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My Experience of Kshara Karma in Different Clinical Conditions

Dr. Ravishankar Pervaje

MS (Ay) B.H.U.
Consultant Surgeon,
Sushruta Ayurved Hospital
(Modern Medicine , Maternity & Ayurvedic Speciality Care Hospital)
Near Mayure Theatre, Bolwar, Puttur.D.K.

Introduction:

As a clinician I am presenting my experience of utilizing Pratisaraneeya Teekshna Kshara as external application and also MriduKshara as Internal Medicine in different clinical conditions. At present kshara being used as Internal Medicine in powderform

In some clinical conditions like Mutrakrichra (UTI), Arshas & Sarvanga Shotha etc. and also externally kshara being used in preparing Kshara sutra for application in Piles & Fistula in Ano. In all above conditions kshara powder is used and also they are all Mridu type of kshara.

Actually what Sushruta was told that is – Pratisaraneeya Teekshna kshara in pasteform where as Mridu Kshara is Paneeya Kshara is in Liquidform.

In my Surgical practice I have utilized teekshna kshara in pasteform as sushrutha told, and paneeya kshara in liquid form by which also we can get very good result. Here I will explain way of preparing kshara and its usage according to my experience.

Arshas: - Kshara Karma was famous Para Surgical procedure elaborately explained in Sushruta Samhita in treating Piles.

Pratisaraneeya Kshara is indicated in piles, which is soft extensive deeply situated and projecting ones caused by pitta and rakta; i.e. Second and Third degree internal hemorrhoids with bleeding tendency.

Materials & Methods:

- 1. **Instruments:** Arshoyantra (Proctoscope)-2 types Ekachidra Arshoyantra and Dwichidra Arshoyantra.
- 2. **Pratisaraneeya Teekshna Kshara:** I have used Apamarga Kshara.

Prepration:

Prepared as explained in Sushrutha

Whole plant of Apamarga (Achyranthes Aspera) was burnt to get ash. About one 1kg of ash mixed with 6 times of water to form a solution. This solution is filtered. The filtrates was boiled slowly to reduce it 2/3 of quantity. Then to this about 100gms. of lime

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stone powder was added. Then the solution again boiled slowly. To this solution 10gms. of powder of chitraka, Langali, Vacha, Pravala, was added. Then the solution further boiled to get semisolid, brownish coloured paste like substance, which should be collected in dry glass bottle. This is Pratisaraneeya Teekshna Kshara.

Procedure of Kshara Therapy:

Anaesthesia: According to the need. I have used mostly local Anesthesia.

Position os Patient: Lithotomy Position.

At first dwichidra Arsho Yantra (Slit type Proctoscope) was slowly introduced to the anal canal. Through the slit opening of Proctoscope internal Hemorrhoids bulges in. Then the pile mass was cleansed and brushed slowly. After that Prati Sraneeya Kshara was applied over the pile mass. (1). After about one minute that is shatamatra Kala as explained in Sushruta, the applied Kshara was wiped out by lemon juice. By that time mass of piles reduced in size and its color turned to blackish brown that is Pakwa Jambu Phala varna (2) as explained in Sushruta, then the Proctoscope was removed. Same procedure should be followed in other piles also.

Although Sushruta indicates in cases of multiple piles to deal with one pile at a time, then to repeat the procedure once in a week in other piles. In my practice I have dealt all 3 piles at 3,7,11,0 clock pile masses in a single sitting with the help of modern Anesthesia.

Post Operative Management: _-

- 1. Narayana Taila Basti of about 5ml quaintly twice a day.
- 2. Hot sits hipbath after each defecation.
- 3. Mild laxatives.
- 4. Gandaka Rasayana Tablets and Triphala Guggulu Tablets internally.
- 5. Modern Analgesics and Antibiotics if necessary.

The postoperative management is of ambulatory nature there is no need of Hospitalization after 1st post-operative day. Then treatment is needed for complete wound healing.

Complication: -

- Bleeding: Negligible.
- Pain: It is subjective symptoms. In Kshara therapy slight to moderate pain occurs during defecation, which is relieved by oil Enema and hot sit'z bath.
 - When compare to conventional surgery it is negligible.
- Discharge: Postoperative blackish brown discharge will be there for 3 to 4 days in Kshara therapy.

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- Anal Stricture: If correct technique is followed in Kshara therapy there is no possibility of developing stricture.
- Recurrence: In my practice of these procedures in last 12 years of 2000 cases there is no reported recurrence till date.

Discussion: -

Even though Kshara Karma is well-documented therapy of Sushruta in piles, which is not followed nowadays by surgeons of ayurveda.

Here the difficulty is in preparation of teekshna kshara of correct potency and its proper application in patients.

In the year 1991, I have tried to prepare Teekshna kshara as told in sushrutha samhita. Actually I could prepare teekshna kshara, it's correct potency was not attained, as it could not burn the pile mass so that pile mass become pakvajambuphala Varna in shata matra kala.

"Pile mass becoming pakvajambu phala Varna in shata matra kala was taken as standard." I have tried different combinations of apamarga, shukti choorna (lime stone powder) and chitraka, langali etc. to attain correct potency. At the end the following combination of 1:10:100 ratio of chitraka, langali (for prativapa) limestone (for avapa), Apamarga ash was found to be correct in attaining standard potency of teekshna kshara.

Then after preparing teekshna kshara of correct potency, then I have started its application in different clinical conditions, specially in internal hemorrhoids and other diseases as told in sushrutha samhita. I have used lemon juice (organic acid) to neutralize the kshara after proper burning of piles. In following chart I have explained its probable mode of action in piles. Anyhow in present day practice this kshara can be used safely with the help of modern anesthesia and analgesics to get maximum benefit to patients.

Pratisaraneeya Teekshna Kshara Coagulation of Protien in Haemorrhoidalplexus Cauterises pile mass. Digredation of Hemoglobin leads to seperation of Haem & globin. this Haem gives pakvajambuphala varna.

Necrosis of tissues with obliteration of Haemorrhoidial vein Radical so that necrosed tissue sloughs out as brownish black discharge for 3 to 4 days.

Fibrosis and scar formation of site and permanent obliteration of Haemorrhoidal vein.

Fixation of anal cushions to deeper tissues.

Kshara Therapy Has Many Advantages Over Conversional Surgery:

- 1. Minimum hospitalization only one day
- 2. Less bleeding
- 3. No postoperative bleeding4. Only local anesthesia needed
- No recurrence

Conclusion:

As per my experience of convensional surgery and Kshara therapy in different types of piles, Kshara therapy in treating hemorrhoids of different stages is better procedure.

Bibliography.

- 1. Acharya Sushruta, Sushruta samhita Chikitsa sthana part-I, 34th chapter, shloka no.16, Editor. Kaviraja Ambhika Datta Shastry.11th edition. Varanasi: Chaukhambha Sanskrit Sansthana; 1997.P.151.
- 2. S.Das, A Concise Text Book of Surgery, Chapter no.54, 3rd edition. Calcutta: Dr.S.Das. 13, Old Mayors Court; 2001. P.1062.
- 3. Baily & Love's, Short Book of Surgery, 72nd Chapter. By, R.C.G.Russel, Normens. Williams & Christophar J.K Bulstrode. 24th.Edition. Landon.Arnold a Member of the Hoddar Headline groups 338 Euston Road;2004. P.1252.
- 4. Acharya Sushruta, Sushruta samhita Chikitsa sthana part-I, 36th chapter, shloka no.37, Editor. Kaviraja Ambhika Datta Shastry. 11th edition. Varanasi: Chaukhambha Sanskrit Sansthana; 1997. P.158.
- Acharya Sushruta, Sushruta samhita Sutra sthana part-I, 36th chapter, shloka no.16, Editor. Kaviraja Ambhika Datta Shastry. 11th edition. Varanasi: Chaukhambha Sanskrit Sansthana; 1997, P.138,

Gandakadya Malahara – For Rapid Relief in Mukhapaka

Dr.Sunil V.Mulje

Dr.Maruti T. Narhare

Professor & HOD
Dept.of Rachana Sharir,
Lt. B.V.KaleAyurved College, Latur

Lecturer,
Dept. of Rasashastra,
Lt. B.V.Kale Ayurved College, Latur

Introduction

Mukhapaka is the most predominantly found in daily practice. Mukhapaka (mouth ulcer) is a commonest condition and most Painful.In mukhapaka condition patient has exessivecutting pain in mouth various modes of treatments such as oral analgesics, topical anaesthetics, multivitamins etc. which has many untoward effects. Recurrence is very common and most of the methods of treatment are expensive and requires long duration to get cure.

So, there is need to have a simple method which is having better patient compliance. Various treatments are suggested by acharyas, like kawal, gandush, application of malaharafor management of mukhapaka. Gandakadya Malaharais dahashamak, raktastambha kvranaropak and sandhaniya. Keeping in view these factors application of Gandakadya Malahara is thought in mukhapaka. So a simple method which is having better patient compliance is suggested in this study.

Key words; Mukhapaka, Gandakadya Malahara

Aim

1. To study the efficacy of Gandakadya Malahara in the management of mukhapaka.

Objectives of Study

- 1. To review and analyse the available literature of mukhapaka Ayurvedic and modern medical science.
- 2. To highlight the pharmacological significance of Gandakadya Malahara
- 3. To promote and update it in current medical stream

Materials And Methods

Materials:

- Patients: Patients suffering from mukhapaka attending OPD and IPD
- Literature: literary aspect of study will be collected from classical Ayurvedic and modern texts and updated recent medical journals.

Medicine: The required materials are Gandakadya Malahara will be prepared (Ref: Rasatarangini 21/100-104)

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Methodology:

Inclusive criteria:

- 1. Patients diagnosed as mukhapaka will be included in the study.
- 2. Patients of both sex in between the age group of 16 to 50yrs will included.

Exclusive criteria:

- 1. Patients having mukhapaka secondary to ulcerative colitis, crohn's disease, syphilis and tuberculosis will be excluded.
- 2. Patients with uncontrolled disease like Diabetes and Hypertension will be excluded.
- 3. Patients with infectious disease like HIV and HbSAg will be excluded.
- 4. Patient undergoing treatment of virechana and basti

Study design: Present study is anoncomparative observetional clinical study.

Sample size: 30 patients of mukhapaka randomlyselected for the study.

Procedure: GandakadyaMalaharawill be applied locally, for 7 days, before and after meals.Pathyaapathya will be also explained.

Parameters of study: Following parameters will be considered for the study.

- 1. Shoola (pain): Assessment of pain gradation before and after treatment based on 3 degrees i.e. Mild(+), Moderate (+ +), Severe (+ + +).
- 2. Raktasrava (Bleeding): present or absent, before and after treatment.
- 3. Length of ulcer

Criteria for assessment: Criteria for assessment will be based on

A. Relief of symptoms before and after treatment

The results will be scored as

Complete relief - above 75% improvement,

Moderate relief - 50 to 75% improvement,

Mild relief - 25 to 50% improvement,

No relief - below 25% improvement.

B. Length of ulcer

Length of ulcer based on the results categorized as below,

No change in ulcer - no relief,

Partial healing - Moderate relief,

Complete healing - complete relief.

C. Overall assessment is done based on the improvement in parameter score before and after treatment which will be subjected to statistical analysis.

Observations & Results

Observations obtained on the basis of methodology followed are as below.

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Table. showing distribution of patients according to age

Age	Study Group
15 – 25 yrs	10
25- 35	10
35 - 45	10
total	30

Table Showing Percentage of Relief in Each Symptom of 30 Patients of mukhapaka

Symptoms	Before treatment	After treatment	Difference	% of relief
Pain in mouth	30	4	26	84
Bleeding from ulcer	14	3	11	79
Length of ulcer	14	12	2	100

Results:

- 1. Gandakadya Malahara purifies the wounds, lyses the debris and enhances healing process by decreasing swelling & inflammation of mukhapaka
- 2. Gandakadya Malaharais a cost effective best alternative to available ointments for the treatment of mukhapaka
- 3. This ointment is used for dressing purpose for all kind of wound (acute or chronic) irrespective of cause.

Conclusion:

- It is cost effective and non laborious remedy to treat wounds.
- > Standardization and marketing of Gandakadya Malaharais needed.
- Gandakadya Malaharais a best alternative to available ointments for the treatment of various wounds.
- Medical practitioner should be made aware of this multidimensional drug.

Bibiliography

- Vaidya Yadavaji Trikamaji Acharya, Charaka Samhita, Varanasi, Choukambhasamskritasamsthana, 4th edition 1994.
- Acharya Vagbhata , Ashtanga Hrudaya, Aruna Datta's Sarvangasundara and Hemadri's Ayurveda rasayana Sanskrit commentary edited by Pt.Hari Sadasiva Sasthri Paraadakara, Chaukamba Sanskrit Sansthan, Varanasi, Reprint edition 2012
- 3. Acharya Sarngadhara, Sarngadharasamhita, edited by Sreekantha Murthy, Chaukamba Sanskrit Bhavan ,Sixth Edition 2006

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- Acharya Susrutha, Susrutha Samhita, Dalhana's Nibandhasangraha Sanskrit commentary edited by YadavjiThrikamji Acharya, Chaukamba Krishnadas Academy Publications, Reprint edition 2008.
- 5. D.P. Panditrao's translated Sashryog published by centra council of research in Ayurveda and siddha, New delhi.
- Dr. Somen Das, A concise Text Book of Surgery, Dr. S. Das, Culcutta, 5th edition, 2008, page no. 1074-1076
- 7. Monier Williams Sanskrit English Dictionary.Chaukhambha Sanskrit Series, 1st edition. Varanasi: page no.1333
- 8. Bailey& love's Short practice of Surgery. Edited by- Russell (M.S. FRCS), Norman S Williams (FRCS), Christopher J.K. Bulstrode (FRCS), Arnold Hodder Headline group; London, 24th Edition 2004; Chapter no.27 page no. 341-350



The Role of Medhyrasayan And Nasya in Writers Cramp - A Case Study

Dr. Vandana Digambar kamble (Ghate)

M.D. Kayachikitsa(Mumbai)
Professor and H.O.D (kayachikitsa)
Late.B.V.Kale Ayurveda Medical
College And Hospital,Latur

Dr. Aruna S. Rupnar Assistant Professor, Sharir Rachna Department, Late.B.V.Kale Ayurveda Medical

College And Hospital, Latur

Abstract -

Writers cramp is a focal dystonia of the finger, hand, or forearm. Focal dystonia of the hand is a neurological movement disorder. Writers cramp is known as task - specific dystonia affecting the action of writing but no other task graduation of synaptic strength. According to Ayurveda it comes under vatavyadhi as neurological and musculoskeletal disease symptom. In this case patient has advised Nasya and medhyrasayan. According to Ayurveda text, Nasya is advised in vrudhavajatrugatavyadhi and vatavyadhi and medhyarasayan is effective in neurological disease as jaravyadhi Nashan.

key words - writers cramp, Medhya rasayan and Nasya.

Introduction -

writers cramp is considered as a vatavyadhi owing to its chronicity as it occurs in old age and due to neurological and musculoskeletal system disease. Symptoms of writers cramp vary from person to person and include unusual positioning of the fingers, wrist or the elbow and muscle Spasms, and cramping of the fingers, hand or forearm while writing. Sometimes uncontrolled involuntary movement or tremors may occur. for most people no causes are found although it can be related to repetitive movement performed over many years. In some cases a genetic cause may be found if the writers cramp is a part of more generalized dystonia. It is generally accepted that writers cramp is in part related to a problem with the functioning and connection of the various areas of the brain including the basal ganglion and cerebellum. There is no known cure for writerscramp, but there are treatment options to reduce the severity of the symptoms. Hence this case study was undertaken to relieve the signs and symptoms of the writers cramp.

