlated with Depression. In Ayurveda there are various references among Vishada. Mana is having Chala gunatva so control over mana is very important in Vishada.

Which can be done through the Satvavajaya Chikitsa? Acharya Charaka explained Trividha aushadhi chikitsa as includes Daivavyapashrya, Yuktivyapashrya & Satvavajaya are important for Chikitsa. Health is one the most important for every person likewise Mental health is also important now a days.

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A review study of analgesia and anesthesia in obstetrics and gynecology

Manisha B. Dhote*¹, S.M. Yennawar², J.S. Deshmukh³

1. P.G. Scholar,
2. Guide And Associate Professor,
3. HOD and Professor,

Department of Streeroga and Prasutitantra,
 C.S.M.S.S. Ayurved Mahavidyalaya, Kanchanwadi, Aurangabad, Maharashtra

*Corresponding author: Email- manishapatil705@gmail.com

Abstract-

Analgesia and Anaesthesia have very importance in operative field and they both have some different meanings. Analgesia means the inability to sense pain without loss of consciousness. While Anaesthesia is a state of controlled, temporary loss of sensation or awareness that is induced for medical purposes. It may include Analgesia (relief from or prevention of pain), paralysis (muscle relaxation), amnesia (loss of memory) or unconsciousness. Thus according to the definition of Anaesthesia, Analgesia is the term which itself included in Anaesthesia. Relief of pain during labour and delivery is an essential part in Obstetrics and Gynaecology. Choice of Anaesthesia depends upon the patient's

condition and the associate disorders. Anaesthetic complications may cause maternal death also. So the knowledge of Analgesia and Anaesthesia is very necessary in Obstetrical and Gynaecological field.

Keywords: Gynaecological, Analgesia, Anaesthesia, Obstetrics

Introduction-

The beginning of the history of Anaesthesia were largely attributed to the pain management. Various procedures for pain relief and experimentations with different medicines are described in Ayurveda.

There are various processes and solutions for pain relief everywhere in the world. Scholars from all over the world have acknowledged that Acharya

Sushruta is the father of Surgery and during his period Surgery was well developed and advanced. The knowledge of Anaesthesia is of special importance in the development of Surgery and without this it is impossible to perform any type of Surgery.

From this, it is clear that the precise knowledge of the process of Anaesthesia must be known at that time. But unfortunately such references are not available today. So people have a false belief that Anaesthesia was not mentioned in Ayurveda and which is not true.

According to Acharya Sushruta¹-
 प्राक्शस्त्रकर्मणश्चेष्टं भोजयेदातुरं भिषक्। मद्यं
 पाययेन्मध्यं तीक्ष्णं यो वेदना सहः ॥
 (सु.सू.17/16)

i.e. Sushruta described the Tikshna Sura in the process of Anaesthesia. Also he described various processes and fluids for pain relief like use of 'Vidha chikitsa', Aphu, Bhang etc.

In the time of Sushruta, patient was proven for Anaesthesia through the preoperative process. There is a reference available in Bhojaprabhandha of performing Surgery when the patient is in an unconscious state. During the Surgery on Raja Bhoja he was seduced by using hypnosis.

In this way, the reference of Anaesthesia related to Obstetrics and

Gynecology was taken from Charak Samhita also²-

व्यपगतगर्भशल्यां तु स्त्रियमामगर्भा
 सुरासीध्वारिष्टमधुमदिरा- सवानामन्यतमग्रे
 सामर्थ्यतः पायमेदः ----- प्रहर्षणार्थं च ॥
 (च.शा.८/३१)

Thus Acharya Charak prescribed 'Madira Sevan' for relief of labour pain and for extraction of Mudhagarbha. Thus from these examples it is proved that Ayurveda is the origin of Analgesia and Anaesthesia. But in this article Analgesia and Anaesthesia and Analgesics and Anaesthetic agents are studied according to modern science and its importance in Obstetrics and Gynecology.

Aim-

To study the review of Analgesia and Anaesthesia in Obstetrics and Gynecology

Materials and Method-

Data related with Analgesia and Anaesthesia was collected from modern texts, Journals, Articles and Internet sources and classified according to their types.

❖ SEDATIVES AND ANALGESICS³-

In labour and delivery:

-The pain during labour results from a combination of uterine contractions and cervical dilatation.

-The intensity of labour pain depends on the intensity and duration of uterine contractions, degree of dilatation of cervix, distension of perineal tissue, parity and the pain threshold of the subject.

-The most distressing time during the whole labour is just prior to full dilatation of cervix.

-For the purpose of selecting a general analgesic drug, labour has been divided arbitrarily into two phases. The first phase is controlled by sedatives and analgesics and the second phase is controlled by inhalation agents.

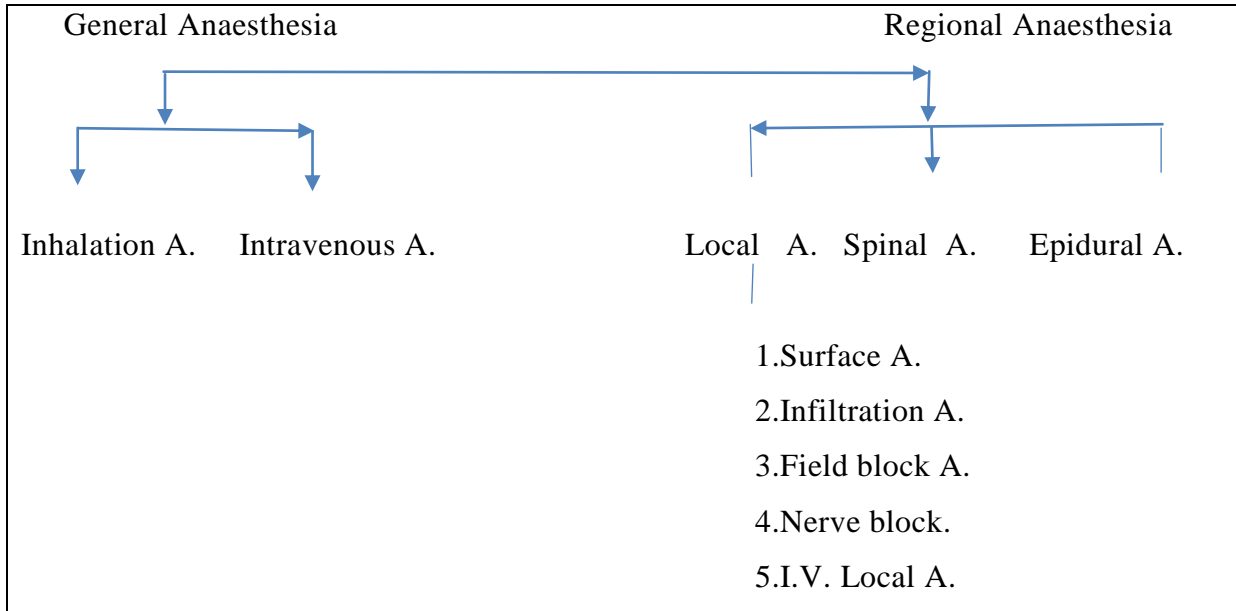
▪ **Commonly used sedatives and analgesics-**

In 1st phase of labour

DRUGS	USES
Pethidine	- Generally used in the first phase of labour and indicated when the discomfort of labour merges into regular, frequent, and painful contractions. -Initial dose 100mg(1.5mg/kg body wt) IM
Fentanyl	-Short acting synthetic opioid and is equipotent to Pethidine. -It has less neonatal effects and less maternal nausea and vomiting and needs frequent dosing.
Phenothiazines	-Commonly used in labour in combination with an opioid -Weak antiemetic drug and causes sedation in the mother.
Narcotic antagonists- Naloxone	-These are used to reverse the respiratory depression induced of opioid narcotics. -Naloxone is given to the mother 0.4mg IV in labour. It may have to be repeated.
Benzodiazepines (Diazepam)	-It is well tolerated by the patient. It does not produce vomiting and helps in the dilatation of cervix. -The usual dose is 5-10mg. -It may be used in larger doses in the management of pre-eclampsia. However, Diazepam is avoided in labour. - Flumazenil: Specific benzodiazepine antagonist. It can reverse the respiratory depression effect of benzodiazepines.

In 2nd phase of labour

- Inhalation methods- premixed nitrous oxide and oxygen
- Used from 8cm dilatation of cervix to delivery
- Self administered



-Entonox is most commonly used inhalation agent during labour in the UK.

❖ ANAESTHESIA AND ITS TYPES^{4,5}-

A] GENERAL ANAESTHESIA⁶-

It means abolition of all sensations, i.e. touch, pain, posture, and temp with a state of reversible loss of consciousness.

It has got three components:

- 1. Analgesia

- 2. Hypnosis

- 3. Muscle relaxation

- Muscle relaxants⁷-

- 1. Depolarising muscle relaxants
- 2. Non-depolarising muscle relaxants

Depolarising muscle relaxants-

(Succinyl choline): It is the only depolarising muscle relaxant in clinical use. Commonly used immediately after the induction drug to facilitate intubation. It is a short acting muscle relaxant with rapid onset of action.

- General anaesthetic agents and its effects⁸-

INHALATION AGENTS		INTRAVENOUS AGENTS	
Drugs	Effects	Drugs	Effects
1) Halothane	Decreases uterine muscle tone	1) Thiopentone Sodium	-Ultra short acting barbiturate. -It is a standard induction agent - There is little effect on resting uterine tone

			-It crosses placenta rapidly, although foetal blood concentration is far less than that observed in the mother.
2) Isoflurane	Decreases uterine muscle tone but less than Halothane	2) Propofol	Widely used induction agent which has got predictable onset and recovery
3) Sevoflurane	Decreases uterine muscle tone like Isoflurane	3) Ketamine Hydrochloride	It readily crosses the placental barrier and hence should be given in lower doses in pregnant patient
4)) Nitrous oxide	Used to provide Labour Analgesia	4) Fentanyl ⁹	-It is neuroleptanalgesic. -Preferred in asthmatics

B] REGIONAL ANAESTHESIA-

▪ Commonly used anaesthetic agents¹⁰-

Drugs	Uses
Lignocaine	-Used for local/Pudendal block and also for epidural or spinal Anaesthesia for cesarean delivery
Bupivacaine	-Used for Epidural or Spinal for cesarean delivery
Ropivacaine ¹¹	-Available as 0.2% for providing post operative Analgesia, labour Analgesia and as 0.75% for spinal and epidural Anaesthesia and nerve blocks.

▪ Types of regional Anaesthesia and its uses¹²:

1. Continuous lumbar epidural block

-When complete relief of pain is needed throughout labour, epidural Analgesia is

the safest and simplest method for procuring it.

-It should be given when labour is well established.

-For complete Analgesia a block from T10 to S5 dermatomes needed. For cesarean delivery a block from T4 to S1 is needed . Repeated doses of 4 to 5ml of 0.5% bupivacaine or 1% lignocaine are used to maintain Analgesia.

-It is beneficial in cases like PIH, breech presentation, twin pregnancy, and preterm labour.

-Previous cesarean section is not a contraindication. Epidural Analgesia when used there is no change in duration of 1st stage of labour, but 2nd stage of labour appears to be prolonged. This might lead to frequent need of instrumental delivery like forceps or ventouse.

-Vitals should be monitored

-The woman is kept in semilateral position to avoid aortocaval compression.

2. Paracervical nerve block

-It is useful for pain relief during the 1st stage of labour

-5 to 10ml of 1% lignocaine with adrenaline is used. Bupivacaine is avoided due to its cardiotoxicity

-Paracervical block should not be used where placental insufficiency is present

6. Infiltration Analgesia

-It can only relieve the pain of uterine contraction

3. Pudendal nerve block

-It is a safe and simple method of Analgesia during delivery

-Pudendal nerve block does not relieve the pain of labour but affords perineal Analgesia and relaxation

-It is mostly used for forceps and vaginal breech delivery

-It is less danger, both for mother and for the baby than G.A.

4. Spinal Anaesthesia

-It is obtained by inj. of local anaesthetic agent into the subarachnoid space

-S.A. can be employed to alleviate the pain of delivery and during the 3rd stage of labour

-Also used for normal delivery/ for outlet forceps with episiotomy, ventouse delivery and for cesarean delivery.

-Addition of Fentanyl (to enhance the onset of block) or Morphine(to improve pain control) may be done

5. Combined spinal-epidural Analgesia

-A single bolus of 1ml 0.25% bupivacaine with 2.5ug Fentanyl is injected into the subarachnoid space

-The method gives rapid and effective Analgesia during labour and cesarean delivery

Perineal infiltration		Local abdominal for cesarean delivery
-For episiotomy	-For outlet forceps or ventouse (Perineal and labial infiltration)	-This method is rarely used where regional block is patchy or inadequate.
-It is extensively used prior to episiotomy. -A 10ml syringe, with a fine needle and about 8-10ml 1% lignocaine hydrochloride (Xylocaine) are required.	-The combined perineal and labial infiltration is effective in outlet forceps operation or ventouse traction. -A 20ml syringe, a long fine needle and about 20ml of 1% lignocaine hydrochloride are required.	-The skin is infiltrated along the line of incision with diluted solution of lignocaine 2% with normal saline. The subcutaneous fatty layer, muscle, rectus sheath layers are infiltrated as the layers are seen during operation. The operation should be done slowly for the drug to become effective.

Discussion-

In modern science, for the management of every disease, different types of treatment modalities are mentioned and researches are going on for development of different types of medicines also. For the treatment of every disease, conservative and surgical management is necessary. And from this two types of management, Analgesia, Anaesthesia and anaesthetic drugs become very important tool in surgical management of any disease.

Whole discussion is about Analgesia, Anaesthesia and its type, Anaesthetic agents in Obstetrics and Gynecology.

Conclusion-

The Obstetrician-Gynecologist is often solely responsible for Analgesia/Anaesthesia including general and regional blocks during IPD-based and outpatient procedures. This article shows how Analgesia and Anaesthesia plays an important role in the field of Obstetrics and Gynaecology.

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Manisha B. Dhote, S.M. Yennawar, J.S. Deshmukh

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CONCEPT OF AGNI AND ITS CLINICAL IMPORTANCE

Rahul Panditrao Surnar^{*1}, Avinash Deshmukh² and Deepali Amle³¹P.G. Scholar ²Associate Professor, ³HOD of Rog Nidan Department.
C.S.M.S.S. Ayurved Mahavidyalaya, Aurangabad, Maharashtra, India.***Corresponding Author: Dr. Rahul Panditrao Surnar**

P.G. Scholar C.S.M.S.S. Ayurved Mahavidyalaya, Aurangabad, Maharashtra, India.

Email Id: rsurnar@yahoo.co.in.

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ABSTRACT

Ayurveda is the ancient Indian system of life sciences and Medicine, its historicity going back to the Vedas. Ayurveda has described an important factor of digestion and metabolism in our body as Agni. Agni is responsible for strength, health, longevity; vital breath and it determines the quantity of food to be consumed. Ingested food is to be digested, absorbed and assimilated, which is unavoidable for the maintenance of life, and is performed by Agni in Ayurveda. The term "Agni" is used in the sense of digestion of food and metabolic products. According to the functions and sites of action, Agni has been divided into 13 types, i.e. 1 Jatharagni, 5 Bhutagni and 7 Dhatvagni. About the importance of Agni, Acharya Charak has mentioned that after stoppage of the function of Agni, the individual dies, and when the Agni of an individual is sama, then that person would be absolutely healthy and would lead a long, happy, healthy life. But, if the Agni of a person is vitiated, the whole metabolism in his body would be disturbed, resulting in ill health and disease. Hence, Agni is said to be the base (mool) of life.

KEYWORDS: Agni, bhutagni, dhatvagni, jatharagni, digestion, absorption.

1. INTRODUCTION

AYURVEDA has considered AGNI a very important entity for the maintenance of good health. Ayurveda says that if AGNI is not in its normal state than it will result in the formation of a disease. The entire basic physics and biology of Ayurveda are greatly different from the modern basic sciences and the understanding of the structure and function of human body, the pathology and diagnostics are based on its own theories of Triguna (Sattva- Raja-Tama), Tanmatra, Panchamahabhuta, Tridosha (Vata- Pitta-Kapha) and AGNI. In Ayurveda, the term "Agni" is used in the sense of digestion of food and metabolic products. Agni converts food in the form of energy, which is responsible for all the vital functions of our body. This agni is not in the form of flame as the terrestrial fire but is in the form of liquid which is called as 'Pitta' in Ayurveda. 'There is no agni apart from pitta and pitta itself is agni' asserts Charaka.^[1] Consumption of food may be various forms i.e. eatables, beverages, linctus (licked) and masticable foods, which is wholesome if consumed in suitable quantity and free from contamination. These substances undergo metabolic transformation by the effect of Jatharagni, Bhutagni and Dhatvagni. Initially Jatharagni gives stimulation to Bhutagni because consumed food is Panchabhautika, it has to undergo transformation by the respective Bhutagni's then only it becomes easy for tissue metabolism by Dhatvagnis. Then processed

metabolic products circulate inside the srotas continuously by the help of Vata dosha. This favours the development, strength, complexion and happiness as well as growth of tissues. Dhatus remain in their normalcy after receiving respective nutrients from metabolized food substances. Jatharagni is the main principal substance responsible for disease and health. During its normalcy it is responsible for longevity, complexion, strength, health, enthusiasm, well built, luster, immunity (ojas), temperature, other Agni's (bhutagni and dhatvagni) and other vital functions all are dependent on jatharagni. Therefore healthy state of body and diseased condition is entirely dependent on status of agni.^[2]

2. MATERIAL AND METHODS

2.1 Kosthagni Vyapara (functions of digestive fire)

The food ingested, is acted upon by the normal Kosthagni vis a vis pachaka pitta and cooked properly to produce two substances, the Sarabhaga or the Ahara rasa (the essence of food) and Kitta bhaga (the waste products of food). The sarabhaga or ahara rasa undergoes further changes being acted upon by the bhutagnis and gets converted into Rasadhatu- the first dhatu (first tissue) of the body. The activities of kosthagni and bhutagnis together form the Ahara paka or digestion of food. The rasadhatu contains the nutrient materials derived from the food and required by the dhatus (tissues), This rasa

dhatu circulates all over the body supplying the nutrients to all the other dhatus, which utilize this material for their growth (metabolism).^[3]

2.2 Importance of Agni

Bala (strength), varna (colour), swasthya (health), utsaha (enthusiasm), upacaya (development of the body), prabha (complexion), ojas (strength), tejas (valour), vaya (age), and even ayu (life) - all depend on Agni and its function (fire-like activity). So long as agni is normal, man can have a healthy and long life, loss of Agni leads to loss of life.^[4] Foods containing the nutrient materials of the dhatus can be of help to the dhatus, only after they are cooked (digested) well by the Agni.

2.3 Concept of PITTA & AGNI in Ayurveda

It is a question of debate to say pitta and agni are one and the same. Is there any separate agni other than pitta? Or pitta itself is agni? For this Sushruta said no separate agni is found other than pitta. It is due to the properties of hotness in pitta leading to burning cooking and such similar functions performed by pitta are considered as Agni itself & it is called antaragni. During diminished state, use of similar properties of drugs advised & during increased state resorting to cold treatments have been advocated, no mention of Agni found in the texts.^[5]

Large food molecules are broken down to smaller molecules both mechanically & chemically by the action of pitta. Further pitta helps for the process of transporting these smaller molecules across the intestinal wall which facilitates absorption & lastly undigested portions of food and waste products are removed from the body.