A Case Report -

A male patient of 58 years retired teacher came to the out patient of kayachikitsa of LBV kale ayurveda medical college and hospital 12/4/18 suffering from(RT) hand writing problem since 3 months. Patient has no more complaint rather than cramp. He has no H/O major disease or chronic illness, No other neurological symptoms like muscle wasting and reduced muscle tone was there in that patient. He has consulted to neourophysician also. But

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satisfactory relief has not got to the patient so patient has developed (LT) hand writing skill gradually.patient s general health was good .Both , physical and blood tests were within normal range.

O/E-

- Nadi 78/min niyamit
- Mala Niram no H/O constipation
- Mutra Samyaka
- Jiva Alpasam
- Shabda samyak
- Spqrsha Anushhashita
- Drik samyaka
- Akriti Madhyam
- Prakriti kaphapradhanvata
- Agni Madhyam
- Kostha Madhyam
- Nidra prakrut
- ♦ family history nil
- ♦ past history nil
- ♦ dietary history only vegetarian

Treatment Plan –

Patient was prescribed with deepan and pachanchikitsa for 7 days with 7 days Nadya with panchendriyatail. After 7 days patient has given internally saraswatharishta (suvarnayukta) 20 ml 2 times after meal mixed with water for 1 month. After 1 month patient has advised to take capsule palsineuron twice daily after meal for 1 month and simultaneously again panchendriya tail nasya 2 to 4 drops has used at night while sleeping. After 2 month, patient has Improved in writing skill.

Discussion -

According to Ayurveda , writers cramp come under vatavyadhisaras watharishtasuvarnayukta is used as Medhyarasayan as it contains bruhan and rasayan property required old age and capsule palsinuron contains Mahavatavidhwansras , sameerpannag Ras , ekanveerras , sootshekarras and khurasaniowa and Lajari whole plant powder. All above ingredients has Vata shaman property. This drug is used as a maintainancedrug. For analysis of the writers cramp only one subjective analysis is used which is very easy for patient. One notebook is kept for handwriting improvement for the

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patient during 2 months treatment period.patient has advised to write 2 lines par day in a notebook. day by day patient was improving his writing skill and he get satisfied.

Conclusion -

From above case study, it can be stated that Ayurveda management can cure the case of writers cramp effectively.But it is needed studied in a large scale.

Bibliography – Harrison's manual of medicine 19th edition.

- 1. Charak Samhita Dr. Bramhanand Tripathi Chaukhamba.
- 2. Dr.Bramhanand Tripathi Character samhita 11th edition chaukhmbasurbharatipublication , Varanasi.
- Dr.Ambika dattashastri sushrutasamhita -14th edition- chaukhamba Sanskrit publication , Varanasi.
- 4. Vd. Yadaunandan Upadhayaya Ashtanghridaya 14th edition chaukhamba Sanskrit publication Varanasi.
- 5. Pt.kashinathshastri Rasayarangini 11th edition Motital Banarasidas publication, Delhi.
- 6. Dr.Krishnakumar Vishavigyan 1st edition Ayurvedic Evum Tibbi Academy ,Lucknow.
- 7. Dr.Prakash Paranjape Indian medicinal plants forgotten healers -1st edition chaumbha Sanskrit Prathisthan, Delhi.
- 8. R N Chopra , IC Chopra Chopras indigenous drugs of India 2nd edition U N Dhur and (P) Ltd .Kolkata.
- 9. Dr.K M Nadkarni Indian Materia Medica volume 1-2nd edition Bombay popular prakashan.
- 10. The wealth of India raw materials vol 3 Revised edition 1952 council of scientific and industrial research, New Delhi.
- 11. The Ayurvedic Pharmacopoeia of India- part 1- vol 3-1st edition government of India ministry of health and family welfare department of ISM and H.



Eye Donation – A Charity

Dr. Sunil Anantrao Walewadikar

MS. Shalakya tantra Professor, Dept of Shalakya tantra Late B.V. Kale Manjara Ayurved Medical College, Latur

Abstract -

The eye is the window to the world, at the same time it is window to the soul – Shakespeare. This indicates importance of eyes to human being. In present life style diseases of eyes are increased. A use of spectacle is also seen commonly. Vision affecting diseases are seen more in number. Loss of vision, blindness due to corneal affections is more in corneal blindness patient losses its vision due to damage opaque cornea, considering remaining part of eyes are in normal condition. So replacement of cornea is the treatment. That is in short eye donation.

Key words – Cornea blindness, eye bank, donor, recipient

Introduction -

In India, we have 4.6, million people with a corneal blindness that is curable through corneal transplantation made possible by eye donation.

Cornea is the clear transparent surface at front of eye. When cornea becomes cloudy due to diseases, injury, infection vision will be lost. At this stage corneal transplant is the surgical treatment from healthy donor cornea.

More than 90% of corneal transplantation is carried out successfully and helps in restoring vision in people with corneal blindness when infants born with cloudy cornea, corneal transplantation a big difference to their lives.

Aim and Objective -

- To increase Awareness in society about eye donation.
- To reduce the phobia of eye donation.
- To give clear idea about corneal blindness and transplantation.

Corneal Blindness & Cure -

Cornea is clear transparent covering of front of eye and it is focusing element of eye. Vision is drastically lost due to cloudy cornea. This loss of vision is called corneal blindness.

Removal of this damaged cornea and replacing it with healthy cornea by surgery is only cure for corneal blindness.

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Review of Literature -

About Donar

- Eye Donors could be of any age group or sex.
- Peoples with blood pressure, diabetes, Asthma, with spectacles can donate eyes after death.
- The person who wants to donate his/her eyes after death, Should inform to his family members about it. A donor card can serve as an indication to family.

Who cannot donate eves-

Peoples with Aids, Hepatitis B, Rabies, Septicemia, Blood cancer, Tetanus, meningitis can't donate eyes.

Donors Relatives Duty

- Close eye lids of deceased person erdisciplinary
- Switch of fan directly over deceased.
- Raise head and place pillow underneath.
- Contact eye bank, quickly, with correct location.
- If death certificate is available keep it ready.
- Eye donation can be done with written consent of next kin in presence of two witnesses.
- Eye should be kept wet by sprinkling water so that cornea does not become dry till the eye surgeon arrives.

Donation Process of Eyes –

Surgical removal of eye is performed soon after death ensuring the eye is in best condition for transplant. Eyes donation is an act of donating one's eye after his/her death. This is helpful to only corneal blind persons not others. It is act of charity, purely for benefit of society and is voluntary eye donation should be encouraged in large scale to enable another person obtain vision is one of the best form of charity. Even after the death donors lives in the eye of recipient. Eyes from a dead person can enable two blind people to acquire vision.

Eye of dead person can be used only if they are taken out within six hours of death. Removal of eyes, eye lids will be stitched together. Entire process completes within 10-15 minutes.

After Eye Donation

- Eyes are taken to eye bank and evaluated by eye bank staff.
- Some tests are carried out and cornea is sent to corneal surgeon
- Recipient is called for corneal transplant.

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• After corneal transplant is performed periodic follow up of recipient is done to ensure the graft is successful.

Eye Bank -

Eye bank is charitable organizations and not for profit. They are purely for benefit of society. The Eye Bank facilitates removal of eyes, evaluate of eye, distribute them to needy. Trained staff should be available round the clock to attend call. Increase public awareness on eye donation. Train doctors in eye removal procedure. Enable corneal research using eyes unsuitable fir grafts.

Discussion -

It is duty of every human being to increase awareness of eye donation in society. Encourage the people about it. It is charitable work in the interest of corneal blind people who can see this beautiful world. This is done by only positive thinking. It is free of cost. One person can give vision to two blind people. You have to take information about eye bank in your city only and call to eye bank after death.

Summary -

Help the corneal blind humans. You have to contact with eye bank with donor. Do it by heart and with sensitivity. It gives pleasure to helping mind and hands.

References -

- 1. Krishnaiah S, Kovai V, Nutheti R, Shamanna BR, Thomas R, Rao GN. Awareness of eye donation in the rural population of India. Indian J Ophthalmol. 2004;52:73–8.
- 2. Rekhi GS, Kulshreshtha OP. Common causes of blindness: A pilot study in Jaipur, Rajasthan. Indian J Ophthamol. 1991;39:108–11.
- 3. Dandona L, Dandona R, John RK. Estimation of blindness in India from 2000 through 2020: Implications for the blindness control policy. Natl Med J India. 2001;14:327–34.
- 4. Saini JS, Reddy MK, Jain AK, Ravinder MS, Jhaveria S, Raghuram L. Perspectives in eye banking. Indian J Ophthalmol. 1996;44:47–55.
- 5. Kannan KA. Eye donation movement in India. J Indian Med Assoc. 1999;97:318–9.
- 6. Dandona R, Dandona L, Naduvilath TJ, McCarty CA, Rao GN. Awareness of eye donation in an urban population in India. Aust N Z J Ophthalmol. 1999;27:166–9.
- 7. Saini JS. Realistic Targets and Strategies in Eye Banking. Indian J Ophthalmol. 1997;45:141–2
- 8. Diamond GA, Michael C, Mussoline JF, D'Amico RA. Obtaining consent for eye donation. Am J Ophthalmol. 1987;103:198–203.

Changes in Hridaya With Jaraawastha W.S.R.Ageing - A Physiological Review

Dr Sunil Mahindrakar

Dr Sanyogita R Londhe

Prof.Kriya Sharir Dept.

Asst-Prof. Kriya Sharir Dept.

Late B. V. Kale Manjara Ayurved Medical College & Hospital, Latur.

Late B.V. Kale ManjaraAyurved Medical College & Hospital, Latur.

Abstract

Ageing is spontaneous process, which stars with conception and ends with the death. Acharya Charka has mentioned the growth period that is up to the age of 30yrs. After that the growth stops and ageing start to continue.

Ayurveda believes the jara (ageing) is natural phenomenon like hunger thirst and sleep. Acharya sushruta has explained them in Swabhav Bala Roga and these includes Jara as well as mrutyu. Vagbhata and Sharangdhara has described the ten Phasic sequential biological changes taking place during first to tenth decades of life.

The physiological changes in functions of hridaya and related dosha dhatu have been discussed in this article.

Keywords: Jara, Hrudya, Mana, Sharira etc.

Introduction

Jara (Aging) is both a complex and challenging scientific problem and a fact of universal concern.

Ayurveda, deals with physical, social, psychological as well as spiritual wellbeing of an individual. Ayurveda also gives attention towards psychosomatic approach of ayu.

According to Ayurveda, heart is location of Mana (Psych). Aging is slow and continuous process, which affects various organs tissues at different time. Different classical books have mentioned a lot of signs and symptoms of jaraawastha. These include both physical and mental sign & symptoms.

Ayurvedic classics have given a detail version on the biological aspects of aging inclusive growth, puberty and senility. In present scenario due to improper dietary habits, defective life style, excessive stress and lack of exercise, the process of ageing starts very earlier. These factors produce various degenerative changes as well as metabolic disorders in our body.

Some diseases and conditions that are common in old age are osteo-arthritis, hypertension, urinary incontinence, diabetes mellitus, arthritis, atherosclerosis, cardiovascular disease, cerebrovascular accidents, respiratory disease, senile dementia, delirium, confusion etc. Jara (aging) management in present time is a challenging task for present health providing system.

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Aim and Objectives:

- 1. To re-evaluate, discuss, and elaborate the various Ayurvedic concepts related to effect of jara(aging) on Hridaya(Heart).
- 2. To understand the health-related problems of the elderly specifically related to heart; aging is a risk factor for heart diseases and its management in ayurveda.

Review of literature

- In Ashtanga Hridaya of Arunadatta and Ayurveda Rasayana commentary of Hemadri explained details about hridya.
- Sushruta in sharir sthan and Sharangdhara elaborated in detail about Hrudya.
- In Charak samhita Agnivesha explained about jaraawastha.

Materials and Methods:

This article is based on a review of Ayurvedic texts. Materials related to (Jara) aging, Hridaya, and other relevant topics have been collected. The main Ayurvedic texts used in this study are Bruhatrayi and Laghutrayi and available commentaries on it. We have also referred to the modern texts and internet media to collect information on the relevant topics.

Table 1. Different biological changing factors during different decades of life

Decades	Year	Sharangadhara Samhita	Ashtangsangraha/ Hridaya
I st	0-10	Balya (Childhood)	Balya
II nd	11-20	Vruddhi (Growth)	Vruddhi
Ⅲ rd	21-30	Chabi (Complexion)	Prabha
IV th	31-40	Medha (Intellect)	Medha
V th	41-50	Tvaka (Skin texture)	Tvaka
VI th	51-60	Drusti (Vision)	Shukra
VII th	61-70	Sukra (Virility)	Drusthi
VIII th	71-80	Vikrama (Strength)	Shrotrendriya
IX th	81-90	Buddhi (Cognitive power)	Mana
X th	91-100	Karmendriya (Locomotive ability)	Sparshanendriya

Ageing is heterogeneous. It varies widely in different individuals and in different organs within a particular individual. Ageing is not a disease; however, the risk of developing disease is increased, in old age. Many degenerative changes related to heart have been seen jaraawastha (Ageing).

They are as follows:

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Cardio-vascular disorders - Hypertension (Vyana bala vaishamya), Ischemic Heart Disease.

Ageing changes in the Cardio vascular system: Age is the major factor for cardio vascular disease. Heart diseases and stroke incidence steeply raises after the age of 65. Accounting for more than 40 percent of all deaths among people age from 65 to 74 and almost 60 percent at the age of 85 and above. People age 65 and much more are likely than younger people to suffer heart attack, to have stroke or to develop coronary heart disease and high blood pressure leading to heart failure.

Atherosclerosis in turn is the underlying cause of most cardio vascular diseases. Angina that is the chest pain caused by the temporarily reduced blood flow to the heart muscle causing pain the chest, in the left arm or between the shoulder and abnormal heart beats are found in ageing heart. Shifts in the circulation of blood to various organs can also change the blood flow to kidneys may decrease 50 percent and to brain by 15 to 20 percent.

Finally, heart murmurs are more common with age because our heart valves become flexible and calcium deposits build up.Blood vessels become stiff and less responding to hormones which relax the valve of vessel and thus result in increasing systolic blood pressure. Due to lipid deposition and collagen degeneration, valve in the chamber of heart becomes thick and stiff. Cardiac muscle becomes stiff due to changes in connective tissue, thus decreases response to catecholamine, the barrow receptors which monitor blood pressure and results in hypertension.

Jaraavastha, Hridaya (Heart) and Dosha

Ayurveda states predominance of dosha according to different stages of age. According to Ayurveda, during childhood KaphaDosha is predominant, in middle age Pitta and in old age VataDosha becomes dominantⁱ. Functions of dosha related to hridaya affected in jara shown in table given below.

Sr no Type of Vatadosha **Physiology Manifested symptoms** 1. Prana Vayu Udgara(belching), frequent belching due to Nishvasa(breathing), delayed digestion, AnnaPravesha(deglutition) exertion dyspnea, difficulty in deglutition 2. Udana Vayu VaakPravrutti (speech), Indistinct or unclear speech (loss of teeth), Bala (strength), Varna(complexion), diminished strength, complexion and memory Smruti(memory)

Table 2. Functions of Vata Dosha affected in jaraawastha.