2.4 Types of Agnis

Agni is innumerable because of its presence in each and every dhatu paramanu (cell) of the body. But, enumeration of the number of Agnis varies in various classical Ayurvedic texts, as shown below Charaka has mentioned about 13 Agnis. Jatharagni -1, Bhutagni -5, Dhatvagni -7.^[6]

According to Sushruta, five types of Agnis are illustrated, viz. Pachakagni, Ranjakagni, Alochakagni, Sadhakagni and Bhrajakagni.^[7] However, there is an indirect reference of Five Bhutagnis underlying in the brief description made to the transformation of food stuff.^[8]

Vagbhata has described different types of Agni, viz. - Aaudaryagni-1, Bhutagnis-5,^[9] Dhatvagnis -7, Dhoshagni -3 and Malagni-3.^[10] Pitta -5.

Sharangadhara has recognized five pittas only (Pachak, Bhrajak, Ranjak, Alochaka and Sadhak).^[11]

Bhavamishra has followed Acharya Charaka and Vagbhata.^[12]

Agni has been divided into 13 types according to the function and site of action.

These are

1. Jatharagni - One Agni present in the stomach and duodenum.
2. Bhutagni - Five Agni from five basic elements.
3. Dhatvagni - Seven Agni present, one in each of the seven dhatus.

Accordingly, they are classified into three groups, namely Jatharagni, Bhutagni and Dhatvagni.

(a). Jatharagni

Jatharagni is the Agni or bioenergy present in the Jathara (stomach and duodenum). According to Ashtanga Hridaya, Jatharagni, the seat is grahani (duodenum), so called because it withholds the food for a certain time inside the Amasaya (stomach) to facilitate digestion. In the opinion of Dhanvantari, it is the Kala known as "Pittadhara," situated at the entrance of the Pakvashaya (intestine) and acting as a bolt to the door of the pathway/channel of food. It is responsible for the duration of life, health, valour, ojas (essence of the dhatus), strength of all the bhutagni and dhatvagni. The strength of the grahani is from Agni itself, and the strength of Agni is from grahani.

When the Agni undergoes vitiation, grahani also gets vitiated and produces diseases.^[13]

Jatharagni is considered to be the most important because each and every nutrient that one ingests first comes to the Jathara and is subjected to the action of Jatharagni. Jatharagni digests the food materials that consist of the five basic elements and transforms it for utilization by the respective Dhatus paramanus (tissues). It is also responsible for separation of the food material into the essence portion (Prasad) and the waste products (kitta) in our body.^[14]

Jatharagni is directly related to Dhatvagni or bio-energy in the cells and their metabolic processes, with ultimate tissue metabolism or Dhatu-Paka process. All the Dhatvagni depend on the normal, healthy state of Jatharagni. If the Jatharagni is hyperactive (Tikshna) or hypoactive (Manda), it will cause an excessive or retarded action of the Dhatvagni. This disturbed action ultimately leads to various disorders. Jatharagni is the main important Agni that controls the function of all other 12 Agnis. All the Agnis are totally dependent on the status of Jatharagni.^[15]

Jatharagni is also classified into four categories according to its performance of digestion in the human being namely Vishmagagni, Tikshanagni, Mandagni and Samagni.^[16] According to Hareet Samhita, Samagni depends on whether the Doshas (Vata, Pitta, Kapha) are in normal stage. When the Pitta is higher than normal, the condition is known as Tikshnagni. When Vata and

Kapha are higher than normal, the condition is known as Mandagni.

(b). Bhutagni

Bhutagni is the one that is present in a basic element (Bhutas). There are five Agnis in each of the five basic elements, namely – Parthiva (earth), Apya (water), Tejas (Agni), Vayavya (vayu) and Nabhasa (akash).

Each and every cell in our body is composed of the five mahabhutas or five basic elements. Naturally, each cell (dhatu paramanu) consists of these five Bhutagni also. All the nutrients in this world that we eat also consist of the same five basic elements with their respective Agni or bioenergy. Thus, they are completely similar with respect to the five basic elements with their Bhutagni in our body cells as well in the entire outside nutrient that we ingest for the nutrition of our body. Acharya Charak has mentioned that the five Bhutagni digest their own part of the element present in the food materials. After the digestion of food by the Bhutagni, digested materials containing the elements and qualities similar to each bhutas nourish their own specific bhautika elements of the body.^[17] These Bhutagnis act after the Jatharagni present in the stomach and duodenum, acting on the food and causing their disintegration. In the modern physiological perspective, the action of Jatharagni can be equated with the digestion in the stomach and duodenum, and the action of the Bhutagni can be equated with the conversion of digested materials in the liver.

(c). Dhatvagni

All the seven Dhatus (seven element tissues of the body) contain their own Agni to metabolize the nutrient materials supplied to them through their own Srotas.

- a) Rasagni present in the Rasa Dhatu.
- b) Raktagni present in the Rakta Dhatu.
- c) Mamsagni present in the Mamsa Dhatu.
- d) Medagni present in the Meda Dhatu.
- e) Asthyagni present in the Asthi Dhatu.
- f) Majjagni present in the Majja Dhatu.
- g) Shukragni present in the Shukra Dhatu.

Each Dhatvagni or the bioenergy present in each Dhatu synthesizes and transforms the essential Rasa Dhatu required for that particular Dhatu or cell from the basic nutrients present in the Anna Rasa or essence of the diet that we consume. Each Dhatvagni has got a speciality to synthesize and transform the constituents suitable to its particular Dhatu. This action is a sort of selective action. Acharya Charaka has mentioned the fact that that the seven dhatus that are a support of the body contain their own Agni, and by their own Agni they digest and transform the materials supplied to them to make the substances alike to them for assimilation and nourishment.^[18]

2.5 Importance of Jatharagni

Functions of various agni elaborately discussed above in which jatharagni is the chief among all types of agnis

because function of bhutagni and dhatvagni depends on this. Aggravation or diminution of jatharagni results in aggravation or diminution of bhutagni and dhatvagni. Therefore by all means one has to protect jatharagni by consuming suitable wholesome dietetics and behaviour because longevity and strength depends on normal state of agni. On the contrary one, who consumes unwholesome diet due to greed, succumbs to disease caused by the vitiation of grahani.^[19]

2.5 Physiological and Pathological State of Agni.^[20-23]

(a). Samagni

First variety is not associated with dosa and it is called samagni state and it is the physiological state of agni. The Samagni digests and assimilates food properly at the proper time. This thus increases the quality of the Dhatus (supportive tissues of the body). Persons having Samagni are always hale and healthy.

(b). Vishamagni

Visamagni is the state in which improper digestion and metabolism takes place i.e. sometimes performs normal functions followed by abnormal one and manifest flatulence, abdominal pain, upward movement of vata inside the kostha, diarrhea, and heaviness in abdomen, intestinal gurgling and straining exercise for evacuation of stools. When this Agni is affected by the Vata Dosha, it creates different types of vatavyadhi.

(c). Tikshnagni

Tikshnagni means very quick/very sharp/very fast. Tikshnagni is a state of very quick digestion of food, regardless of the type of food. Acharya Shushrut states that when the power of digestion is increased from normal to above normal, food digests very quickly and produces hunger or the desire for food. When food is digested, the throat, the mouth cavity and the lips become dry with a burning sensation. This condition is known as “Bhasmak Roga” according to Ayurveda. Tiksnagni state gives rise to manifestation of vatavyadhi.

(d). Mandagni

“Mand” means slow. The meaning of the Mandagni is slow digestive power or digestive capacity. Those who are having Mandagni eat very little and are unable to digest the smallest amount of food. Dhanvantri says that Agni digests the least amount of food in the greatest amount of time and manifest heaviness in abdomen and head, cough, dyspnea, excessive salivation, vomiting and weakness of the body. Mandagni state gives rise to manifestation of kaphaja vikara.

CONCLUSION

After detailed discussion of AGNI, it can be concluded that AGNI plays a pivotal role in maintaining good health of a human being. In clinical practice AGNI PARIKSHA of the patient is very important, because on the basis of this pariksha future treatment plan can be decided. Healthy state of the body and diseased condition depends entirely on AGNI. VATA (prana, saman, apan,

udan) stimulates the digestive fire. AGNI should be protected by proper intake of food because this act as a fuel. If a person is deprived of food or takes too much food for quite some time then it results in the disturbance of AGNI and disease develops in the body. Jatharagni is important because it facilitates secretion of various chemicals, enzymes etc leading to proper digestion of food. Further Dhatwagni and bhutagni help for the digestion absorption and assimilation of food substances into the body. AYURVEDA says that disturbed function of AGNI is the root cause of all diseases.

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A Therapeutic Review of Medicinal Potential of Nimba (*Azadirachta Indica*) In Treatment of Skin Diseases

Dr.Ketaki P. Gavle¹ & Dr.A.M.Ghotankar²

MD Scholar, Department of Dravyaguna¹, H.O.D & Professor, Department of Dravyaguna²,
C.S.M.S.S Ayurved Mahavidyalaya,
Kanchanwadi, Aurangabad.Kanchanwadi, Aurangabad.

Abstract

Azadirachta Indica, commonly known as Nimba, nimba tree or Indian lilac, is a tree in the Meliaceae family. Nimba was found to be the source of various bioactive compounds of medicinal and cosmetic importance. The earliest Sanskrit medical writings refer to the benefits of its fruits, seeds, oil, leaves, roots, and bark. Each of these has been widely used in Chinese, Ayurvedic, and Unani medicines worldwide especially in Indian Subcontinent. As Nimba has been renowned for healing as it is packed with antibacterial, anti-inflammatory, antiparasitic, analgesic, wound healing and antifungal properties that not only gives benefits to health but also solves many beauty problems. In this review an insight into some literature reports on the medicinal (skin diseases) and cosmetic applications of natural bioactive compounds & phytoconstituents in various parts of Nimba was provided as an overview.

Keywords

Bioactive compounds, phytoconstituents, medicinal, cosmetics, antibacterial, anti-inflammatory, antiparasitic and antifungal.

Introduction

The Nimba tree, one of the most promising of all plants, may eventually benefit every person on the planet is native to the Indian subcontinent. It is considered a major component in siddha medicine and Ayurvedic and Unani medicine and is particularly prescribed for skin diseases. Nimba leaves have also been used to treat skin diseases like eczema, psoriasis, etc.

Today, the best-established and most widely recognized skin care uses are based on its merits as an antibacterial, anti-inflammatory, antiparasitic, analgesic, wound healing and antifungal properties that not only gives benefits to health but also solves many beauty problems. Nimba preparations are reportedly efficacious against a variety of skin diseases, septic sores, and infected burns.

Nimba ingredients are applied in Ayurveda, Unani, Homeopathy, and modern medicine for the treatment of many infectious, metabolic, or cancer diseases. *Azadirachta indica* has complex of various constituents including nimbin, nimbidin, nimbolide, and limonoids and such types of ingredients play role

in Skin diseases management through modulation of various genetic pathways and other activities. Quercetin and β -sitosterol were first polyphenolic flavonoids purified from fresh leaves of Nimba and were known to have antifungal and antibacterial activities [1]. Numerous biological and pharmacological activities have been reported including antibacterial [2], antifungal [3], and anti-inflammatory. Earlier investigators have confirmed their role as anti-inflammatory, antiarthritic, antipyretic, hypoglycemic, antigastric ulcer, antifungal, antibacterial, and antitumour activities [4-7] and a review summarized the various therapeutics role of Nimba [8].

This review summarizes the role of Nimba and its active ingredients in the skin diseases treatment through the modulation of various biological pathways.

Ayurvedic literature:- [9-18]

Ayurved Samhita-	
1. Charak Samhita	Gana- kandughna, Tiktaskandh
2. Susruta Samhita	Gana- Aaragwadadi, Guduchyadi, Lakshadi

3. Astanghridaya	Guducyadigana (15/16), Aragwadadigana (15/18)
Nighantu –	
1. Bhavaprakasa Nighantu-	Guducyadivarga (94)
2. Dhanwantari Nighantu-	Guducyadivarga (29)
3. Shaligram Nighantu	Guducyadivarga
4. Madanpal Nighantu	Abhayadivarga
5. Kaiyadeva nighantu	Aushadhivarga (883)
6. Raj Nihantu-	Paribhadradivarga (10)

Nimba properties as per Ayurvedic literature-

As per ayurvedic literature Nimba Rasa (Taste) is Tikta, Kashaya, Guna (Qualities) are Laghu, Ruksha, Veerya (Potency) is Sheeta, Vipaka (Post-digestion effect) is Katu and Karma (Pharmacological activity) are Kaphaghna, Pittaghna karma. Nimbapatra is shothghna ,twagadoshahar, krimighna, kushthahar, vranashodhak and vranaropak. Nimbatwak is graahi, jwaraghna, twagadoshahar&krimighna. Nimba fruit is kushtha, Gulma ,krimi&pramehanashak, Nimba tail is vranashodhak , vranaropak, vaathar, kushthaghna&krimighna.[12]

Botanical Description of Nimba

Nimba tree belongs to the family Meliaceae which is found in abundance in tropical and semitropical regions like India, Bangladesh, Pakistan, and Nepal. It is a fast-growing tree with 20–23 m tall and trunk is straight and has a diameter around 4-5 ft. The leaves are compound, imparipinnate, with each comprising 5–15 leaflets. Its fruits are green drupes which turn golden yellow on ripening in the months of June–August.

Taxonomic Identity

Nimbais a member of the Mahogany family. The word Azadirachta is derived from the Persian azaddhirakt (meaning 'noble tree'). The taxonomic position of Nimba is as follows:

Kingdom :	Plantae– Plants
Subkingdom	Tracheobionta – Vascular plants
Superdivision	Spermatophyta – Seed plants
Division:	Magnoliophyta – Flowering plants
Class:	Magnoliopsida – Dicotyledons
Subclass	Rosidae
Order :	Sapindales
Family	Meliaceae – Mahogany family
Genus	Azadirachta A. Juss. – azadirachta P
Species	Azadirachta indica A. Juss. – Nimba P

Active Compounds of Azadirachta indica L. (Nimba)

Azadirachta indica L. (Nimba) shows therapeutics role in health management due to rich source of various types of ingredients like nimbolinin, nimbin, nimbidin, nimbidol, sodium nimbinate, gedunin, salannin, and quercetin. Leaves contain ingredients such as nimbin, nimbanene, 6-desacetylnimbinene, nimbandiol, nimbolide, ascorbic acid, n-hexacosanol and amino acid, 7-desacetyl-7-benzoylazadiradione, 7-desacetyl-7-benzoylgedunin, 17-hydroxyazadiradione, and nimbiol Azadirachta indica A. Juss. (Nimba) Fruit and Seeds are source of several bioactive triterpenoids. [19–24]

Mechanism of Action of Active Compounds

Nimba(Azadirachta indica) plants parts shows antimicrobial role through inhibitory effect on microbial growth/potentiality of cell wall breakdown. Azadirachtin, a complex tetranortriterpenoid limonoid present in seeds, is the key constituent responsible for both antifeedant and toxic effects in insects [25]. Results suggest that the ethanol extract of Nimbleaves showed in vitro antibacterial activity against both Staphylococcus aureus and MRSA with greatest zones of inhibition noted at 100% concentration [26]. Nimba plays role as free radical scavenging properties due to rich source of antioxidant. [27].

Therapeutic Implications of Nimba and Its Various Ingredients in Health Management

1. Effect of Nimba as Anti-Inflammatory

A study result has confirmed that extract of Azadirachta indica leaves at a dose of 200 mg/kg, p.o., showed significant anti-inflammatory activity in cotton pellet granuloma assay in rats [28]. Nimbleaf extract showed significant anti-inflammatory effect but it is less efficacious than that of dexamethasone [29] nimbidin suppresses the functions of macrophages and neutrophils relevant to inflammation [30]. Earlier finding showed immunomodulator and anti-inflammatory effect of bark and leave extracts and antipyretic and anti-inflammatory activities of oil seeds [31,32]. One study showed that Nimba seed oil showed significant analgesic effect in the dose of 1 and 2 mL/kg and oil has dose-dependent analgesic activity [33].

2. Wound Healing Effect

A study was made to evaluate the wound healing activity of the extracts of leaves of *A. indica* and *T. cordifolia* using excision and incision wound models in SpragueDawley rats and results revealed that extract of both plants significantly promoted the wound healing activity in both excision and incision wound models [34]. Other results showed that leave extracts of *Azadirachta indica* promote wound healing activity through increased inflammatory response and neovascularization [35].

3. Antimicrobial Effect

Nimba and its ingredients play role in the inhibition of growth of numerous microbes such as viruses, bacteria, and pathogenic fungi.

3.1. Antibacterial Activity

In trials Nimba oil has suppressed several species of pathogenic bacteria, including *Staphylococcus aureus*. A common source of many pus-forming disorders (for example, boils and abscesses), this bacterium also causes secondary infections in cystitis. An experiment was made to evaluate the antibacterial activity of the bark, leaf, seed, and fruit extracts of *Azadirachta indica* (Nimba) on bacteria isolated from adult mouth and results revealed antibacterial activity against all the test bacteria used [36].

3.2 Antiviral Activity

In India, It's efficacy-particularly against pox viruses—is strongly believed, even among those of advanced medical training. Smallpox, chicken pox, and warts have traditionally been treated with a paste of Nimba leaves—usually rubbed directly onto the infected skin. Recent pharmacological studies have supported the belief that Nimba leaves possess some antiviral activity.

3.3. Antifungal Activity

In one laboratory study, 2 Nimba preparations showed toxicity to cultures of 14 common fungi, including members *Trichophyton*, *Epidermophyton*; *Microsporum*, *Geotrichum*, *Candida*. Alcoholic extract of Nimba leaf was most for retarding the growth of fungal species [37]. Another finding showed the antimicrobial role of aqueous extracts of Nimba cake in the inhibition of spore germination against three sporulating fungi such as *C. lunata*, *H. penniseti*, and *C. gloeosporioides* f. sp. *mangiferae* [38]. Aqueous

extracts of various parts of Nimba such as Nimba oil and its chief principles have antifungal activities and have been reported by earlier investigators [39-41].

4. Role of Nimba in Dentistry

A study confirmed that *A. indica* mouth rinse is equally effective in reducing periodontal indices as chlorhexidine [42]. Chloroform extract showed strong activity against *Streptococcus salivarius* and third strain *Fusobacterium nucleatum* was highly sensitive to both ethanol and water extract [43]. Earlier finding confirmed that dried chewing sticks of Nimba showed maximum antibacterial activity against *S. mutans* as compared to *S. salivarius*, *S. mitis*, and *S. sanguis* [44].

5. Maintains Oral Health

Nimba oil can play a major role in treating gum disease. Mouthwashes that contain Nimba extracts inhibit the growth of *Streptococcus mutans* in the mouth, a bacteria that causes oral issues. . In fact, Nimba oil is added to certain toothpastes as the oil acts as a purifier and an antimicrobial agent. Nimba leaves are also rich in antioxidants and build the immune response of the gums and tissues of the mouth (45).