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Table 3. Functions of Pitta Dosha affected in jaraawastha.

Sr. no	Type of Pitta Dosha	Physiology	Manifested Symptoms
1.	Sadhaka Pitta	Buddhi-Medhadi Mano arthagrahana (intellectual perception)	Psychological changes

Table 4. Functions of Kapha Dosha affected in jaraawastha.

Sr.no	Type of KaphaDosha	Physiology	Manifested symptoms
1.	Avalambaka	Trika Avalambana	Reduced functions of
	Kapha	(protection of mediastinum)	cardiovascular system

Jaraawastha, Hridaya (Heart) and Dhatu

Oja: According to Ayurveda, the essence of all seven Dhatu is Oja. The same is Bala and is responsible for resistance against diseases i. e., Vyadhikshamatva shakti. The seat of Ojas is Hridaya. Ojas is able to nourish and strengthen the Dhatus, giving energy, provides happiness, lustre, and balances the function of Indriyas. In old age as the Kshaya of Saptadhatus is observed, naturally it leads to Ojokshaya.

Ojokshaya is again of three types;

- 1. Ojovisramsa
- 2.Ojovyapat Sandhivishlesha, Gatrasadan. Dosachyavana, Kriyasannirodha. Stabda, Gurugatrata, Vatasopha. Glani. Tandra, Nidra, Varchobheda.
- 3. Ojokshaya Murcha, Moha, Manasakshaya; Pralapa, Marana.

Thus, the aging (Jara) which in an inevitable process involves a structural & functional change in the body and the role of Dosa, Dhatu; Mala, Satva. Agni, Srotas. Ojas has been considered with respect to the aging process. This unique concept, which is hidden in Ayurveda, shows that the methods to minimize or delay the inevitable process are already known by the ancient Acharyas and was the secrets behind a healthy longevity in the context of the cont

Jaraawastha, Hridaya (heart) and srotas

In Ayurveda Hridaya is known for moolsthana of pranvahasrotas. Srotas are the channels of body which transfer the body fluids. The Srotodushti (pathological changes in Srotas) leads to various diseases and the main cause for Srotodushti is vitiation of Vata and Mandagni (reduced digestive power) which is predominant in old age.

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Reasons of akala jajara:

Jara is divided in two types kalaj and akalaj i.e. premature ageing. Acharya Charaka and Vagbhata have clearly described the etiological factors for initiating the early ageing process. All these etiological factors for Jara(ageing) can be differentiated in three categories, **Aharatmakhetu**, **Viharatmakhetu** and **Mansikhetu**.

Asatmyaahara (unwholesome diet), Vishamashana, Adhyasana etc. leads to agnidushti and senility.

Viharatmakahetu of jara comprise divaswapna, ativyavaya, ayasa and vishamaatimatravyayama etc.

Bhaya, krodha, shoka, lobha, moha etc. are the factor responsible for the senility.

Rasayana

Rasayana word is made up of two words "Ras" means "nutrition" and "Ayana" means circulation or promotion.

Rasayana is one of eight main clinical disciplines of Ashtanga of Ayurveda, in which study of jara (ageing), hetus of jara and its prevention is carried out. Rasayana (rejuvenation) therapy affords a comprehensive physiological and metabolic restoration

.Ayurveda describes that a person undergoing Rasayana therapyattains longevity, improved memory, intelligence, freedom from diseases, youth, excellence of luster, complexion and voice, optimum strength of physique and senses, command over language, respectability and brilliance. Rasayana drugs act primarily at the level of Rasa dhatu (promoting nutrient value of plasma), Agni (improved digestion and metabolism) and Srotas (cleaning up the micro channels leading to better perfusion of tissue).

Conclusion

- Ayurveda, almost all ayurvedic classics have mentioned a lot of signs and symptoms of jaraawastha.
- ➤ These include anatomical, physiological and psychological signs and symptoms related to hridaya (heart).
- The kalajjara is mentioned as a swabhavik vyadhi, which cannot be prevented by drugs or any other things but Akalajjara is early ageing process.
- ➤ Jaraawastha may be prevented by rasayana. Ayurveda has a branch rasayana tantra to maintain the normal peaceful longevity of elder people.

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Bibiliography

- 1. Paradakara HSS. Ashtanga Hridaya with Sarvangasundara commentary of Arunadatta and Ayurveda Rasayana commentary of Hemadri. Reprint edition. Chaukambha Sanskrit Sansthan, Varanasi (India); Sutra sthana 1/8, 2009.
- 2. Singh Ram Harsh. The Contemporary Strength of Ayurvedic Geriatrics. Annals of Ayurvedic Medicine. 2012; 01(1&2): 22-30
- Srikanth N. Ayurvedic Management of Select Geriatric Disease Condition. CCRAS New Delhi. 2011.
- 4. Singh Ram Harsh. Manual on Geriatric Health Care. Department Of AYUSH, Ministry Of Health and Family Welfare, Govt. Of India, New Delhi, India and Faculty Of Ayurveda, Banaras Hindu University, Varanasi, 2009.
- 5. Babu Suresh. Geriatric In Ayurveda Chaukhambha Oriantalia, Varanasi. 1st Edition 2001,
- 6. Acharya Sushruta, Sushruta samhita Editor. Kaviraja Ambhika Datta Shastry. 11th edition. Varanasi: Chaukhambha Sanskrit Sansthana; 1997.
- 7. Acharya Charaka, Charaka Samhita, Pt.Kasinatha Shastri & Gorakhanath Chaturvedi.23rd Edition, Varanasi: Chaukhambha Vishvabharati;1996.



Aahara Vidhi Vidhaan - Ayurvedic Code For Diet Consumption

Dr. Rajendra M. Nirgude

Associate Professor & HOD. Dept. of Sanskrit Samhita & Siddhanta, Late B V Kale Ayurved Medical College & Hospital, Latur.

Abstract -

Ayurveda is a science of life. It not only provides curative measures but also suggests preventive principles for healthy & long Life. Ayurveda is a health science, a life style & an art of appropriate living which ensures health of human being. To keep life in healthy status Ayurveda mentioned various measures through classics. One of them is Aahara Vidhi Vidhan. It means the rules for diet consumption. For healthy life not only healthy diet is must but also some codes or rules are as important. Food should be always hot & unctuous in quality. One should eat at regular time interval & after the digestion of previous food. The code says one should not over eat food or should not do fasting. Also one should consume food which is good & suitable for him or her. One should not talk or laugh while eating as it may disturb the digestion process. Eating is an important process in our daily regimen, so mind of the individual should be very calm & stable during diet consumption. Food consumed in proper manner builds the body in proper way & if consumed in wrong manner leads to various diseases. Thus Aahara Vidhi Vidhan (dietetic code) & proper diet mentioned in Ayurveda will definitely conquer the diseases in the body, keeps the body in healthy & will prevent the formation of diseases.

Key words – Ayurveda, Aahara Vidhi Vidhan, Aahara, Food

Aims & Objectives

- 1) To know the rules of food consumption mentioned in Ayurvedic classics.
- 2) To know the efficacy of these rules to overcome the problems arising due to not following the proper regime of diet. w aiirjournal.com

Introduction

In Ayurveda three Upstambha (Pillers) are mentioned which holds the life in healthy status. These are Aahara (Diet), Nidra (Sleep) & Bramhacharya (Celibacy)¹. Amongst these Aahara is the first & important Piller about which Ayurveda mentioned various informative principles through classics. According to Acharya charka, food helps in sustenance of the life of human beings. Complexion, clarity, good voice, longevity, intelligence, happiness, satisfaction, nourishment, strength, intellect etc depends on food². One should follow certain rules before consuming the diet as mentioned in Ayurveda. These rules are called as Aahara vidhi Vidhaan.

When to consume food? What quality of food? How much quantity of food? At what place it should be consumed? What are the rules regarding food consumption? Is this

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food is good for me or not? All these questions have been answered by Ayurveda through various classics thousands of years ago. We got various dietary problems due to not following the rules while consuming the food. It got a name in today's era as Life style disorders. Due to not following such rules one has to suffer various kinds of problems such as indigestion, acidity, constipation, gaseous distention, loss of desire for food, various skin conditions, nausea, vomiting etc. Hence to overcome all these problems one should go through Ayurvedic code available in Ayurvedic literature regarding food consumption.

Literary study -

In Ayurveda Ashtavidh Aaharvidhi Visheshayatana are mentioned regarding the quality of diet substances. In these eight qualities one is Upyokta³ i.e. the one who consumes the diet. Upvokta is responsible for the diet he/she consumes, because taking good diet without taking care of diet rules is also harmful . Upvogsanstha⁴ is the last one in Ashtavidh Aaharvidhi Visheshayatana. It means the code for diet consumption. Hence one should look after the rules for diet, mentioned in Ayurveda under Aahara Vidhi Vidhan. These are as follows-

- 1) Usnamashniyat⁵ (food consumption at warm stage) First rule regarding the diet is it should always be in *Ushna* (hot) in condition. Hot food enhances Agni (digestive fire) which helps in proper digestion food. It also helps for good bowel movements (*Vaatanulomana*).
- 2) $Snigdhamashniyat^{6}$ (food consumption in unctuous stage) One should take food of Snigdha (unctuous) condition, as it helps in digestion, increases peristaltic movements, decrease Vata dosha, nourishes the body & sense organs, increases the strength etc.
- 3) $Matravataasnivat^7$ (food consumption in proper quantity) It is a very important point as consuming food in too much quantity (Atimatrayukta) & in too low quantity (Hinamatrayukta) causes various kinds of digestive disorders. One should consume food as per the strength of their Jathara Agni (Digestive fire). Food taken in proper quantity increases strength, nourishes the body, good skin complexion & prolongs life. There are some
- 4) Jirne Ashniyat ⁸(food should be consumed after complete digestion of previous food)
 - This is very important rule as one should be very conscious about the timing of food. One should eat food when the previous food get digested completely & if there is urge of hunger. Consuming food when the previous food has not been digested completely may cause mixing of partially digested previous food & new food. Ultimately it leads to Agnidushti & tridosha Prakopa which causes ajirna.

- 5) Viryaviruddhmashniyat⁹ (Food consumption which are not antagonist)
 Consuming food of different potency or Virya may cause various problems of Tidosha. Also it causes various kinds of skin diseases like Kushtha, Visarpa etc. Hence two opposite quality foods should not be consumed with each other e.g. food of hot potency & cold potency.
- 6) Ishta deshe ishta sarva upkaranam ashniyat¹⁰ (food should be consumed at favorable place with reqired accessories)

 One should consume food in favorable condition with all types of required accessories because as per Ayurveda one's mind should be very calm while eating and it should not contain any grief, anxiety, unpleasant atmosphere. It affects on the proper digestion of food and various diseases can occur with consuming food with disturbed mind. In this rule psychological effect of mind on the digestion has been described.
- 7) Na atidrutam ashniyat ¹¹(do not consume food too quickly)

 One should not consume food very quickly. It hampers proper digestion which starts from mouth. Ultimately it causes various problems like indigestion, acidity
- 8) Na ativilambitam ashniyat¹² (do not consume food too slowly)

 One should not eat food too slowly because we cannot get the satisfaction of diet & diet becomes cold. It causes digestive problems.
- 9) Ajalpan, Ahasan, Tanmana Bhujita¹³ (food should be consumed without laughing, taking & with concentration)
 Talking & laughing is not allowed while consuming food. Due to this the food may enter into wrong path causing sever coughing reflux. Also talking & laughing alters concentration from food & it may cause in over eating or less eating.
- 10) Aatmanamabhisamikshya Bhujeet ¹⁴(consume the food which is suitable to you)

 Before eating one should think about the quality food. Is it suitable for me? Can I digest this quality & quantity of food? Is it good to eat food at this time? So one should consume food in prescribed manner with regard to own self.

Discussion -

After going through the *Ayurvedic* code for diet one can understand the importance of diet in daily regime. Diet is an important part of life. Many diseases occur due to irregular timing, irregular quantity and irregular habits of food. Taking food with high or low quantity is not good as it may hamper the proper digestion of the person. Also consuming food at irregular time & in irregular quantity may cause gastric disturbances. One should not eat food up till there is an urge for hunger if the previous diet has not been

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digested completely then the new diet entering into the tract may cause indigestion. Some people have the habit to eat food when it is cold or the food is prepared many times before. This could again lead into the disturbances of digestive power. So keeping in mind all the above code for diet one can be live healthy life.

Conclusion Consumption of diet is not only option to fill the cavity but it is *Yagnya* (A Holy Work).

Aahara consumption is not enough to keep life in healthy state. To receive the total benefits of the Aahara it is also necessary to have knowledge about Aaharavidhividhan. To keep life in healthy state one should be very conscious regarding the code of diet consumption. In today's life style no one is observing these rules and intern they get various digestive disorders. We can say that proper application of these rules is effective in maintaining of positive health & it may also help as a curative aspect for the diseases. Finally we can conclude that diet & code for diet consumption are very important aspect of life.

References -

- 1) Charak samhita with charaka chandrika hindi commentary, by Dr.Bramhanand Tripathi and Dr. ganga Sahay Pandey, sutra sthana chapter no.238, Chaukhamba Surbharti Prakashan, 2007.
- 2) Charak samhita with charaka chandrika hindi commentary, by Dr.Bramhanand Tripathi and Dr. ganga Sahay Pandey, sutra sthana chapter 27, verse 349-350, page no.544, Chaukhamba Surbharti Prakashan, 2007.
- 3) Charak samhita with charaka chandrika hindi commentary, by Dr.Bramhanand Tripathi and Dr. ganga Sahay Pandey, vimana sthana chapter 1, verse 21/7, page no.665, Chaukhamba Surbharti Prakashan, 2007.
- 4) Ibid p.665
- 5) Ibid, verse24/1 p.666
- 6) Ibid, verse24/2p.666
- 7) Ibid, verse24/3 p.666
- 8) Ibid, verse24/4 p.666
- 9) Ibid, verse24/5 p.666
- 10) Ibid, verse24/6p.666
- 11) Ibid, verse24/7 p.666
- 12) Ibid, verse24/8 p.666
- 13) Ibid, verse24/9 p.666
- 14) Ibid, verse24/10 p.666

Modus operandi of Nasya Karma -Scientific Review

Dr. Anand M. Pawar

Dr. Sumol M. Bhosale

M.D.(Panchakarma),GAU, Jamnagar

MD,(Rachana Sharir)

Prof, HOD, Panchakarma Dpt.

Late B.V.Kale Ayurved College and Hospital, Latur

Abstract:

Ayuveda is a science of life not only cure the disease but prevents it and helps to remove the toxins from the body with the help of Panchakrma, it includes Vaman, Virechana, Basti, Nasya and Raktamokshan. Nasya is one of the Panchakarma which helps to remove the morbid or vitiated toxins from the head and neck region (Urdhwajatrugata). in present conceptual study the probable mode of action of nasya karma has been discussed according to Ayurveda and Modern point of view. Which in turn helps to understand the utility and functional ability of Nasya karma

Key words: Panchkarma, Shodhana, Nasya, Abhyanga, Karma, Urdhwajatrugata, etc

Introduction:

Since ancient times, India is known world wide for its splendid civilization (culture) has its own system of medicine, & that was Ayurveda system of medicine. It is difficult to find its root but glimpses points that Indian culture origins from Vedic time. In the history of Ayurveda also, it is indicated that "Ayurveda is the science of life which is Eternal & immortal."