6. Helps Treat Leprosy

As per an Egyptian study, Nimba seed oil can be used to treat leprosy. The study also claims that Nimba is non-mutagenic, which means it doesn't lead to any undesirable changes in the DNA of the individual (46). But beware of the consumption of Nimba seed oil – as it is said to produce toxic effects.

7. Skin care and treatment

7.1 Treats Wounds and Rashes

The topical use of Nimba oil was found to treat chronic non-healing wounds in combination with Haridra showed good results (47). A paste of Nimba and turmeric applied topically was found to treat chronic ulcers and scabies (48). Though safe for adults, it might be harmful for children.

7.2. Relieves Dry Skin & Smoothens Wrinkles

With its regenerative properties and immune-boosting compounds, Nimba oil enables the skin to fight pathogens that are present below the skin surface. This keeps the skin smooth and fights wrinkles. Using Nimba oil for face or including Nimba powder in face packs soothes the skin thereby reducing the effects of aging (49). Vitamin E and

EFA's enable Nimba oil to seep deep into the skin thereby healing cracks caused by dryness.

7.3. Stimulates Collagen

Here's another addition to benefits of Nimba oil for skin. Nimba stimulates collagen production which slows down the aging process of the skin. (5) Regular usage of Nimba oil not just smoothens wrinkles and fine lines but also makes your skin look young and supple. (50)

7.4. Reduces Eczema

Nimba oil is an age old natural remedy for eczema symptoms like itchy, dry skin. Though it soothes the skin, Nimba oil does not cure the root causes of eczema. These causes could be hereditary or acquired. Regular use of Nimba oil helps a great deal in treating eczema irritation and red rashes (51).

7.5. Treats Psoriasis

Psoriasis is a painful skin disease which leaves your skin looking sunburnt. Dryness and scaling are the two leading symptoms associated with Psoriasis. Vitamin E rich Nimba oil is incredibly helpful in soothing the itchiness and irritation caused by Psoriasis. Nimba, with its antibacterial properties prevents the development of any further skin infections (52)

7.6. Treats all Types Of Dermatitis, scars, fights acne

It is loaded with compounds like Nimbidin and Nimbin, which prevents redness and swelling thereby retaining the skin moisture. Nimba oil is a tested remedy for all types of dermatitis (53). Nimba seed oil removes acne causing bacteria from skin; the high amount of fatty acid in Nimba oil prevents and treats scars left by acne.

7.7. Anti-Aging Serum

Nimba oil, enriched with fatty acids, vitamin E, antioxidants and anti-inflammatory properties shield the skin from environmental damage. It also contains carotenoids that accelerate skin's defence against free radicals which cause aging (54).

7.8. Ringworm, Warts And Moles, Cold Sores And Herpes

Nimba oil has a significant effect on chronic skin conditions like Ringworm, warts & moles, cold sores and herpes. Applying good quality, organic Nimba oil packed with antifungal properties on affected skin areas will not just soothe the irritation but will also kill the bacteria that are the root-cause

of these conditions. Nimba oil has been commonly used in the Siddha medicine for the treatment of skin diseases (55).

7.9. Urticaria

Urticaria, commonly known as hives appear as patchy red bumps on the skin caused by allergic reactions. Nimba has antihistamine and other compounds that help ease Urticaria (56). Applying Nimba oil on affected area prevents and cures this skin condition.

7.10. Promotes A Healthy Scalp

Nimba oil uses for scalp and hair treatment are fascinating. The beauty of your hair depends on the health of your scalp. Nimba oil, with all its remedial properties, treats your scalp thereby enhancing the beauty of your hair. Nimba oil not just moisturizes your hair but also works on keeping your scalp healthy (57).

8. Nimba Oil For Internal & External Use

A) Internal Uses Of Nimba Seed Oil

8.1. Gingivitis and Pyorrhoea

Nimba oil is an extremely effective oral remedy for all dental problems. Be it bleeding gums, toothache or foul breath, the antiseptic properties of Nimba are proven to keep gums and teeth healthy. Many dental care products include Nimba oil as a major ingredient for this same purpose (58).

B) External Uses Of Nimba Seed Oil

8.2. Mosquito Repellent

According to a study published in the Journal of the American Mosquito Control Association, the researchers mixed 2% Nimba seed oil to a bowl of coconut oil provided complete protection for approximately 12 hours from the bites of all anopheline species (59).

14. Immunomodulatory and Growth Promoting Effect

Experiment was performed to investigate growth promoting and immunomodulatory effects of Nimba leaves infusion on broiler chicks showed improved antibody titre, growth performance [60]. Another study showed that AI (2 g/kg) treatment significantly enhanced the antibody titres against new castle disease virus (NCDV) antigen [61].

Conclusion

Popularity of natural products or their derivatives role in diseases cure and prevention is increasing worldwide due to less side effect properties. Nimba and its ingredients have therapeutics implication and have been traditionally used worldwide especially in Indian Subcontinent since ancient time. Clinical based studies confirmed that Nimba plays pivotal role in prevention of various diseases. A lot of research and studies have concluded that the Nimba tree oil benefits are magical—be it skin, hair, chronic or viral diseases, stress or overall wellness. The list of benefits just doesn't seem to end! This is a gentle reminder of the old yet wise phrase: Old is gold! No matter what your problem is, the Nimba will always come to your rescue. The detailed study should be made based on animal to know the exact mechanism of action in the diseases management.

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Study of Sushrutokta Vedhya Sira of Urdhavshakha In Siravedhan Vidhi

Sachin S. Bhagwat^{*1}, R. R. Jape², Shashank K. Maldhure³

¹Associated Professor,

²HOD and Professor

³Final Year PG Student, dr.shashank.maldhure@gmail.com; Ph. No. + 91- 8600333784

Dept. of Rachana Sharir, C.S.M.S.S Ayurved Mahavidhyala,

Kanchanwadi, Aurangabad, Maharashtra, India

***Corresponding author:**

E-mail:

dr.sachinbhagwat@gmail.com;

Mobile: + 91- 9822672393

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Abstract:

The term “Sira” is collectively used for blood vessel (Arteries, Veins, Capillaries and Lymphatics) which denote the circulatory system. Some siras are not suitable for *venouspuncture*. These siras are called *Avedhya Sira*. A surgeon should not perform *venesection* on these sira as it may be harmful for patient; on the contrary, some sira are suitable for *Siravedhan*, called *Vedhya Sira*. The anatomical locations are available in classic texts but exact structures and the anatomical description regarding vedhya sira are not described yet. Proposed article aims to correlate *urdhvashakhagat vedhya siras* mentioned by our *Aacharya* with modern anatomical structures and review in contemporary science. For this purpose, ancient *ayurvedic* classics were reviewed and references are compiled for the said subject was critically studied to comprehend the *vedhya sira* in upper extremities.

Primary knowledge of *vedhya Sira* is very important for physicians as well as surgeons. The *vedhya sira* mentioned in *Ayurved* compendia can be correlated with blood vessels, vein in modern anatomy.

Introduction:

The term sira, at one place reflects a meaning of blood vessels while at other place, it means nerve. In such condition it is very difficult to know doubtlessly about it (like modern anatomy, sira is one of such structures having its structural, clinical and surgical significance.) The important descriptions about sira are mentioned by our mentors / aacharyas in ayurvedic classical text like, shushrut samhita, charak samhita, ashtang hridaya and other texts. In sushrut samhita 4 types of sira- Aruna varna (crimson), Neela varna (blue), Gour varna (white) and Rohini (red) which are relevant with three dosha- vata, pitta, kapha and rakta respectively. The term sira stands for channels through which substances or physical forces flow. Sira serves as a channel for rakta dhatu which helps to nourish the body and maintain healthy state. Pathway of sira resembles to the venations of the leaf. According to Ayurvedic texts i.e. Sira emerges from the umbilicus from which they spread into upwards, downwards and obliquely branches throughout the body.

As per the classics total Sira are 700 in number. These are classified on the basis of dosha, adhishtana, vedhya and *avedhya* in *sushrut samhita*, where 98 sira are *avedhya* Sira which are strictly

prohibited for puncturing. So we can conclude that remaining sira which are superficial can be used for blood letting.

Each urdhva shakha (upper limb) consist of 100 siras out of which 4 are *avedhya* siras as per aacharya sushrut, that can't used for Sira vedhana. So for remaining sira, aacharya have mentioned the particular sites of siravedhana in particular disease, but the exact sira present at that particular site which should be used for siravedhana has not mentioned. Hence their anatomical description and their surgical importance need to be evaluated.

As the siravedhana is the mainstay of all treatment in shalyatantra there are several examples of disease which can be cured by siravedhana process like Grudhrasi (Sciatica), Vishvachi, Unmad, Apasmar etc. as per aacharya sushrut. Siravedhan vidhi being less expensive, less time consuming and with minimum side effect it gives better and quick relief. So more emphasis should be given on these vedhya sira for siravedhan chikitsa.

Aim and Objectives:-

- To study sira sharir with the help of ayurved and modern science.
- To correlate the urdhvashakhatagat vedhya sira with modern anatomical structures.

- Try to specify particular sira, its site and name, which can be used in siravedhana vidhi of urdhav shakha according to the ayurvedic texts and modern phlebology.

Materials And Methodology:-

- All sorts of references has been collected and compiled from various ayurvedic texts like bruhatrayi and laghutrayi, available commentaries and text books along with modern science.
- Research articles from various website related to sira sharir were accessed.
- Collected literature was critically reviewed.
- With the help of superficial dissection of upper limb and literature collected an attempt was made to correlate the urdhava shakhagat vedhya sira with modern anatomy.
- Based on the correlation, the conclusion were drawn.
- For Anguli pramana and other measurements we selected a standard reference book of the ayurvedic formulary of India part-2, ayurvedic measurements are taken as follows

1 Anguli = $\frac{3}{4}$ inch = 1.95 cm

- Photography: Photography of both methods was done by using 12 mp camera.

Review Of Literature:-

Structure of Sira

According to Sushruta, Structure of Sira are like the fine fibers in the leaf of a tree, thicker at their roots and finer towards the end, the branches of the Sira resemble the tendrils, the first branch gives out a branch and this again gives out another branch and so on. The blood flows in all the sira throughout the body as the water channels in different areas of a garden or agricultural field.

This drushtant (relevant illustration) of leaf very well correlates with the structural aspect of (sira) blood vessels. Large arteries leave the heart and branch into smaller ones that reach out to various parts of the body. These divide still further into smaller vessels called arterioles penetrating the body tissues. Within the tissues, the arterioles branch into a network of microscopic capillaries. Substances enter and exit of the capillary walls as the blood exchanges materials with the cells. Before leaving the tissues, capillaries unite into venules, which are small veins. These venules merge to form

larger and larger veins that eventually return blood to the heart. The walls of arteries, veins, and capillaries differ in structure. In all three, the vessel wall is surrounded by a hollow center through which the blood flows. The walls of both the arteries and veins are composed of three coats, but they differ in thickness. The inner and middle coats of arteries are thicker than those of veins. This makes arteries more elastic and capable of expanding when blood surges through them from the beating heart. The walls of veins are more flexible than artery walls. This allows skeletal muscles to contract against them, squeezing the blood along as it returns to the heart. One-way valves in the walls of veins keep blood flowing in one direction. The walls of capillaries are only one cell thick. Among all the blood vessels, only capillaries have thin walls enough to allow the exchange of materials between cells and the blood.

Urdhavshakhagat Vedhya Siras

Vedhya sira means that veins which can be punctured at proper site to release the impure blood without any complications or side effect and which can be interfered with the surgical process. Puncturing of these sira will not cause any harm to the body. It is conjointly mentioned by the aacharyas that through these veins only the safer

bloodletting should be done for curing various diseases.

There are 384 vedhya Sira present in the Shakhas (both lower and upper extremities).

Amongst them 192 vedhya Sira are present in upper extremities (Urdhvasakhagat). Means 96 in each upper limb.

Jaal:-

Network of each muscles, blood vessels, ligaments, and bones are four, they are situated in ankles bound & mixed together with holes by which the entire bony is falling net like holes.

Modern science: -

There are no specific guidelines for vedhya Siras (contra indicated veins). All veins can be considered for puncturing as per necessity & emergency.

Structure of Vein-

Venous return to the lower extremity is provided by two sets of veins namely the superficial and the deep veins. The superficial veins are superficial to the deep fascia and are often located at or below the investing layer of superficial fascia in the subcutaneous tissue. Deep

veins are situated deep to the deep fascia and often accompany the artery and the nerves supplying the lower limb forming a neurovascular bundle.

Venous blood flow is a passive flow (not supported by a smooth muscle pump such as the heart). The direction of the flow is maintained by the valves within the Veins which prevents the back flow. The valves are found near the entrance of a tributary. Venous channels are smaller, return blood from different tissue of body. The wall of vessels is thin and transparent, made of elastic fibers (hence it has property of constriction & dilation).

Veins consist of three layers:

- 1) Tunica adventitia- outer layer & consist of connective tissue which surrounds, protects & support vessels.
- 2) Tunica media –middle layer & consist of muscular tissue & nerves fibres which stimulate to contract or relax. (Stimulation by medulla oblongata)
- 3) Tunica interna- inner layer & constructed of smooth endothelial cells which facilitates the blood cells etc. endothelial cells develops fold known as semilunar valves. These valves are noticeable bulges in veins, mostly present in larger blood vessels which helps blood

to move toward heart by preventing back flow.

Venesection Indications, location and causes

Indications: -

- Thrombosed veins – these feel hard and cord.
- Tortuous, sclerosed, fibrosed, inflamed, fragile veins

Location:-

- Veins that cross over joints, bony prominences.

Causes:-

- Medications – (e.g.- anticoagulants, steroids, thrombocytopenia)
- Injury, disease or treatment may prevent the use of a limb (e.g. amputation, fracture, cerebrovascular accident).
- Surgery on one side of the body, for example, mastectomy and axillary node dissection, as this can lead to impairment of lymphatic drainage.

- Hematological factors decreased level of Hb% (Hemoglobin) and PLC (Plate Late Counts)

Dissection of upper limb:-

For the dissection we follow mainly two method of dissection.

1. Dissection of upper limb in detail
2. Superficial dissection of upper limb: for the identification of exact mentioned veins in siravedhana vidhi of upper limb.

Superficial dissection of upper limb:-

For the identification of exact sites of superficial veins mentioned in siravedhana vidhi of upper limb, we followed the following method of dissection.

Preparation for dissection:-

At first, a well preserved, intact cadaver of middle aged and medium builded, has been taken for dissection.

The upper limb of the body was coloured by white acrylic colour and below mentioned colours were used for

the exact identification of surface marking and superficial structures.

- Yellow:- for the marking of distance mentioned in siravedhana vidhi from the various surface land marks as per classics.
- Red:- for the exact site of siravedhana.
- Black:- for making a circle around the siravedhan site.
- Orange:- for the marma point.
- Green:- for the surface marking of inguinal ligament and joint.

Main procedure:-

To study the superficial veins located on the anterior part of upper limb, cadaver was placed in supine position. Then started dissection of front and back side of arm, forearm and hand.

Sushrutacharya have mentioned different siravedhan sites for particular diseases of upper limb. So, according with the help of keen dissection, photographs of superficial veins found in dissection are taken for each site.

Observation:-

On the basis of literature study and with the help of dissection; the observations were made. In the siravedhana vidhi (specifically

considering upper limb) veins used were superficial veins according to various disease mentioned specifically in upper limb. In the following diseases and mentioned sites, below mentioned superficial vein may be used as exact site of bloodletting.

In aavbahuk above the kshipra marma two angula i.e. 3.9 cm. Dorsal venous arch is present which can be used as exact site of siravedhana.

In vishwachi four angula above or below the kurper, there cephalic vein is present. So it may be taken as point of bloodletting that vedhya sira i.e. deep vein and arteries. We should considered so in vishwachi cephalic vein may be used for bloodletting.

In yakrutvyadhi and other diseases like shawas, kasa. The site is dakshin (right) kurperantha site i.e. there are three major superficial veins 1) cephalic 2)

median cubital and 3) basilic vein; but out of all these a superficial structure was cephalic vein so it may be considered as point of bloodletting.

In yakrutvyadhi, plihavyadhi other diseases like shawas, kasa another sites for siravedhan is kanikshthika and anamika yoho madhe i.e. first dorsal metacarpal veins of both hands.

Conclusion:-

1. The sira considered for siravedhana vidhi specifically in the diseases related to urdhvashakha by aacharyas can be considered as superficial veins in the upper limb according to modern anatomy.
2. The specific location of sira (superficial veins) for siravedhana vidhi (bloodletting procedure) in urdhvashakha (upper limb) can be considered as follows:

Sr. No.	Diseases	Exact location	Superficial vein for siravedhana
01	Aavbahuk	3.9 cm above the kshipramarma	Dorsal venous arch
02	Yakrutvyadhi	3.8 cm from mid point of kurper sandhi medially of right hand	1) cephalic 2) median cubital 3) basilic vein
03	Plihavyadhi	3.8 cm from mid point of kurper sandhi medially of left hand	1) cephalic 2) median cubital

			3) basilic vein
04	Vishwachi	In the medial of arm 7.8 cm above the elbow joint and in the medial of arm 7.8 cm below the elbow joint	
05	Shawas, Kasa	3.8 cm laterally above wrist joint, present between kanikshthika and anamika yoho madhe	First dorsal metacarpal veins

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End of article

ANATOMICAL VARIATION IN ORIGIN OF MIDDLE AND INFERIOR SUPRARENAL ARTERIES AND ORIGIN OF INFERIOR PHRENIC ARTERY - A CASE STUDY

¹*Dr. Sachin Shrikrishna Bhagwat, ¹Dr. Nimesh Parashram Sangode and ²Dr. Ravindra Sahebrao Kharat

¹* Associate Professor, Department of Sharir Rachana, CSMSS Ayurved College, Kanchanwadi, Aurangabad.

¹ Assistant Professor, Department of Sharir Rachana, CSMSS Ayurved College, Kanchanwadi, Aurangabad.

² Assistant Professor, Government Ayurved College, Nanded.

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***Corresponding Author**

**Dr. Sachin Shrikrishna
Bhagwat**

Associate Professor,
Department of Sharir
Rachana, CSMSS Ayurved
College, Kanchanwadi,
Aurangabad.

ABSTRACT

In this article we are representing the variation in origin of middle and inferior suprarenal arteries and origin of inferior phrenic artery. During dissection of healthy cadaver in dissection hall we found. 1. Right middle suprarenal artery is originated from inferior phrenic artery instead of abdominal aorta. 2. Right inferior suprarenal artery is originated again from inferior phrenic artery instead of renal artery. 3. Right inferior phrenic artery itself originated from right renal artery instead of abdominal aorta. Thus knowledge of this type of variation is very important in avoiding complications during surgical procedures.

KEYWORDS: inferior suprarenal artery, Middle suprarenal artery, Inferior phrenic artery, Abdominal aorta, Suprarenal glands.

INTRODUCTION

Suprarenal glands are an important pair of retroperitoneal endocrine glands situated on the upper pole of kidneys and enclosed in the same fascial sheath as that of kidneys.