In Ayurveda two basic principle treatment modalities mentioned called Shaman (Palliative) and Shodhan(Purificative) treatment. Panchakarma includes Vaman, Virechana, Basti, Nasya and Raktamokshan. Out of these five Nasya is a Shodhana karma used in Urdhwajatrugat Vyadhi, that means diseases of head and neck region. Acharyas like Charka, Sushruta, Vaghbhata and others mentioned detail description of Nasya, its classification, indications, contraindications and its mode of action, in present article modus operandi of Nasya karma from Ayurved and Modern point of view has been discussed.

Aims and objectives:

- 1. To understand mode of action of Nasya karma from Ayurved point of view.
- 2. To understand mode of action of *Nasya karma* from modern point of view.
- To correlate between them.

Conceptual review:

Etymological Derivation of *Nasya*

The word *Nasya* is derived from '*Nasa' Dhatu*. It conveys the sense of Gati-motion (Nasa Gatau) & *Vyapti* means pervasion (*Nasa Vyaptau*). In Ayurvedic texts, *Nasa Dhatu* is used in sense of nose (*Nasa Nasikayam*)

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Definition of *Nasya Karma*: In Ayurveda, the word *Nasya* has been taken specifically to mention the root of administration of the drugs. As stated by *Sushruta* (Su. Chi. 40/21,29) medicines or medicated oils administered through the nose is known as *Nasya*.

According to *Aruna Dutta & Bhava Prakash* all drugs & measures that are, administered through the nasal passage are called *Nasya (Bha. Pra. Purvakhanda 5/189)*. *Sharangdhara & Vaghbhata* are of same view (As. San. Su. 29/3).

Synonyms: Shirovirechana, Shirovireka, Murdhavirechana, Navana, Nastahkarma

The word *Virechana* means elimination of morbid Doshas from the body. This *Shirovirechana* or *Murdhavirechana* indicates its main function elimination of morbid *Doshas* particularly from the *Shira* or parts situated above the clavicle.

Classification of *Nasya* according the Pharmacological action:

In classics various classification of *Nasya karma* has been mentioned according to form of drugs used ,Doses and the Methodology applied.

Charaka and Vagbhata have also classified Nasya into 3 groups according to their pharmacological action, viz.

- (i) Rechana (Virechana) means purificatory,
- (ii) Tarpana (Brimhana) means nourishing and
- (iii)Shamana (retraining) (Ch. Si. 9/92 and As.H.Su. 20/2)

Mode of action of Nasya Karma: Ayurved point of view:

The clear description regarding the mode of action of the *Nasya karma* is not available in *Ayurvedic* classics.

- According to *Charaka Nasa* is the gate way of *Shira*. The drug administered through nose as *Nasya* reaches the brain & eliminates only the morbid *Doshas* responsible for producing the disease.
- In Astanga Sangraha –Nasa being the gateway to Shira.
- The drug administered through nostrils.Reaches *Shringataka* (a Sira Marma by Nasa srota).Spreads in the murdha (brain) taking marma of Netra (eye), Shrotra (ear), Kantha (throat), Shiramukhas (opening of the vessels, etc.). Scratches the morbid Doshas in supra clavicular region Expels them from Uttamanga (As.San.29/2).
- Sushruta has clarified Shringataka Marma as a Sira Marma formed by the union of Siras (blood vessels) supplying to nose, ear, eye & tongue. He further points out that injury to this Marma will be immediately fatal (Su. Sha. 6/27).
- Indu in his commentary on *Astanga Sangraha* has opined *shringhataka* as the inner side of middle part of the head i.e. *Siraso Antarmadhyam*.
- Under the complications of *Nasya karma Sushruta* noted that the excessive eliminative errhine may cause *Mastulunga* (Cerebro spinal fluid) to flow out of the nose (Su. Ch. 40/40).
- In Sushruta, Astanga Hridaya, Bhavaprakasha, etc detailed descriptions are not found about the mode of action of Nasya karma.

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According to all prominent Acharyas Nasa is said to be the gateway of Shira. It does not mean that any channel connects directly to the brain but they might be connected through blood vessels or through nervous system (olfactory nerve, etc.)

It is an experimentally proved fact that –

Wherever any type of irritation take place in any part of body.

The local blood circulation is always increased. This is the result of natural protective function of the body. When provocation of *Doshas* takes place in *Shira* due to irritating effect of administered drug resulting increase of the blood circulation of brain. So extra accumulated morbid Doshas are expelled out from small blood vessels. Ultimately these morbid *Doshas* are thrown out as nasal discharge, tear & salivation.

The modern point of view –

- There is no such direct Pharmacodynamic considerations between nose & no such cranial organs.
- More over blood, brain barrier is a strict security system that human brain has.
- The nose is used as a route of administration for inhalation of anaesthetic materials.
- In the case of paranasal sinusitis certain agents used as decongestants.
- Since quite a time anterior pituitary hormones, nasal spray is in practice with modern medical system.
- Vasopression or Antidiuretic hormone is already in the market in the form of nasal therapy.
- Nasal administrations or leutinising hormone (Fink G. et al 1973) & calcitonin (Potiroli E.A. et al 1983) are found to be equally effective as intravenous infusions in maintaining blood concentrations.
- Hypoglyceamic effects of insulin & hyperglyceamic effects of glucagons hormone are confirmed by intranasal administration in normal & in diabetic patients (Patiroli E.A. et al 1983)
- Intranasal gonadotropin hormone releasing hormone has been therapeutically recommended in stimulating leutinising hormone secretion in cryptorchid boys (undescended testis) (Raifer J. et al 1985).
- An LRH agonist nasal administration for 3-6 months was observed effective in inhibiting ovulation as a contraceptive measure (Berquist et al 1979). The drugs are mostly believed in these cases to be absorbed through nasal & Pharyngeal mucosa.
- Kumar Anand (1979) has attempted contraceptive drug administration per nasal route & opined that the route is beneficial than systematic administration.
- It was claimed that the concentration of drug in C.S.F. was very high to that when administered intravenously.
- Reduction in the gland activity & reduction is sperm prolactin was also noted.
- Micheal Russel (1977) has observed that perspired scent that has been painted to on the upper lips has caused the synchronization of the menstrual cycle in female volunteers by constant smelling.

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• Scientists of the institute of medical sciences Delhi have proved after experiments that drug administered through *Nasa* shows effective action in the brain. So it can be said that there is a very closed relation between *Shira & Nasa*.

Thus to understand the pathways of *Nasya* drug (classical errhine) acting on the central nervous system, it is important to go in details of the modus operandi of *Nasya karma*.

On the basis of fractional stages of *Nasya karma* procedures, we can draw certain rational issues that are as follows –

Effect on Neuro - Vascular Junction

- The lowering of the head
- Elevation of lower extremities
- Fomentation of face
- These procedures seem to have an impact on blood circulation to the head.
- As the efferent vasodilator nerves are spread out on the superficial surface of the face which after stimulation at surface of the face, by fomentation may angender the increased blood flow to the brain, i.e. momentary hyperemia.
- It has been approximately calculated as 22% of total dilatation of cerebral capillaries, caused by the facial efferent stimulation, will lead to 150% of blood inflow (Chatterjee 1980).
- It is also possible that the fall of arterial pressure due to vasodilation may encounter with cushing's reaction.
- In which, when the ratio between the C.S.F. pressure & cerebral arterial pressure has reduced, the increased C.S.F. pressure tends to compress the arteries in the brain causing a transient ischemia in the brain.
- Due to this, the aroused 'ischemic response' will subsequently raise the arterial pressure (cushing).
- This act convinces more of 'Slush' created in intracranial space, probably forcing more transfusion of fluids into the brain tissue.
- Probably this may be the explanation for the benzyl pencilline like drugs, which do not attain a therapeutic level in the brain in normal conditions, found to be effective during the inflammatory conditions of meninges (Gillman & Goodman 1980).

On this ground, it can be stated that the modus operandi of *Nasya Karma* has a definite impact on central neurovascular system & likely lower the blood brain barrier to enable certain drug absorption in the brain tissues.

Effect on Neuro-Endocrine level.

- The peripheral olfactory nerves are chemoreceptor in nature.
- This olfactory nerves differs from other cranial nerves, except optic nerve, in its nature of phylogenetically closely related to brain.
- Rather it should be considered as the fibretract of brain itself (Brobeck 1980).

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- There are adjacent nerves called terminal nerves which run along the olfactory nerves & their functions are unknown (Hamilton 1966).
- However, it is known that these nerves are connected with limbic system of the brain including Hypothalamus.
- This limbic system & hypothalamus are having control over endocrine secretions.
- Moreover, hypothalamus is considered to be responsible for integrating the functions of the endocrine system & the nervous system.
- It is known to have direct nervous connections with the posterior lobe of pituitary.
- In addition hypothalamus is indirectly having connections with anterior lobe of pituitary, through portal vessels which supplies blood to the gland, having previously ramified in the corpora mammillaria of the hypothalamus.
- Electrical stimulation of this part of the hypothalamus in animals is capable of inducing secretion in the anterior pituitary.
- It is believed that the products of such hypothalamic stimulation are drained by the portal vessels into the anterior to be the experimental stimulation of olfactory nerves, caused stimulation in certain cells of hypothalamus & amygdoloid complex, but the nature of the effection is not properly understood (Tonabe 1975).
- It is understood that just like primitive mammals man also responds to the languages of smell in the environments (B.S.M. 1980).
- Abraham & colleagues (1979) in their experimental studies have noticed that a mere exposure to the smell of the jasmine flowers recuces the activity of mammary gland.
- If the frangrance could have the effect, it may be acting through impasse traveling via the olfactory pathway influencing hypothalamus which in turn, causes the inhibition effect through the pituitary (Abraham et al 1979).
- Olfaction of certain chemical pheramones is also observed to have an impact on menstrual cycle (Russek 1977).

Effect of Neuro-Psychological levels

- The adjacent nerves called terminal nerves which run along the olfactory are connected with limbic system of brain including hypothalamus (Hamilton 1966).
- This limbic system is also concerned with behavioural aspect of human being, besides control over an endocrine secretions.
- Thus, certain drugs administered through nose may have an impact on immediate psychological functions by acting on limbic system through olfactory nerves such a phenomena has been revealed in the work of Cowley et al (1975).
- The work has been carried out on the effect of exposing people for a short period of time, to known pheramone.
- The investigation showed subjects reacting differently, in assessing men & women, in comparison with the control state.
- The people can also be influenced in their judgement by exposure to androstenol & a mixture of short chain fatty acids.

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These things certainly support the recommendation of *Nasya* made by *Ayurvedic* scholars for mental disorders like *Apasmara & Unmada*.

Effect on drugs Absorption & Transportation

- Keeping the head in lowered position & retention of medicine in naso pharynx help in providing sufficient time for local drug absorption.
- Any liquid soluble substance has greater chance for passive absorption directly through the cell of lining membrane.
- On the other hand, massage & local formentation also enhances the drug absorption (Fingl 198).
- The later course of drug transversion can occur in two ways
 - 1. By systemic circulation
 - 2. Direct pooling into the intracranial region.

The second way is more of interest in our present study. This direct transportation can be assumed again in two paths, viz. Applied Science

a. By vascular path b. Lymphatic path

Vascular path -

- Vascular path transportation is possible through the pooling of nasal veinal blood to the facial vein, which naturally occurs.
- Just at the opposite entrance, the inferior opthalmic veins also pool into the facial vein.
- Interestingly, both facial & opthalmic veins have no veinal valves in between.
- So that, blood may drain on either side, that is to say the blood from facial vein can enter cayournus venous sinus of the brain in reverse direction.
- Thus, such a pooling of blood from nasal veins to venous sinuses of the brain, is more likely in the head lowered position due to gravity.
- On these lines, the absorption of drug material into meninges & related parts of intracranial organs, is a worth considering point.
- More over, the modern scholars have noted that the infective thrombosis of the facial vein may lead to infection of the meninges easily through this path (Williams etc. al 1971).
- Pooling of blood from para nasal sinuses also possible in the same manner.
- Vagbhata's notation of *Shringhataka srotas* (anterior cranial fossa) seems to relate with the above explanation.

Lymphatic path -

- Drug transportation by lymphatic path, can reach direct into the C.S.F.
- It is known that arachnoid matter sleeve is extended to the submucosal area of the nose alongwith olfactory nerve.
- Experiments have shown that the dye injected to arachnoid matter has caused colouration of nasal mucosa within seconds & vice versa also (Hamilton 1971).

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- Preliminary studies reported from A.I.M.S. laboratories, clearly showed that steroids enter the C.S.F. rapidly following their administration as a nasal spray.
- Surprisingly their levels in the C.S.F. was found to be much high as compared with systemic injections (Kumar et al 1979).

Here it may be worthy to recall Sushruta's caution that the excessive administration of Virechana Nasya (eliminative errhine) may cause oozing of Mastulunga (C.S.F.) into the nose. On this basis, we may say that ancient scholars of Ayurveda were aware of the lymphatic path in direct absorption into the brain from nose.

Important of Post Nasya Massage

- The texts have recommanded light massage on the frontal, temporal, maxillary, mastoid & on Manya region.
- A comfortable massage on the above regions may help to subside the irritation of somatic construction due to heat stimulation.
- It may also help in removing the slush created in these regions.
- However, interesting here is regarding Manya which is a Marma existing in neck on either side of the trachea (Su.Sh. 6/27) which likely correspond to the carotid sinuses of the neck.
- Pressure applied on the barroreceptors may bring the deranged cerebral arterial pressure to normalcy (Hejmadi S. 1985).
- Because these receptors lying on bed of bifurcation of common carotid artery have a buffering action on the cerebral arterial pressure (Best & Taylor 1958).
- On the basis of the foregoing observations we can state that the procedures, postures & conducts explained for *Nasya karma* are of vital importance in drug absorption & transportation. The facts discussed here is also convincing us about the definite effect of Nasya karma in the disorders of central Nervous system, mental & & some endocrinal disturbances also.

Summary and conclusion:

Nasya is one of the important karma comes under Panchakarma, it is useful in the disorders of head and neck region. Ayurved Acharya mentioned Nasya is one of the important root for drug administration too. As Nasa is directly connected to brain through olfactory nerve and mucosa. Any stimulation ,irritation, activation directly affects brain, its circulation and its activities .According to modern science drugs used in Nasya karma ,the process like massage and steam to face also affects nervous system ,venous and lymphatic drainage too.along with that nasya drugs having direct effect on pituitary gland too. Thus it can acts on disorders of nose, head region and the structures around it which in turns having effect on whole body. According to modern science nasal mucosa having strong absorptive capacity, it absorbs drug fast and circulates it. So Nasya is proving to be one of the best therapeutic processes to purify toxins and to cure the diseases.

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References:

- Charaka Samhita By Chakrapani with Ayurveda Dipika commentary Nirnaya Sagar Press - Bombay.
- 2. Sushruta Samhita With Nibandha commentary by Dalhana and Nyaya Chandrika by Gayadas. Revised by Yadav Sharma & Rama Acharya.
- 3. Ashtanga Hridaya With Sarvanga Sundari commentary Nirnaya sugar press Bombay (1993).
- 4. Bhava Prakasha Bhava Mishra, Trans. By Shastri G.M., ed. Sastu Sahitya, 1963.
- 5. Text book of medical physiology Arthur C. Guyton & John E. Hall, 9th edi., Prism books pvt. Ltd., Banglore, 1996
- 6. Principles of Anatomy & Physiology Gerard J. Tortora & Sandra Grabowski, 8th edi., Haper Collins college pub., 1996
- 7. Principles & practice of medicine Davidson, 18th edi., Harcourt pub. Ltd., 1999
- 8. Nigam U.S.: A clinical study of Nasya Karma on Nasagata Roga & its scientific evaluation (K.C.), 1981.