Hormones secreted by adrenal gland are essential to human life. Failure in the hormonal production will impair carbohydrate metabolism and unstable the electrolytes that will result in the circulatory collapse, hypoglycaemic coma and death.^[1] hence these glands are richly

vascular in nature and get their arterial supply by means of three arteries namely superior, middle and inferior suprarenal arteries.

The inferior phrenic artery gives off superior branch while middle branch arise directly from abdominal aorta and inferior suprarenal branch is given off by the renal artery. Inferior phrenic artery is itself branch of abdominal aorta.

Although variations in framework of adrenal gland vasculature is common.^[2] awareness of these variations are very essential as pre-operative vascular judgement for various surgical and other interventional radiological procedures.^[3,4] thus the present article is for to study the variations in vascular pattern of adrenal gland.

MATERIAL AND METHODS

During routine dissection at the department of rachana sharir(anatomy) of C.S.M.S.S. ayurvedic college, Aurangabad.an anatomical variation in the right suprarenal and right inferior phrenic arteries was observed. The cadaver donated to the department of rachana sharir, was that of middle aged Indian male body.

After dissection of anterior abdominal wall and after cutting the root of mesentery all the abdominal viscera within peritoneal cavity are removed. All fat and fascia from the anterior surface of right kidney and right suprarenal gland are removed and three suprarenal arteries to right supra renal gland and inferior phrenic artery are traced.

Observation

In this case, superior suprarenal artery on right side was normal in origin i.e. from inferior phrenic artery.

Observed variation (Photograph No 1)

Right middle suprarenal artery it is a branch of abdominal aorta in normal case but we observed that.

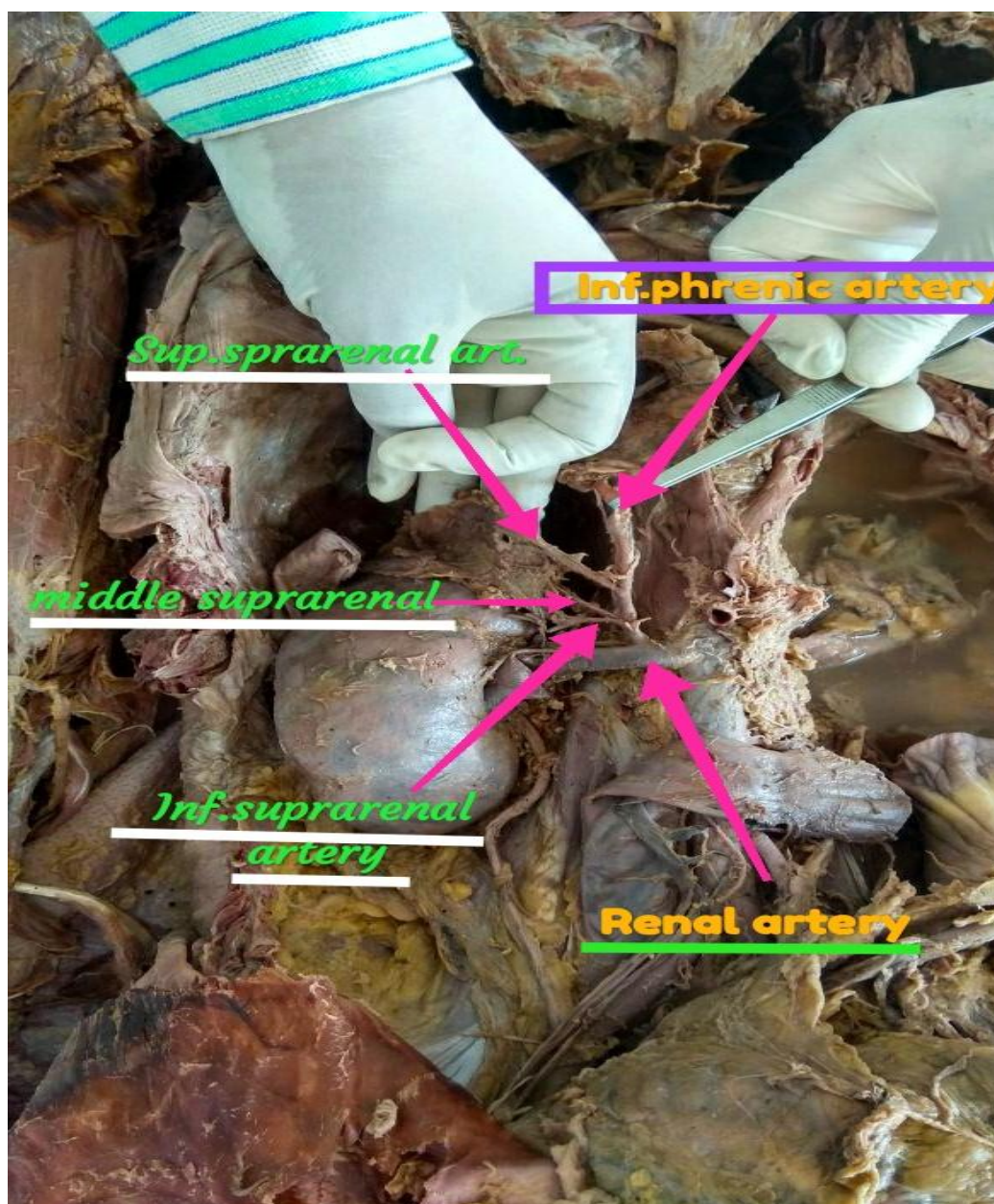
Right Middle suprarenal artery originated from inferior phrenic artery instead of abdominal aorta.

Observed variation (Photo graph no 1)

Right inferior suprarenal artery: it is a branch of renal artery in normal case but we observed that

Inferior suprarenal artery is originated again from inferior phrenic artery instead of renal artery.

Observed variation (Photograph no 1): Right inferior phrenic artery: it is direct branch of abdominal aorta arises just above coeliac trunk. in normal case but we observed that inferior phrenic artery arises from renal artery instead of abdominal aorta.



DISCUSSION

The incidence of anomalous origin of middle suprarenal artery on right side was 47% and on left side was 6%^[5] anomalous origin of inferior suprarenal artery on the right side was 29% and left side was 35%.^[6]

The study result is being described to report anomalous origin of suprarenal arteries in the light of surgical, radiological and embryological significances. Present study and article suggest thorough knowledge of anomalous arterial anatomy of suprarenal gland and is required for surgical and other interventional procedures of retroperitoneal organs to avoid complications.

CONCLUSION

Adrenal gland shows complexity in its blood supply and variability in the origin and the position of arteries supplying them.^[7]

The lateral splanchnic branches of dorsal aorta forms rete arteriosum, urogenitale from which adrenal glands, kidneys and gonads draw their arterial supply.^[8] The other sources of origins of arteries to adrenal gland involve left gastric, superior mesenteric and spermatic arteries.^[9]

The present study deals with anomalous variation of middle and inferior suprarenal arteries which can assist surgeons for preoperative judgement of vasculature while administrating surgical procedures like adrenalectomy, kidney transplantations etc and also for radiological evaluations.

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“A case study on ayurvedic management of asthimajjagat vata w.s.r. to avascular necrosis.”

Akolkar Swati Bharat*¹, Nimbalkar Naresh R.², Deshmukh Shrikant G.³

¹PG Scholar, ²Asso. Professor, ³HOD, and Professor,

Department of Kayachikitsa, C.S.M.S.S. Ayurved Mahavidyalaya, Aurangabad.

*Corresponding author:
swatiakolkar03@gmail.com

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Mumbai, Maharashtra, India

Abstract:

Ayurvedic description of *Asthimajjagat vata* closely resembles with Avascular necrosis of modern medicine. *Asthimajjagat vata* is characterized by *Bhedanvat pida* at *asthi* and *parva*, *Sandhishoola*, *manasbalakshay*, *nidranash*, *santat ruk*. The patient came to us with severe pain at right thigh, Pain at both hip joint, pricking sensation at right thigh, difficulty in walking, Insomnia. In Ayurveda *basti chikitsa* is considered to be half the treatment for *vata* dominated disease. *Vata dosha* is predominately present in *Asthi dhatu* and *Sandhi*. So *Tiktaksheer basti* along with Goat's *Majja* and *shaman chikitsa* was selected for the present case. *Tiktaksheer basti* along with *Majja* has given very effective result in the patient.

INTRODUCTION-

Asthimajjagat vata is mentioned as one of the *Vatavyadhi* in *Charak Samhita*¹. Owing to distracting nature and difficult management. Due to change in life style like unsuitable sitting, sleeping, bike riding, standing, Alcohol consumption, low nutritional value food as the junk food *Asthimajjagat vata* has emerged in society as prominent disease. During the process of pathogenesis, when the vitiated *vata* gets into *Asthi*, then due to inverse relationship in *Asthi* and *Vata*², As *vata* increases *Asthi* decreases i.e. *Asthikshaya*. Causing pain, tingling sensation, numbness. Avascular necrosis is a disease resulting from a temporary or permanent loss of blood supply to the bones. It generally affects people between the ages of 30 and 50 years of age. This disease is also known as osteonecrosis, aseptic necrosis and ischemic bone necrosis. Today the modern science deals with these kind of diseases with analgesics and steroids but their side effects hampers the physiology more³. In Ayurveda text *Tiktaksheer basti* is indicated in all types of *asthigat vikar*. *Tikta ras* has tendency to go towards *Asthi dhatu* after assimilation in the body due to dominance of *Aakash* and *Vayu mahahuta*⁴. Which can help to nourish the *Asthi dhatu*. *Majja* nourishes the *Majja dhatu* as per *Samanya Sidhanta*⁵. Hence we decided to study the effect of *Tiktaksheera basti* along with Goat's *Majja* and *shaman chikitsa* in *Asthimajjagat vata*.