Study of Fetal Development in Fourth Month - According to Ayurvedic Perspective

Vd. Nileema K. Nandanwankar

Professor, Strirog Prasutitantra Dept. Late B.V. Kale Ayurved Medical College & Hospital, Latur

Abstract -

The women is the far most essential factor responsible for producing offspring and for proper growth and development of the fetus. The physiological transition from pregnancy to motherhood heralds enormous changes in each woman physically and mentally.

Ayurved give more attention in fourth month of pregnancy because in this month minute parts of the fetus body becomes evident, fetal heart become perceivable (Dauhrida), fetus become stable and dense. The desires of the woman arising in this period.

Key Words - Dauhridini, Garbha Sthiratwa, Angaprathanga pravakto, chetana

Intorduction

Motherhood is the divine blessing for every woman. In Ayurveda she is considered as an aashar for new care. In Ayurveda all Acharyas described about Garbha masnumasic vrudi and Garbhiniparichrya but there are some differences between the two but they are in synch in regards to basic principles underlying the fetal development.

Pregnancy is considered as unique status of both, mind and body of the woman. So the growing fetus and changing body of pregnant woman undergo changes continuously. If there is some abnormalities in the factors, responsible for proper growth and development of fetus causes either abortion, intrauterine death of fetus, expulsion before viability and some congenital anomaly in fetus therefore the study of fetal development is necessary for both mother and fetus. The expulsion of fetus up to fourth month of pregnancy is termed as Garbhastrava. [In fourth month of pregnancy the angapratyangas, the heart is distinctly developed therefore the mother is called dauhrudini]

Aims & Object -

- To study the fetal development in fourth month according to Ayurveda.
- To review the concept of Dauhrudini according to shushrut.

Review of Literature

According to **Charkacharya** in Sharirsthana 4/20, the fourth month of pregnancy the fetus become stable and dense. As the mass of the fetus increases the woman starts feeling heavy.

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According to **Shustrutacharya** in Sharirsthana 3/15, in fourth month the minute parts of the body become evident. As the fetal heart becomes perceivable the Chetana Dhatu become evident. As the fetal heart becomes perceivable, the chetana dhatu become evident. As the chetana dhatu is manifested the Garbha responds to sensory stimuli that is why pregnant woman have carving (dauhrida) the woman is called douhridini

If the wishes of Dauhridini are not fulfilled the child will be born with defect and deformities like Kubja (dwart), kuni (short upper limbs) khanja (limp) varnana (short) vikrutaksha (deformed eyes) anaksha (blind) etc. On the contrary it the wishes of dauhridini are fulfilled she will give birth to a child who will be strong and would live a long span of life.

It is said that the desires of the woman arising in this period shall not be taken lightly as these are the demands of the child. They compensate the needs of the child therefore these wishes should be fulfilled.

According to **Vagbhatacharya** in Ashtang Sangraha Sharirsthana 2/22 and Ashtanghrudaya Sharirsthana 1/57, fourth month of pregnancy the minute parts of body of fetus become evident and fetus become stable.

Modern Science -

Fetal development in 4th month

- Baby is 6.5 to 7 inches long.
- Baby is developing reflexes, such as sucking and swallowing and may begin sucking thumb.
- Tooth buds are developing.
- Sweat glands are forming on palms and soles.
- Fingers and toes are well defined gender is identifiable.

Discussion -

According to **Charkacharya** in fourth month of pregnancy various body parts of fetus become more conspicuous and stability to the fetus comes in this month.

According to **Shushrutacharya** in fourth month of pregnancy the minute parts of body become evident. As the fetal heart become evident, perceivablethe chetana dhatu become evident. Why is it apprehended only when the heart is evident? The heart is placed or the home of the soul. As the chetanadhatu is manifested the Garbha responds to sensory stimuli that is why pregnant woman have craving the woman is called douhridini (Having two hearts)

Ashatangasangrahakara accepts the stability to fetus according to charaka and minute parts of body become evident according to shushruta.

Ashatangahrudakara mention only minute parts of body become evident.

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Conclusion - All Acharyas told following

- 1) Fetus become stable
- 2) The minute parts of body become evedent
- 3) The woman is called Douhridini (with two hearts)

Bibliography -

- Acharya Vidyadhar Shukla, CharakSamhita Purvardha, Chaukhamba Sanskrut Pratishthan Delhi Edition – Page Sharir 732
- Kaviraj Ambika Datta Shastri, Sushrut Samhita Purvardh, Chaukhumba Sanskrut Sansthan, Varanasi Edition – Page Sharir 24
- 3. Ravindra Tripathi, Ashthang Sangruha, Choukharmba Sanskrit Pratishthan, New Delhi Edition 2015
- 4. Kaviraj Atridev Gupta, Asthangrudhayam, Choukharmba Sanskrit Sanshthan, Varanasi Edition Page 175
- 5. Journal and internet Articles related to the topic.



A Comprehensive Study of Abrus Precatorius

Dr. Sangeeta S. Deshmukh

M.D. (Agadtantra– Vy. Ay.) HOD & Professor

Agadtantra – Vyavahar Ayurved Dept.

Late B. V. Kale Manjara Ayurved Medical College & Hospital, Latur

Abstract

There are many different systems of medicine in the world today. Only a few of them are considered important & recognized by W.H.O., Ayurveda being one of them. Medicinal plants are part of human society to combat disease. India is one of the largest producers of herbs & herbal products. Nature around us provided everything of necessity of mankind. The large resources of medicinal plants have been used continuously for the treatment of various diseases. Herbal medicines are in great demand in the developed as well as developing countries for healthcare because of their wide biological & medicinal values. Higher safety margin & lesser cost.

Gunja i.e. Abrus Precatorius which is described in Upavisha and irritant poison in modern science. Nevertheless it is common drug indicated therapeutically for management of disease like haemorrhoids, dooshyodar, tumors (uranthi), Indralupta, etc. Number of Ayurvedic formulations includes this drug after its proper shodhan sanskara. Injudicious use of assuddha gunja may result in several adverse effects.

Ayurvedic & modern literature related to this subject has been reviewed in this study.

Keywords: Gunja, Shodhan, Upavisha, Indralupta, Abrin

Aim & Objectives:

To overview the Abrus Precatorius.

Introduction

Today people are shifting from modern medicines to the ancient systems of medicine like Ayurveda. It is a very comprehensive medical system which has been practiced in India. It is time tested system of medicine but one must be able to explain various processes used by our ancient systems in terms of modern language & methodology to make more acceptable. Every drug carries some adverse effects. It is always an expertise of a physician which converts highly poisonous substance into an effective medicine. Such drugs which are described in Ayurveda are Gunja, Dhatura, Bhallataka, Vatsnabh, etc. Shodhan is an essential process as far as Ayurved pharmaceutical preparation is concerned when poison is used incautiously, readily spread throughout the body & cause deleterious effect which may cause even death. Poisonous medicines after proper Shodhan process when used in various formulations, act as "Amrut".

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The ancient Indian healers were the first to use poison as medicine. Acharya Charak says, "Any poison if processed properly is a potential medicine, where as any medicine with improper use may be fatal as poison". This treasure of knowledge of converting a life threatening poison to a life saving drug is described in Ayurvedic Samhitas. This conversion requires some specific pharmaceutical process, one of them being is a 'Shodan Sanskara'. The act of treating a substance with advised matter by steaming so as to eliminate harmfulness is known as Shodan Sanskara. This process brings about some changes in physical appearance and chemical composition of the substance.

Review of Literature

Vernaculars

Sanskrit - Gunja, Rakta, Tambrika, Kaknanti, Tulabeej

English - Indian Liquorice Plant

Botanical Name - Abrus Precatorius

Family - Leguminosae

Mention in Brihatrayee

- a. Formulation of kanak kshiri oil (Cha. Chi. 7/112)
- b. For external application on haemorrhoids (Su. Chi. 6/12)
- c. Local Application for kaphaja visarpa (Su. Chi. 17/15)
- d. Treatment of tumours with medicated oil (Su. Chi. 18/19)
- e. Insertion of varti per annum for haemorrhoids (A. H. Chi. 8/20)
- f. Treatment of Kaphaja Galaganda (A. H. U. 22/70)

Classification

Ayurved- Mulvisha [Su.k.2/5, A.S.U.40/7]

Upavisha [R.T.]

Modern- Irritant Organic Vegetable Poison

Fatal dose – 1- 2 crushed seeds

90-120mg extract by injection 0.0001-0.0002mg/kg s.c- Abrin

Fatal period – 3-5 days

Chemical constituents: Abrin, Toxalbumin.

Distribution & Habitat

A common wild plant found throughout tropical India & other warm countries from sea level upto 3000 feet under mesophytic conditions; seldom cultivated.

Description

The plant is a slender twinner with alternatively placed compound leaves. Each leaf has about 20 pairs of narrow, oblong leaflet, looking like a delicate feather. Leaves are

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about 2-3 inches long. Inflorescence recemose. Flowers are white with red tinges which are crowded at the end of a stalk.

Fruits are short, inflated pods: splitting open when mature to reveal the round, hard & shiny seed which are scarlet but black at the base (hilum). Flowers in winter & fruits in summer.

Root woody, hard, much branched & of an acrid odour & taste. Three varieties of Abrus are met with viz.

- i. The common type with scarlet coloured seeds having black area near hilum.
- ii. A completely white seeded variety which is less common but occasionally cultivated.
- iii. A black seeded type which is very rare.

There does not seem to be any noteworthy difference in appearance & structure of the roots of these three varieties.

Officinal Parts

The roots, leaves & seeds are used for medicinal purposes.

Chemical Constituents

The chief poisonous constituent of the seeds is "abrin" a toxalbumin similar to ricin of castor seed. It has been resolved into globulin & an albuminose. A heamagglutin & a glucoside abralin are also reported. In addition the seeds contain the alkaloids bases, abrine mp: 295K (decom.)] hypaphorin, choline, trigonelline, precatorine $[C_{12}H_{14}O_2N_2,$ (C₁₄H₁₁NO₆, mp: 218-220) & methyl ester of N, N- dimetyltrypophan meta cation [mp: 272K (decomp.)]. Abrine is a major alkaloid which is not to be confused with Abrin, a toxic albuminoid product isolated from the seeds of Abrus precatorius. The leaves, stems & root also furnish these bases. 5β – cholanic acid is present in seeds. Stigmasterol, β – sitosterol & two other steroidal fractions, one crystalline $[C_{21}H_{30}O_2]$, mp: 124K] & other oily; have been separated from the seeds.

The seeds yield a light reddish oil (2.5%) with the following characteristics: d²⁴, 0.9108; n_D 1.4702; acid val. 4.8; sap val. 187.5; iod val. 90.64, acetyl val. 7.2 & unsapon matter 1.3%. The fatty acid composition of the oil is as follows: palmitic 1.2; stearic 4.9; arachidic 5.4; behenic 4.6; lignoceric 2.6; oleic 48.5; linoleic 13.3 & linolenic 19.5%.

The amino acids present in the seeds are (9/169N): aspartic 10.60; threonine 3.87; glycine 1.28; valine 5.95; methionine 1.11; leucine 7.20; tyrosine 5.15; arginine 15.77; phenylalanine 6.80; lyine 3.13; histidine 2.77.

Shell of seeds contains a red colouring matter. The colouring matter of the seed coat contains a monoglucoside anthocyanin, abranin. Other antocyanins identified are delphinidin-3,5-diglucoside; & cyaniding-3-glucoside. The presence of gallic acid is also reported.

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The powdered root contains precol ($C_{37}H_{70}O_4$, mp78-80) abrol ($C_{42}H_{62}O_5$, mp305-06), glycerrhizin (15%) & two alkaloids viz abrasine ($C_{18}H_{21}N_3O_3$, mp218-20) & precasine.

The leaves contain glycyrrizin (9.6%) a saturated alcohol, a crystalline compound & pinitol.

Abrin

Abrin is a highly toxic protein (LD $_{50}$ 0.029 mg/kg body weight of mice) present to the extent of 0.15% in the seed. It consists of arbus agglutinin & toxic lectins. Abrin [a] to [d] are the five toxic glycoproteins found in the seeds (Budavari 1989). Five glycoproteins have been purified from the seeds. They are arbus agglutinin (a haemagglutinin) & the toxic principles of abrin [a] to [d].

Arbus agglutinin is a tetramer with a molecular weight of 134900. It is non toxic to animal cells & a potent haemagglutinator. Abrins are composed of two disulpide linked polypeptide chains. The larger subunit, which is a neutral-B chain has molecular weight of approximately 35,000. The other subunit an acidic A-chain has a molecular weight of approximately 30,000.

Pure abrin is a yellowish white amorphous powder. The toxic protein is heat stable to incubation at 60° C for 30 minutes. At 80° C most of the toxicity is lost in 30 minutes. Abrin is soluble in sodium chloride solution usually with turbidity. It is also soluble in glycerin. When taken by mouth gastric juice has some inactivating action on it.

Abrin has been studied intensively for its antitumour activity. In experiments conducted on mice, abrin suppressed Ehrlich ascitis tumour growth. Intraperitoneal injection of 20µg/kg for 3 days after tumour inoculation destroyed tumour growth, as evidence by decrease in the mouse weight & absence of tumour cells in the peritoneal cavity after 50 days. The protein extract of the seeds has also been shown to exhibit antitumour activity on Yoshida sarcoma (solid & ascites form) in rats & on fibrosarcoma in mice. The extract had a direct cytotoxic effect on tumour cells. The tumour cells incubated with the extract showed cellular pathology, decreased viable cell counts & prolongation of survival period of the tumour transplanted animals. Two toxic & possibly neoplasm – inhibitory proteins abrin A & C have been isolated from the dried seeds.

Mechanism of Action:

Abrin is an irritant & CNS depressant, thermolaible toxalbumin. It is a toxic protein resembling bacterial toxin in its action. It is antigenic in nature & causes agglutination, haemolysis & cell destruction.

Signs & Symptoms

Symptoms may be delayed from a few hours to two or three days when taken by mouth. They include severe irritation of upper GI tract, abdominal pain, nausea, vomiting, bloody diarrhoea, weakness, cold perspiration, trembling of hands, weak rapid pulse, miosis

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& rectal bleeding. Delayed cytotoxic effect occurs in CNS, liver, kidneys & adrenal glands 2 to 5 days after exposure.

Animal Poisoning -

When an extract of seeds is injected under the skin of the animal, inflammation, oedema, oozing of haemorrhagic fluid from the site of puncture, & sometimes necrosis occurs surrounding the site of injection. The animal does not take food & drops down after Tetanic convulsions occur or the animal becomes cold,drowsy or comatose & dies. The symptom resemble those of viperine snake bite

Human Poisoning -

In man, at the site injection, painful swelling & ecchymosis develops, wth inflammation & necrosis. Ingestion of deeds or extract can cause haemorrhagic gastritis. There is faintness, vertigo, vomiting, dyspnoea & general prostration. Convulsions

Differential diagnosis: Viper snake bite, Cholera, Croton poisoning.

Treatment -

- a) Ayurved
 - 1. Tandulja swaras with sugar
 - 2. Godughdha with sugar
 - 3. Meghanad ras taken with water & sugar
- b) Modern
 - Needle should be dissected out
 - Inj. Antiabrin
 - Give symptomatic treatment
 - a) Stomach wash with KMNO₄
 - b) Use of demulscents
 - c) HCl + Pepsin mixture orally
 - d) Urine is maintained at an alkaline pH by giving Inj. Sod. Bicarbonate10g in a day
 - e) Inj. Calcium gluconate is given to combat Tetany

PM Appearances

- 1. Fragment of needle may be found at the site of injection along with local necrosis & ecchymosis.
- 2. Petechial haemorrhages may be seen under the skin, pleura, pericardium & peritonieum
- 3. GIT haemorrhages, oedema & congestion
- 4. Cerebral oedema
- 5. Liver, Spleen, Kidney congested

Medicolegal Aspects

1. Accidental poisoning may occur in children on account of its attractive colour if seeds, children may ingest them

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- 2. Commonly used for cattle poisoning
- 3. Homicide by sui prepared with abrin
- 4. Powdered seeds are used by malingers to produce conjunctivitis
- 5. Seeds are also used as abortifacients for criminal abortions
- 6. It is used as arrow poison to kill cattles

Suis

The seeds of Abrus are mixed with Dhatura seeds, opium & made into paste with spirit or water, from this paste, small pointed spikes or needles are made which are dried in the sun called 'Suis'.

The needles are 15mm long

- Two needles are inserted by their base into holes in a wooden handle & blow is stuck to the animal with great force which drives the needle into the flesh(resemble like snakebite)
- For homicide, two needles are kept between the fingers & the person is slapped which drives the needle in the body

Method of Purification

- i. Gunja seeds should be crushed & tied in a piece of cloth in the form of pottali. It should be cooked in Dolayantra by adding cow's milk for six hours. Then these seeds should be washed with warm water & dried. (R.T. 24/443 444)
- ii. Gunja seeds should Kanji be crushed & tied in a piece of cloth in the form of pottali. It should be cooked in Dolayantra by adding milk for three hours. Then these seeds should be washed with warm water & dried. (R.T. 24/445)

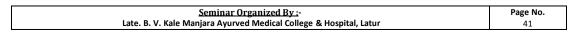
Formulations

- i. Gunjadi Tail
- ii. Gunja Tail
- iii. Gujajivan Rasa
- iv. Gunjabhadra Rasa

Therapeutic Uses

The roots, leaves & seeds are used medicinally.Both red & white types are beneficial for hairs, cure diseases due to vitiation of vatta & pitta; fever, dryness of mouth giddiness, difficulty in breathing, thirst, diseases of eye & is beneficial in pruritus, ulcer, alopecia & other skin diseases.

- The roots, & leaves contain glycerrhizin the principal constituent of liquorice & are used as substitute for liquorice in cough & catarrhal affections (hence the plant is known an Indian liquorice)
- The roots posses diuretic, tonic & emetic properties & are used in preparations prescribed for gonorrhea, jaundice & heamoglobinuric bile.



- Petroleum ether & alcoholic extract of the roots given orally to rats 100mg/kg per day for 1 to 5 days post coitus have been shown to prevent nidation by 100%. The alcoholic extract also showed anti oestrogenic activity.
- A decoction of the leaves is widely used for cough, cold & colic. The leaf juice is employed as a cure for hoarseness.
- A paste of the seeds & of the roots of plumago zeylanica made with water is a stimulant dressing when applied over leucoderma patches.
- A paste of seeds is used as a rubaefacient in sciatica, stiff shoulders, paralysis & other nervous diseases.
- For the care of alopecia paste of seeds is rubbed on the exposed skin of scalp.
- Ethanolic extract of the seeds inhibited the growth of micrococcus pyogens, enteric & dysenteric group of microorganisms, several other bacteria & some pathogenic fungi.
- Abrin, the chief constituent of the seeds, has been studied intensively for its antitumour activity.
- Powdered seeds are said to disturb the uterine function & prevent conception in woman. Petroleum ether extract of the seeds showed antifertility activity in rats. The aqueous extract adversely influenced pregnancy &development of foetus in mice. The oily steroidal fraction separated from the seeds, when fed orally for twenty consecutive days before mating, showed antifertility activity on albino rats & swiss mice. Injection of a single dose of this fraction on the postcoital period produced 80% sterility in rats.
- Externally (Paste of seeds)- Fungistatic against cryptococcus neoformans.
- Seeds are also used as abortifacient.
- Half boiled seeds taken as tonic.
- Seeds poor antihelminthic, extract CNS depressant, analgesic, uterine stimulant.
- Plant extract, one of the constituents of long acting oral contraceptives preventing implantation of fertilized ovum.

Discussion & Conclusion

Life on earth is nature's gift to mankind. Happily living of a man is just not possible without physical & mental health. Ayurveda, the fundamental science of life is evolved primarily for maintainence of health & to alleviate the suffering of sick individual. Ayurveda defines health as balance state of body humours such as dosha, dhatu, malas, etc. along with the pleasant state of mind. Imbalance of these humours result in disease. Ayurveda emphasizes on natural resources for correcting the imbalance.

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The principles of Avurveda are time tested, but the time demands evaluation & expression of these principles & theories in terms of contemporary science. This requires extensive research work in Avurvedic field. Regarding the research work, the branch Agadtantra has wide scope to be explored. Now a days, number of Ayurvedic Pharmaceutical Companies are preparing medicines from poisonous herbs. But it is the matter of discussion whether they are doing Shodhan Sanskara of these poisonous herbs properly as mentioned in Ayurved samhitas. If the proper processing techniques are not followed, there is a chance of retaining harmful characters in the prepared medicines which in turn may prove fatal.

Gunja, when studied for its properties through both Ayurveda & modern view, was found to contain some toxic principles. It is accepted "Upavisha" in various Rasagranthas. Rasatarangini has specially described the toxic symptoms produced by consumption of Abrus powdered seeds. Though Gunja was accepted as a single drug therapy for various disease conditions & was included in different Kalpa; for ex- Gunjabhadra rasa, it is advised to use only after proper Shodhan Sanskara. Along with the internal administration, Gunja Kalpa is admired as a local application in Indralupta.

Gunja, an ancient medicinal remedy is biologically accepted as Abrus Precatorius a species of Leguminosae family. By the various analytical procedures carried out worldwide, it is reported to contain number of active ingredients with the toxicity of Abrin.

A detailed review of Gunja as well as Abrus Precatorius through the Ayurveda & modern literature was studied.

References

- 1) Dr.Bramhanand Tripathi Charak Samhita 11th edition Chukhamba Surbharti Publication.
- 2) Dr. Ambikadatta Shastri Sushrutsamhita 14th edition Choukhamba Sanskrit Publication.
- Publication.

 3) Vagbhatta Edi. By Gupta Kaviraj Atrideva Ashtanga Hridaya (10th edition 1992) Chaukhamba Sanskrit Sansthan, K- 37/114, Gopal Mandir Lane, Varanasi
- 4) Sharma Sadan& Rastaragini 11th edition (1973) Banlow Rd. Jawahar Nagar, Delhi.
- 5) Chopra Ramnath, Budhwar Ratanial, Ghosh Sudhamoy Poisoning Plants of India (1984) - Academic Publishers, Jaipur.
- 6) R. N. Chopra, I. C. Chopra Glossary of Indian Medicinal Plants 3rd Reprint (1992) Council of Scientific & Industrial Research, New Delhi.
- 7) Colonel L. R., Kiritikar K. R., Basu D. B. Indian Medicinal Plants Vol.(1-4) 2nd edition (1999) – International Book Distributors.
- 8) The Wealth of India Raw Materials (1989) Council of Scientific & Industrial Research, New Delhi.

Aayushi International Interdisciplinary Research Journal (Monthly Journal)	
Website www.aiiriournal.com I. Contact :- Pramod P. Tandale, I Mob. No. 08999250451	

- 9) Dr. K. M. Nadkarni Indian Materia Medica (Vol. 1) 2nd edition Bombay Popular Prakashan.
- 10) Dr. Krishnakumar Vishavigyan 1st edition Ayurved Evu Tibbi Academy, Lucknow.
- 11) The Ayurvedic Pharmacopeia of India Part 1-Vol. 3 1st edition Government Ministry of Health & Family Welfare Department of ISM & H.
- 12) Dr. K. S. Narayan Reddy The Essentials of Forensic Medicine & Toxicology Jaypee Brothers Medical Publishers, Delhi.
- 13) Apurba Nandy Principles of Forensic Medicine including Toxicology 3rd edition New Central Book Agency, Kolkata.



Ayurvedic Management of Vaipadika – A Case Report

Dr. Naresh Kishanrao Kore

Asso. Professor, Dept. of *Kayachikitsa*, Late B. V. Kale Ayurved Medical College and Hospital, Latur (MS)

Abstract

Vaipadika i.e. cracked heels and palm is a common painful condition of foot and palm skin. It causes discomfort while walking and if cracks are very deep, causes bleeding. Various home remedies are available for the treatment of VAIPADIKA ¹but recurrence is very common. In Ayurveda VAIPADIKA is considered as a type of Kustha and its management can be done without considerable recurrence. In the present study it has found that Vaipadika can be treated in a simple, economical way by means of Ayurvedic medicine.

Key Words— Vaipadika, cracked heels, hell fissure, Kushta, *Ayurveda*, palmer cracks.

Introduction

As per Ayurvedic concepts *Vaipadika is* classified under *Kshudra Kushta*. *Nidanpanchak* ² of *Kushta* has been described in detail in *Brahadtraye* and *Laghutriye*. *Tridosha* and *Twak*, *Rakta*, *Mamsa*, *Ambu* are collectively involved in the pathogenesis of *Kustha*. Despite of this mainly *Kapha Pitta dosha* are dominant in the pathogenesis of *Vaipadika*. Various *shodhan and shaman* treatment modalities are described in classics for the treatment of *Kustha*. Considering the history and clinical examination of said patient specific treatment plan was defined.

A Case Report

A female patient of 42 years old came to the Out Patient department of Kayachikitsa of , Late B. V. Kale Ayurved Medical College and Hospital, Latur (MS) on 12/2/2018 suffering from multiple painful cracks on sole of foot. Majority of cracks are painful, the cracks tends to worsen in winter season and after walking bare foot. She has been treated by Allopathic Dermatologist for one year but there was no relief. Her general health was good and both physical examination and blood tests are within normal limits.

c/o

- Cracks on both sole of foot since 1 and half year.
- Pain on walking—7 months.
- Bleeding from deep cracks 3 months.

o/e

• Nadi – 74/ min

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- Mala avastambha 1-2 times per day, durgandha +
- Mutra 4-5 times per day
- Jivha uplipta.
- Shabda samyak.
- Sparsha anushnasheet.
- Drik samyak
- Akruti sthula.
- Prakruti Kapha pradhan Vata.
- Agni Manda.
- Kostha Madhyam.

No past H/o any major illness.

H/o, tubectomy before 4 years.

Diet history – Mixed,

- Madhur katu rasa pradhan ahara.
- Virudhaanna one to two times per 15 days
- Non veg food 1 to 2 times per 15 days.
- Upavasa 1 per week.

Treatment Plan -

Patient was prescribed *GANDHRAVHASTADI TAILAM CAPSULE* 1 at 7 pm. Tab. *Arogyavardhani vati 500* mg 2 times a day after food. *Tiktak kashyam* 30 ml 2 times per day after food. After 7 days conforming *niram avastha Mahatiktak grithm* 15 gm *shaman matra* and *Aragwadhadi kashyam* 30 ml 2 times a day after food for 1 month. Jivantayadi yamak for padaabhangya. This module was followed by *padaabhangya* with *Jivantayadi yamak* ⁵ for another 2 months. Patient was assessed by specially designed chart. The score was recorded before and interval of 1 month up to 3 months.

Results-

Table 1 Before Treatment

		Left	Right
1	Number of cracks	15	17
2	Painful cracks	9	10
3	Cracks having bleeding	5	6
4	Length of cracks		
	More than 1 cm.	8	10
	Less than 1 cm.	7	7
5	Tenderness in heels	+++	+++

Table no. 2 After 1 month

		Left	Right
1	Number of cracks	12	13
2	Painful cracks	6	7
3	Cracks having bleeding	3	3
4	Length of cracks		
	More than 1 cm.	6	7
	Less than 1 cm.	6	6
5	Tenderness in heels	++	++

Table no. 3 After 2 months

		Left	Right
1	Number of cracks	8	8
2	Painful cracks erolsc//	03/72	3
3	Cracks having bleeding	1	1
4	Length of cracks		200
	More than 1 cm.	3	2
	Less than 1 cm.	5	6
5	Tenderness in heels	+	+

Table no. 4 After 3 months

	Ž \	Left	Right
1	Number of cracks	0	0
2	Painful cracks	0	0
3	Cracks having bleeding	0	0
4	Length of cracks		
	More than 1 cm.	0	0
	Less than 1 cm.	0	0
5	Tenderness in heels	0	0

Discussion

Kustha has been categorized under Astomahagadha, which requires a strict nidanpariwarjan, consistant shodhan followed by shaman therapy. Vaipadika is not so much severe condition. Recurrence and pain are two important factors which require medical management. Considering the chikitsa sutra and dosha dominance in Vaipadika Kaphavatahara³ regime was planned. For sthandusti which is Vata dosha dominant Abhangya with Yamak sneha kalpana was planned. So oral (Abhantara) and local (bahiparimarjan) treatment approach will be more effective to manage Vaipadika.

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Conclusion

In above patient hell cracks were completely healed after 3 months. Till the patient was asked for regular follow up. Till last follow up there were no hell cracks found. So oral (*Abhantara*) and local (*bahiparimarjan*) treatment approach will be more effective to manage *Vaipadika*.

Referances

- 1) Charaksamhita by Dr Brahmanand Tripathi Chiktsa sthana, chapter 7,Verse no. 22, page no. 305, Chaukhamba Surbharti Prakashan Varanasi,2007
- 2) Ibid, Verse no. 4 -8, page no. 300
- 3) Ibid, Verse no. 22, page no. 305
- 4) Ibid, Verse no. 29, page no. 306
- 5) Ibid, Verse no. 117, page no. 322



Role of Ayurveda in Oral Diseases

Dr. Varsha V. Khanapurkar,

MD (Dravaguna) Associate Professor ,Dept of Dravaguna Late B.V. Kale Ayurved Medical college, Latur Maharashtra , India

Abstract:

This article describes role of Ayurveda and dentistry in brief and the panchkarma therapy for oral cavity and maintaince of oral diseases. The various therapies and medicines are used in Ayurveda which are used to treat various oral diseases, this article will elaborate role of various herbal plants and there use in management of various oral diseases and classification.

Keywords: Ayurveda ,Dentistry, panchkarma, oral cavity, oral diseases, herbal plants.