CASE REPORT

PATIENT DESCRIPTION & HISTORY EXAMINATION-

- A 35 year old male suffered from severe Right leg pain especially at

Right Thigh region pricking sensation, Both Hip joint pain specially in Right hip joint with difficulty in walking.

- These symptoms of insidious onset 1 month prior had caused patient to cease his daily activity e.g. walking, household work sleeping.
- H/O – Previous illness about same complaints 2 years ago.
 - Patient taking allopathic treatment.
- Personal history- Alcohol consumption daily.
 - Bike riding.
- Family history- Past family medical history was noncontributory.

GENERAL EXAMINATION-

P.R.- 80/min. regular

B.P.- 130/90mmHg

Weight- 64 kg

P/A- Soft

LOCOMOTOR EXAMINATION-

Hip joint-

1. Redness – absent
2. Swelling – absent
3. Temperature – normal
4. Tenderness – absent
5. Movement – all movements were restricted.

AVN is classified by five stages through the use of normal radiological clinical findings. Each stage identifies and explains the pathological progress and the severity of the disease.

- Stage 1 – Cell death; undetectable by plain films.
- Stage 2 – Cell modulation; characterized by localized osteoporosis

- Stage 3 – Development of the margin of dead bone; appears sclerotic.
- Stage 4 – Margin increases; takes on a crescent shape.
- Stage 5 – Total destruction and possible collapse of the bone.

INVESTIGATION –

- MRI of both hip joint –
 - i. Findings suggestive of bilateral avascular necrosis of the Femoral head (more on right).
 - ii. Acute bone marrow edema in right femoral head and neck.
 - iii. Grade 3rd on right side and Grade 2nd on left side.

ASTHAVIDH PARIKSHA-

1. Nadi- Vata Pradhan pitta
2. Mal- once a day
3. Mutra- 4-6 time /Day
4. Shabda- Prakrut
5. Jiva- sama
6. Sparsha- prakrut
7. Druka- prakruta

RESULT-

Sr. no.	Subjective/ objective parameter	Before treatment	7 th day	14 th day	21 th day
1	Hip joint pain	10	9	6	4
2	Pricking pain	10	9	6	3
3	Difficulty in walking	10	9	6	4
4	Stiffness	9	7	4	3

The assessment was done before and after the completion of treatment. Patient got 60% relief in 3 parameters and 50% relief in one parameter within span of 21 days of treatment. The right hip joint pain which was pricking in nature was found

8. *Akruti- madhyam*

INDRIYA PARIKSHAN-

Dnyanendriya – prakrut

Karmendriya – prakrut

STROTAS PARIKSHAN –

1. *Asthivah strotas* – pain at right thigh region, *Balakshay*
2. *Majjavah strotas* – hip joint pain, pricking sensation, loss of sleep.

DIAGNOSIS – *Asthimajjagat vata*

TREATMENT –

- ❖ *Sarvang Snehana* with *Abhyang taila* for 21 days.
- ❖ *Sarvang swedan- Avgah swedan* with *Nirgudi kwath* for 21 days.
- ❖ *Tiktaksheera basti* along with *majja* for 21 days
- ❖ *Jalaukaavacharan* at Right hip joint
- ❖ Oral medication – *Mahayograj guggulu* 2 tab. Twice a day
Rasnaghana vati 2 tab. Twice a day
Shallaki plus tablet 1 tab. Twice a day

to be reduced remarkably and in the VAS score has come to 5 from 10. Difficulty in walking and stiffness of the joint also reduced by 60%.

DISCUSSION -

Asthimajjagat vata is mainly degenerative disease. In *Asthimajjagat vata* there is involvement of *Vata*, *Asthi*, *Majja* and *Sandhi dushti*. Hence this disease was considered as *Madhyam marga roga*.⁶ Ayurvedic description of *Asthimajjagat vat* closely resembles with Avascular necrosis of modern medicine. AVN is primarily due to the lack or loss of blood supply. The treatment strategies for aggravated *Vata* includes *sarvang snehan* and *Swedan*. Among of all therapies, *Basti* is the excellent therapy for *Vatashaman*⁷. In this case we administered *Tiktaksheer Basti* along with *majja* so as to promote the *Asthi & Majja dhatu*. *Acharya Charaka & Vagbhata* mention the use of *basti* prepared with *Tikta dravya*, *ksheera*, *ghrita* as the treatment⁸ of *Asthi kshaya* along with use of *Swayoni dravyas*. Also we used *Avgah swedan* by *Nirgundi kwath* gives soothing effect on body. It increases vasodilation which leads to improve in blood circulation. Regarding *Tiktaksheera basti*, *Arundatta* says that the combination of *Snigdha & Shoshna* property produces *Khara* property which is also the *Guna* of the *Asthi*. This nourishes the *Asthi* as per *Samanya Sidhanta*⁵. We used *Majja* in preparation of *Tiktaksheera Basti*. So *majja* also nourishes the *Majja dhatu* as per *Samanya Sidhanta*⁵. If we analyze the *Panchbhautika* composition *Tiktaksheera basti* having predominance of *Vayu & Aakash Mahabhut* hence it can enter any part of the body specially the part having the similar *Mahabhuta* predominance like *Asthi dhatu*. Hence, it can be said that *Tiktaksheera basti* has ability to repair degenerative changes in bone & cartilage. *Tikta dravyas* has properties of *Deepana*, *Pachana*, *Stanya shodhana*, *Lekhana*, *Kled-Med-Vasa upshoshanam*⁹. Which

can help to reduce *Medodushti* & helps in aggragation of *agni* of *meda dhatu* which is indirectly helping to proper formation of *Meda dhatu & utarottar dhatu* i.e. *Asthi, Majja* etc. By *Jalaukaavcharan* the vitiated blood was removed and its place was taken by fresh oxygenated blood and its made the movement of *dosha* free. *Mahayograj Guggul* is mentioned by *Sharangdhar samhita*. In *Phalashruti* it is said that it can be used in all types of *vata vikara*¹⁰. *Guggul* also helps to relieve pain. *Rasnaghanvati* act as *Vatashamak*¹¹. Tablet *Shallaki Plus* contains *Boswellia serrate* extract and *Vitex negundo*. *Shallaki* supports the prevention of excessive joint wear and tear by inhibiting glycosaminoglycan degradation. *Boswellic acid* an important active constituent in *shallaki*, helps in suppressing joint inflammation and pain by targeting key enzymes that facilitate the release of pro inflammatory chemicals in the joints. This can help to breakdown chain of reaction occurring in the form of *Samprapti* at one hand and arrest the progress of disease on the other hand in addition to producing subjective improvement in patient.

CONCLUSION-

The present case study signifies the role of *Tiktaksheer basti* along with *majja* and *shaman chikitsa* in the treatment of *Asthimajjagat vata*. The patient can make significant gains in sign & symptoms in relatively short periods of time. A wholistic approach to the patient with further modifications in the diet pattern which is promoting the *asthi majja dhatus*, daily intake of milk and ghee, with the healthy life styles, administering adequate medicines and *panchakarma* therapy can further yield a better result in such similar cases.

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<p>Sahyadri Imaging Pvt. Ltd. New Advanced 1.5 Tesla MRI 16 Slice CT Scan Ultrasonography Digital X-Ray Patient Code: SI-027522 Name: MR. SUNIL KIRTIKAR Ref. By: Dr. SACHIN BEDMUTTHA MS Orth. Date: 2-Oct-2018 Age/Sex: 35 Y/Male Exam ID: 0202</p> <p>MRI BOTH HIP JOINT</p> <p>Technique: Multiplanar multisequence MR of the hip joints has been performed.</p> <p>Findings: Subarticular altered signal intensities area noted in right femoral head on anterior and superior aspect involving 30-40% area. Loss of normal shape of femoral head is seen with mild flattening. It appears hyperintense on T1W and T2W images (fatty bone marrow). Mild reactive joint effusion seen. STIR images show hyperintense bone marrow signal intensity in right femoral head and neck.</p> <p>Serpiginous subchondral altered signal intensity area is seen in left femoral head which has hypointense rim on T1W1 and hyperintense rim with hypointense centre on STIR (Double line sign). It is involving less than 10 percent area anterosuperiorly. Shape of femoral head is maintained with normal joint space. No evidence of left hip joint effusion.</p> <p>The signal intensity of the ischium, pubis, iliac bones and acetabulum appears normal. The ligaments, muscles and vascular structures are normal. Bilateral SI joints are normal.</p> <p>Thanks for referral Page 1 of 2</p> <p>Dr. D.B. Dahiphale M.D. Rad. Dr. Abhang Apte M.D. DNB Dr. Syed Sajjad DMRD DNB Dr. Sartaj Pathan M.D. Rad.</p>	<p>Sahyadri Imaging Centre New Advanced 1.5 Tesla MRI 16 Slice CT Scan Ultrasonography Digital X-Ray Patient Code: SI-027522 Name: MR. SUNIL KIRTIKAR Ref. By: Dr. SACHIN BEDMUTTHA MS Orth. Date: 2-Oct-2018 Age/Sex: 35 Y/Male Exam ID: 0202</p> <p>MRI BOTH HIP JOINT</p> <p>Impression:</p> <p>MRI of Hip joints reveals -</p> <ul style="list-style-type: none"> Findings suggestive of bilateral avascular necrosis of the femoral head (more on right). Acute bone marrow edema in right femoral head and neck. Grade III on right side and Grade II on Left side (Ficat Arlet staging). <p>Thanks for referral Page 1 of 2</p> <p>Dr. D.B. Dahiphale M.D. Rad. Dr. Abhang Apte M.D. DNB Dr. Syed Sajjad DMRD DNB Dr. Sartaj Pathan M.D. Rad.</p>

End of article