Introduction

Oral health is amajor health concern in era of 21century, with more advancement in the fild of medicine as well in dentistry. Searching for the alternative prevention and treatment option which are safe effective and economical and practicable because of many pathogydeveloped resistence to allopathic medicines. As everyone knows Ayurveda is an ancient science based on holistic therapeutic methods and belives that oral and general health can be treated by balancing the doshas of human body. Aurveda is the ancient indian system of health care and longevity evolved as a holistic system 3000-5000 years ago by use of medicinal plants. The doshas of human body are mainly *vata*, *-pitta* and *kapha*. The change in life style of human being creating various diseases and certain diseases are mostly occurred in the oral cavity. To prevent all these ill effects as well as various health issues alternative traditional medicine (*Ayurveda*) came in to light such as oil pulling, salt later mixture, turmeric etc. Use of strengthinggums, teeth, and jaw, tooth decay, halitosis and prevention of pain and healing socket. Now a days the hike of demand is more towards the usage of renewed various medicines and ayurvedic products for the management of various oral diseases. 1.2

Oral health and Ayurveda

In Ayurveda dental health (*Dataswastha*) is held to be very individualisitic, varying with each person's constition (Prakrti), amd climatic condiation (*Kal-parinama*). Sushruta, samhita, the surgical compendium of Ayurveda define health "equilarium of the three biological humors(*Doshas*), the seven body tissues(dhatus), proper digestion and state of pleasure or happiness of the soul, senses and the mind. The balance between these doshas

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are necessary for mainting the health. When they go unbalanced, symptom of sickness are observed in an individual. ²

In recent years, attempts have been rightly made to test the plants and plant products for their effectiveness. Extensive studies have also been conducted on blood root plant (sanguinariya) for its effect on bacterial plaque. Use of plants and herbs for dental care is very common in indigenous system of medicine and plants like *Acacia* and *AzadirachtaIndica*have been demon started: ³

Diseases of oral cavity:

A. Diseases of teeth (*Dantharogas*)

Dalana

Krimidantha(Dentalcaries)

Dantthaharsha(Hypersensitivity)

Danthashaykara(Calculas)

Danthakapalika

Adidanth(Supernumerarytooth)

B. Diseases of face

Ostaroga(Diseasesof lips)

Taluroga

Jihwaroga

Dantamoolaroga(Diseasesof gums)¹

Herbs used in dentistry

Herbs:

According to shalakyatantra 65 different oral diseases can arise in seven anatomic locations 8-lips, 15 alveolar margin, 8 teeth, 5 tounge, 9 palate, 17 oropharynx and 3 generalized form.

For management of these diseases Ayurveda recommends daily use of therapitic procedure for the prevention and maintaince of oral health. These include, three main procedures in day to day life are

- 1) Dantdhavana(Brushing)
- 2) Jivalekhan (Tongue scrapping)
- 3) Gandusha(Gargling) followed by other ayurvedic products as clove oil,(syzygiumaromaticum), aloevera, pepper (*Piper nigrum*), coriander, eucalyptus, turmeric.

Followed by some ayurvedic products are clove oil, pepper, Coriander (coriandrum), eucalyptus, Green tea (*Camellia sinensis*), onion(*Allumcepa*).

All the products have scientifically proven benefical effects in prevention and maintaince of oral health diseases.

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Dantadhavana(brushing): Ayurveda recommends chewing sticks in the the morning as well as after meals to prevent diseases as they have medicinal anti bacterial and anti cariogenic properties. They are 9 inches long and thickness about 1 finger .with either kashya(astringent), Katu(*Acrid*) or *Tikita*(bitter)in taste. The *neem*is famous herbal chewing stick used for medicinal purposes such as cosmetic, agricultural antifungal and antibacterial purposes. *Vattadosha*dominant individuals are recommended to use bitter – sweet astringent tastes. The main disadvantage of these herbal brushes are on chewing on these steams causes attrition of teeth. Recentaly the use of *salvadorapersica tw*igs has been recommended by the world health organization for oral hygiene purposes due to their enormous medicinal value.

Jivalekhana(tongue scraping) : Tongue scraping on regular basis stimulates the reflux points on the tongue and removes micro-organisum growth followed by bad odour (halitosis) as well improves the sense of taste and stimulates the secretion of digestive system.

Gadusha (gargling) or oil pulling it is an ancient ayurvedic procedure, swishing oil in the mouth for oral hygiene, gadusha claimed to cure 30 systemic diseases ranging from hedache, migraine, dibeties and asthama and various oral diseases and blledinggumsa dryness of mouth. Gadusha and kavalagraha are two primary cleaning techniques used in Ayurveda to prevent oral diseases.

Tissue regeneration therapies: In Ayurveda the well known various herbal products are considered as a general rebuilder of oral health as a well as general health.

- a) Amala: (phyllanthusemblica): It is considered most potent herbal product due to its unique properties as degenerative and senescence process, to promote longevity and enhance digestion to treat constipation, and reduces fever and cough.
- b) Turmeric (circuma longa): It is a member of the ginger family, zingaberaceae family it has medicinal value in wound healing, nausea, indigestion to treat liver diseases and enhancing skin complexion and various health benefit.²
- c) Tulsi (ocimum sanctum): Is widely used herb it found throughout India it contains many nutrients and their biological active compounds due to its botanical value.it has many uses such as hepatoproctective, anti oxidant, immunomodulatinganti inflammatoryanti viral and antifungal and antipyretic activity. Tulsi is also known as elixir of life since it promotes longevity, chewing of tulsi leaves also cures ulcers of mouth.⁴

Medicinal value of herbal products in treatment of oral diseases.

- 1. Asgand ---- Management of patient with dental anxiety
- 2. Aloe vera oral lichen planus
- 3. Babul (acacia Arabica) management of gum diseases due to its activity against p-gingivalis

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- 4. Clove oil is most powerful antiseptic and analgesic and antimicrobial
- 5. Eucalyptus (Eucalyptus Globules) management of periodontal diseases.
- 6. Garlic (allium sativum, liliaceae) act asa a powerful antibiotic and relaxative properties
- 7. Haldi for the management of dental pain, dental plaqueand and deactivation of Tobacco containing carcinogens
- 8. Honey: (apismellifera) act as a antibacterial and anti-inflammatory and immune-stimulator used for oral ulcerative lesions
- 9. Jasmine: act as antioxidant, used in treatment of odantalgia, and periodontitis and skin lesion
- 10. Katha: Act as analgesic and antibacterial and anti ulcer.
- 11. Olive oil: For the management of periodontal diseases
- 12. Piper cubeba(piperaceae)- act as anti carcinogenic activity.
- 13. Tulsileaves: act as a antibacterial and prevents dental plaque. And mouth infection.
- 14. Nettle: 2-3 drops on root extracts are applied to tooth cavities to treat toothache. 2,4

Conclusion:

Ayurvedic therapies for treating various diseases are exist thousand years ago now a days various extracts are done on Ayurvedic plants for treating various oral diseases. Oral cavity reflects the health of the body so oral clinician aware of various oral diseases and their management by medicinal plants. So tradional knowledge of the Ayurveda should be integrated with modern dental and cosmetic practice

References:

- 1. Sunitaamruthesh; Dentistry and Ayurveda- IV; classification and management of common oral diseases; indian j dental res, 19(1), 2008
- 2. Sai Lakshmi bhukya, kotyanaikmaloth ; Ayurveda and dentistry : a scientific review , vol V, Issue I(jan- feb 2017)
- **3.** Ramisettysabithadevi ; role of herbs and their uses in dentistry ; international journal of scientific study ; oct –dec , vol1 issue 3 2013
- **4.** Tiwariranjana ,Tripathi V.D; national journal of research in ayurved science -2014; 3(1); 1-12.

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Study of Effect of Shatadhauta Ghrita Application in The Management of Fissure-in-Ano

Dr.Santosh Swami

Dr.Sunil V. Mulje

M.S. Asso. professor

Prof., HOD (Rachna Sharir)

HOD ,(Shalyatantra Lt.b.v. kale aturved college, latur

Abstract

The incidence of ano-rectal diseases in the population is shooting up in alarming rate, most common being Fissure-in-ano, Hemorrhoids and Fistula-in-ano. The disease Parikartika characterised with Anilasanga, Kartanavat shoola and Daha in the anal region, resembling Fissure-in-ano.

This is the most painful ano-rectal disease affecting both sexes equally, found in the community as acute and chronic. Acute fissure is characterized by spasm, pain on defaecation and passage of bright streaks of blood along with stool and if this fails to heal turns into chronic fissure. Its chikitsa aims at pacifying Vata and Pitta dosha and the treatment in classics is pichhabasti, anuvasanabasti, pichu, parisheka and lepa with sneha dravya.

In modern science if the conservative treatment fails, Lord's dilatation, Fissurectomy and Lateral Sphincterotomy are the treatments which are having complications like faecal incontinence and prolonged healing. Hence there is a need for an effective and safe management.

In this study Kasisadi ghrita and Shatadhauta ghrita⁶ are selected as they are having effective vrana shodhana and vrana ropan properties. Drugs in the ghrita medium gives good lubricating action relieving muscular spasm. Hence this study is intended.

Key words: Fissure in ano, shatdhauta ghrita

Review of literature:

Review of the literature include a thorough screening of Ayurvedic texts, contemporary Ayurvedic literatures, modern texts and internet sources to collect sufficient data regarding,

- Nidana, Samprapti and laxanas and chikitsa of Parikartika explained in classics like Sushruta Samhita, Charaka samhita, Chakradatta, Kashyapa samhita will be reviewed in detail.
- Definition, incidence, etiology, pathology, clinical features, examination, and treatment of Fissure-in-ano explained in modern texts will be reviewed in detail.^{2,3}
- The detail description of Kasisadi ghrita in Sushruta Samhita will be reviewed.⁵
- Description of Shatadhauta ghrita mentioned in Kashyapa samhita will be reviewed in detail.⁶

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Aims and objectives of study:

- Detailed literary review of Parikartika and Fissure-in- ano.
- Evaluation of the effect of Shatadhauta ghritha as lepa in Fissure-in-ano.

Materials and methods:

Patients will be selected from the outpatient & inpatient department of Shalya Tantra.

A minimum of 30 patients fulfilling the diagnostic and inclusion criteria of either sex will be selected for the study.

(a) Inclusion criteria:

- 1. Clinically diagnosed cases of Parikartika will be taken for the study.
- 2. Patients irrespective of sex, religion, occupation & economic status.
- 3. Patients of both the sexes in between the age group of 18 to 60 years.
- 4. Patients of Parikartika with systemic diseases like Diabetes and Hypertension which are under control, are also included in the study.

(b) Exclusion criteria:

- 1. Patients having Parikartika (Fissure-in-ano) secondary to Ulcerative colitis, Shyphilis, Crohn's disease, Tuberculosis and Ca of rectum and anal canal.
- 2. Patients with infectious diseases like HIV& HbsAg.
- 3. Patient with uncontrolled Diabetes and Hypertension.
- 4. Patients with chronic sentinel pile and associated with conditions like Hemorrhoids, Fistula-in- ano.
- (c) Treatment group: 30 diagnosed patients of Parikartika on the basis of the lakshanas will be selected.
- d) Duration of treatment: Procedure: Per rectal application of Shatadhauta ghrita once daily

Duration: Two weeks

Clinical features are recorded before the treatment that is on zero day. Changes with the treatment will be observed on the first week and second week, as per the proforma of the case sheet, prepared for the study.

Follow up:

Patients are advised to come to the hospital for follow up once in fortnight for three months. Clinical observations will be recorded systematically.

Advice: Roughage diet, intake of plenty of fluids and avoiding spicy, oily food and vehicle riding.

(e) Assessment Criteria:

Following subjective and objective parameters will be considered for the study

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Subjective:

- Gudagata kartanavat peeda (cutting and burning type of pain).
- Gudagata raktasrava (per rectal bleeding).
- Constipation.

Objective:

- Tenderness.
- Size of the ulcer(fissure bed).
- Sphincteric spasm.

Assessment of subjective and objective parameters will be made before and after treatment on the basis of gradation.

Investigations:

- Blood tests-
- 1. CBC with ESR
- 2. RBS
- 3. HIV I&II
- 4. HbsAg
- Urine tests-
- 1. Sugar
- 2. Albumin

(a) Intervention:

- 1. The patients will be assessed before and after treatment as per assessment criteria.
- 2. The nature of the study will be explained to the patients in detail and pretreatment consent will be taken.
- 3. The patients have full right to withdraw from the study at any time.
- 4. The data will be maintained confidentially and subjected to statistical analysis.

Observations:

Table1-1
Showing distribution of patients according to age

	_	
age	Study Group	
15 – 25 yrs	9	
25- 35	14	
35 - 45	07	
total	30	

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Table -2 ,Result : Showing Percentage of Relief in Each Symptom of 30 Patients of Parikartika

Symptoms	Before treatment	After treatment	Difference	% of relief
Burning sensation at anal region	30	6	24	80%
Bleeding per anum	18	3	15	83%
Cutting pain during defecation	18	0	18	100%

Summery and Conclusion:

- It is cost effective and non laborious remedy to treat parikartika (fissure)
- > Standardization and marketing of Shatadhaut ghruta needed.
- Shatadhauta ghruta a best alternative to available ointments for the treatment of fissure and various non healing ulcers.
- Medical practitioner should be made aware of this multidimensional drug.

Bibliography.

- Acharya Sushruta, Sushruta samhita Chikitsa sthana part-I, 34th chapter, shloka no.16, Editor. Kaviraja Ambhika Datta Shastry.11th edition. Varanasi: Chaukhambha Sanskrit Sansthana; 1997.P.151.
- 2. S.Das, A Concise Text Book of Surgery, Chapter no.54, 3rd edition. Calcutta: Dr.S.Das. 13, Old Mayors Court; 2001. P.1062.
- 3. Baily & Love's, Short Book of Surgery, 72nd Chapter. By, R.C.G.Russel, Normens. Williams & Christophar J.K Bulstrode. 24th. Edition. Landon. Arnold a Member of the Hoddar Headline groups 338 Euston Road;2004. P.1252.
- Acharya Sushruta, Sushruta samhita Chikitsa sthana part-I, 36th chapter, shloka no.37, Editor. Kaviraja Ambhika Datta Shastry. 11th edition. Varanasi: Chaukhambha Sanskrit Sansthana; 1997. P.158.
- Acharya Sushruta, Sushruta samhita Sutra sthana part-I, 36th chapter, shloka no.16, Editor. Kaviraja Ambhika Datta Shastry. 11th edition. Varanasi: Chaukhambha Sanskrit Sansthana; 1997. P.138.
- 6. Vridha Jivaka, Kashyapa Samhita/Vridha Jeevaka Tantra, 14th Chapter, shloka no.46, Editor. Pandit Hemaraja Sharma, Varanasi: Chaukhambha Sanskrit Sansthana; P.328.
- Acharya Sushruta, Sushruta samhita Chikitsa sthana part-I, 34th chapter, shloka no.03, Editor. Kaviraja Ambhika Datta Shastry. 11th edition. Varanasi: Chaukhambha Sanskrit Sansthana; 1997.P.147.
- 8. Shri Chakrapanidatta, Chakradatta, Ksudra roga chikitsa prakarana sloka no.34, Prof. Ramanath Dwivedi. 3rd Edition. Varanasi: Chaukhambha Sanskrit Sansthan; 1997.P.314.

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Standardization of Mouktika Bhasma

Dr. Maruti T. Narhare

Dr. Dipti J.Chewale

Lecturer, Dept. of Rasashastra and B. K.

Lecturer, Dept. of Shalakya Tantra

Lt.B.V.Kale Ayurved Medical College, Latur.

Abstract

Standardization of Rasaushadhi'sis a need of hour to maintain its safety and efficacy. Rasaushadhi Mouktikabhasmaa is a unique mineral calcium containing preparation of Rasashastra. It is used in treatment of bone metabolic disorders associated with calcium deficiency and in pittajvyadhi..Muktabhasma was prepared by Shodhana and Marana process. Standardization of muktabhasma is very necessary to confirm its identity and to determine its quality and purity. An attempt has been made to summarize the ancient and the advanced methods available for standardization of bhasma such as varna, varitara, rekhapurnatatvam, niruttha, DSC, FTIR, TGA, SEM, NPST, etc. Key words: Peptic ulcer, Muktabhasma, Standardization, Acute toxicity.

Key Words – MuktaBhasma, Shodhana, Marana

Introduction

Parpati, Bhasma, Pottali, Kupipakvarasayana etc., are various preparations of Rasa sastra. Outs of these Bhasmas are more commonly practiced for treatment purpose.

Bhasma is a specific state of metals, minerals and other substances which is obtained after frequent trituration with various juices and decoctions of drug and burnt with appropriate fire repeatedly and which has lost it's original shape, colour, lustre, heaviness, taste etc., and in appearance resembles the ash is known as Bhasma".

Mouktika is a calcium compounds categorized under the name "Sudha Vargiya Dravyas (calcium group drugs)". It is obtained from the Pearl shell or oyster found in the sea. Pearls (Mukta) are the calcareous concretions formed as protection against the irritation caused by foreign objects, either sand or minute parasites which have lodged inside the shell, between the mantle and the shell of the animal. A fold of soft tissue envelops the foreign particles and deposits layer after layer of nacre on it to form a pearl. Nacre is composed of conchioline and calcium carbonate.

Mukta (pearl) bearing qualities like Sheetavirya, Madhuravipaka, Kapha-pitta shamaka, Vrishya, Aaushyam, Balakaraand Brihmanaand also indicatedinKasa, Shwasa, Kshaya, Agnimandhya, Daha, KaphajaUnmada, Vatavyadhi, Rajayakshma, Vishvikaraand Netra roga

Aims and objectives

- 1. To Explore the concept of Bhasma.
- 2. To prepare MouktikaBhasma

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- 3. To carryout physico-chemical analysis of MouktikaBhasmaat different stages.
- 4. Providing scope for clinical research on MouktikaBhasma as an medicine.

Review of literature

- Acharya Shri yadhavji Trikamji in his Rasamruta text, in rasyogavijnaniyam chapter has mentioned in detail about preparation and uses of Mouktika
- Mouktika will be reviewed as per all Rasaclassics like Rasratnasamuchya Rasa Tarangini, rasamruta Ayurveda prakasha etc.,
- ➤ Kumari will be reviewed as per all various nighantus like Bhavaprakasha, Rajanighantu, Madanapalanigantu etc.,

Materials and Methods

The raw materials moutika, nimbu ,sharava etc. was procured from local market

Preparation of Mouktikabhasma

- a. Shodhana of raw Mouktika
- b. Marana of Mouktika

a) Shodhana

About 270gm of raw Mouktika was subjected to shodhana process. The outer side of Mouktika was cleaned with sharp knife to remove the impurities. Then it is broken into small pieces. It was wrapped with a cloth and pottali was prepared. Pottali was suspended with help of stick and immersed in Jambir swarasa. The Yantra was kept on fire for boiling. The boiling of Mouktika in Dolayantra was carried out for 3 hours. The pottali was opened and mouktika was washed with hot water and kept for drying. 10 gm Shodhitamouktika was collected as a sample for analytical study.

b) Marana

The whole method of Mouktika marana was completed in following steps.

- 1. Bhavana (Trituration) with kumariswarasa
- 2. Preparation of chakrikas (Pelletization)
- 3. Sharavasamputa formation.
- 4. Laghuputa.

The lemon juice treated *Mouktika*were directly placed in silica crucibles which were subjected to heating in the muffle furnace for about 550°C for 3hrs. For this heating process i.e. *Laghuputa*, temperature was gradually increased to 550°C in about 180mins. When the temperature reaches 550°C, the temperature was maintained constant for about 3hrs and after 3hrs the temperature was decreased gradually in about 180mins to cool. After this process the *Mouktika*becomes brittle. These brittle *Mouktika*were collected and powdered with the help of mortar and pestle. The powdered *mouktika* given Bhavana

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(trituration) with 40ml of *nimbuswarasa*(lemon juice) for 3hrs. Then *Cakrikas*(pellets) were prepared and dried. After drying these pellets were subjected to second *puta* for 800°C. The process was repeated for third time, 30 ml of *nimbuswarasa*was used and it was heated for 3 hours. After cooling white coloured *MouktikaBhasma*was obtained



Fig No-01 Preparation of Muktabhasma

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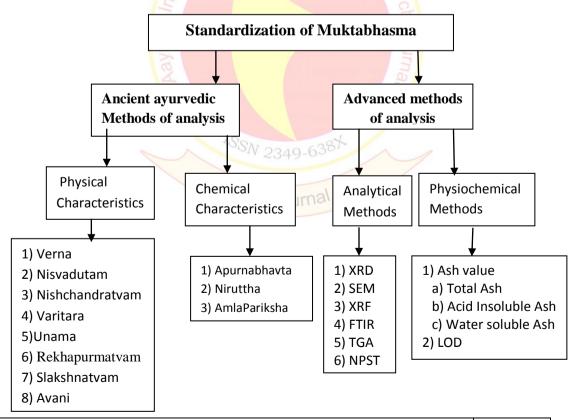
Observation during Mouktika Marana:

Table No- 01 Observation during Mouktika Marana

Table 140- 01 Observation during Mountina Mai ana					
Test	Before	Observation During Puta			
	Marana	I	II		
Colour	Pale White	Milky white	Bright white		
Taste	-	Slight Alkaline	Tasteless		
Touch	-	Rough, Hard, Khara	Mrudu, Soft		
Appearance	-	Powder	Very Fine Powder		
			·		
Weight	250 gm	B.M	250 gms	B.M	200 gms
		A.M	210 gms	A.M	160 gms
Odour	-	Slight odour	Odourless		
Varitaratva	-	70 - 80%	100%		
RekhaPoornatva	-	NOB	OB		
Loss	-	40 gms	40 gms		

- NOB -Not observed B.M Before Marana
- OB Observed A.M After Marana

Standardization of Mouktikabhasma



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Physical Characteristics

Table No- 02 Showing Physical and Chemical Characteristics According to ancient avurvedic methods

Parameter	Muktabhasma
Verna	Dull white
Nisvadutam	Palatable
Nishchandratvam	Free from Luster
Varitara	Fine powder
Unama Test	Positive
Rekhapurnatvam	Positive
Slakshnatvam	Good

Physio-chemical methods

Table No- 03 Showing Physiochemical Methods according to advanced method of analysis

Parameter Muktabhasma	
Total Ash w/w	99.84% w/w.
Acid insol <mark>uble ash w/w</mark>	0.34% w/w
Water soluble ash w/w	8.31% w/w
Loss o <mark>n drying</mark>	0.24% w/w

Analytical methods XRD Study

In XRD of MuktaBhasma, Peaks at d =3.04 A0 (2 0 =29.3666) confirmed the presence of calcite as the major crystalline phase in sample and Bhasmacontained calcite form of calcium carbonate (CaCO3).

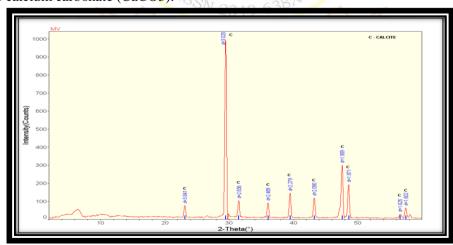


Fig No- 02 XRD of Muktabhasma

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X-Ray Fluorescence SpectrometerX-Ray Fluorescence Analysis-one of the best Analytical techniques to perform elemental analysis in all kind of samples, no matter if liquids, solids or loose powders have to be analyzed. XRF combines highest accuracy and precision with simple and fast sample preparation for the analysis of elements from Beryllium (Be) to Uranium (U) in the concentration range from 100% down to the sub-ppm-level. The XRF spectrometer measures the individual component wavelengths of the fluorescent emission produced by a sample when irradiated with X-rays

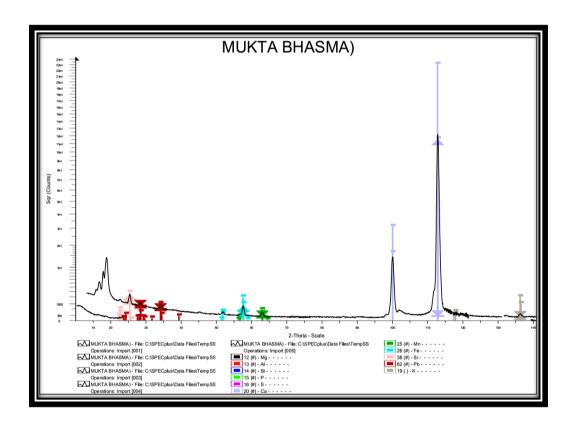


Fig No-03 XRF graph of Muktabhasma

Scanning electron microscopy (SEM)

The SEM photomicrograph of Mukta showed 20-100nm particles in the sample. Particle size is one of the factors which will affect dissolution and absorption of drug. Particle size and surface area are inversely proportional to each other, as particle size

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decreases surface area increases. This leads to increase in dissolution of drug and rapid absorption. Mukta are having good dissolution rate and smaller particle size make the drug in bio-assimilable form so it is easily and readily absorb in body and also SEM gave the information of chemical constituent so from observation it shows that Muktabhasma having Calcium carbonate as main chemical constituents

FTIR

This technique is based upon the simple fact that the substance shows marked selective absorption in the infrared region. After absorption of IR radiations, the molecules of the chemical substance vibrate at many rates of vibration, giving rise to close-packed absorption bands, called as IR absorption spectrum which may extend over a wide wavelength range. Various bands will be present in IR spectrum which will correspond to the characteristic functional groups and bonds present in the chemical substance. It is used to establish the structure of unknown compound and analysis of functional group.

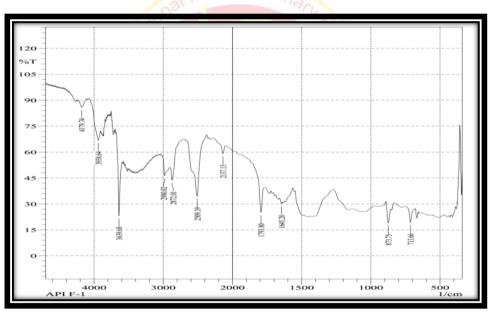


Fig No- 04 FTIR of Muktabhasma

Discussion

- 1. Before going to Mouktika bhasma, Mouktika was subjected to Shodana process
- 2. Nimbu Swarasa was used for MouktikaShodhana
- 3. Marana of Mouktika was done by giving bhavana with Nimbu Swarasa.
- 4. White coloured Mouktika Bhasma was obtained
- 5. Total three laghuputa were given to obtained moutika Bhasma
- 6. Quality assessment was done by using ancient and modern parameters.

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Conclusion

- 1. Selection of standardized Mouktika is essential.
- 2.. Mouktika bhasma prepared by using bhavan with nimbu swarasa.
- 3. Mouktika bhasma requires three laghu puta,
- 4. The colour of Mouktika bhasma is of white colour.
- 5. Qualitative chemical analysis of Mouktika bhasma reveals the presence of Ca.
- 6. XRD Study shows crystallographic and physical properties of Mouktika bhasma.

Bibliography:

- Yadavji Trikamji; Acharya, Rasamritam, Trans Dr.JoshiDamodar, First Edition 1998; Chaukamba Sanskrit Bhavan, Varanasi -315PP;Pg118.
- 2. Shri Sadanandasharma, RasTarangini, KashinathShastri, New Delhi, MotilalBanarasidas publication, ed.11th, 2009, pp.614, 23/72.
- 3. Mishra S, Ayurvedic Rasa Sastra, Varanasi, Chaukhambha Prientalia, 1998, Pp-609, P.No-400.
- 4. Prashanta Kumar Sarkar, Anand Kumar Chaudhary. AyurvedicBhasma: The most ancient application of nanomedicine. J SciInd Res, 69:901-905, 2010.
- 5. Amrita Mishra, Arun K Mishra, Om Prakash Tiwari, ShivehJha. In-house preparation and characterization of an Ayurvedicbhasma: Pravalbhasma. J Integrative Medicin, 12:52-58, 2014.
- 6. Vagbhat, Rasa RatnaSamucchaya, hindi commentary by Kulkarni D. A. 3rd ed. Chapter 2, Verse 1, MeharchandLakshmandas Publications, New Delhi. 1982. p. 18.
- Charak, Charak Samhita, Vidyotinihindi commentary by Upadhyay Y. 19th ed. Chapter 1-3, Verse 65, ChaukhambhaOrientalia Publications, Varanasi, India. 1993. p. 49.
- 8. Trivedi NA, Mazumdar B, Bhatt JD, Hemavanti KC. Effect of Shilajeet on blood glucose and lipid profile in alloxon induced diabetic rats. Indian J Pharmacol, 36, 2004, p. 373-376.
- 9. Tan L., Tay T.S., Khairoman S.K. and Low Y.C., Identification of an imitation pearl by FTIR, EDXRF and SEM, Journal of Gemmology, 29(5/6), 2005, 316-324.
- 10. Shastri, K.N.: Sadanand Sharma's Rasa Tarangani, MotilalBanarasi Das, Varanasi, 22, 2002.
- 11. 2-4. Kulkarani, D.A.: Rasa Vagbhata' Rasa RatnaSammucchaya , MeharchandLacchman Das, New Delhi, 1992

Role of Age, Gender, Occupation in Madhumeha – A Clinical Study

Dr. Shubhangi Milind Shastri

Dr.Anil R. Pawar

Associate Professor, Rognidan & Vikruti Vidnyana Late B.V.Kale Ayurved Medical College & Hospital, Latur Assistant Professor, Rognidan & Vikruti Vidnyana Late B.V.Kale Ayurved Medical College & Hospital, Latur

Abstract

In the new millennium Diabetes has become a problem of epidemic proportions. Diabetes is in the top 10, and perhaps the top 5, of the most significant disease in the developed world, and is gaining significance there and elsewhere. There are an estimated 80 million Diabetics in the world around 50 millions of them belong to healthy populated developing countries. The gobal pandemic principally involves type - 2 Diabetes and is associated with several contributory factors including unsatisfactory diet, sedentary lifestyle and increasing urbanization. So there is need to study the role of causative factors of Madhumeha.

Key Words: Madhumeha, Diabetes Mellitus, Occupation

Introduction

In ayurvedic classical text Diabetes Mellitus has been included under 'Prameharoga' with special name 'Madhumeha', a vata predominant type of Prameha. It finds place among eight Mahagada by Charak and Sushruta and has been declared a pandemic by W.H.O. This signifies its all time gravity. Diabetes has been described in ayurveda with physiopathology, role of gender, role of age, role of occupation has been described along with management. Considering these facts, these attempts are also made for the clinical study so as to establish the concept firmly and to understand the role of these factors.

Aims And Objectives

- To study the role of age, gender in Diabetes Mellitus.
- To study role of occupation in Diabetes Mellitus.

Review of Literature

Madhumeha Nidan

Aaharaj Hetu: Kashay, Katu, Tikta, Ruksha, Laghu, Sheeta, Anashan

Viharaj Hetu: Ativyavay, Ativyayam, Atiatap, Vishamsharirnyas, Jagran, Vegsandharan Madhumeha Samprapti: If vata by its ruksha quality changes the vital essence which is naturally of sweet taste into one of astringent taste and carries it to the urinary organs then it

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causes the condition called Madhemeha.

Age: According to modern science, age is an important risk factor for type 2 Diabetes. It is the disease of middle aged and elderly affecting 10% of the population over the age of 65. Urbanization: Among group of persons with similar body weights Diabetes is more common among the urban compared to the rural.

Materials And Methods

Sample

The patients coming to Late B.V.Kale Ayurved College and Hospital were studied in 2016-2017.

These 75 patients of Diabetes Mellitus were selected randomly.

Inclusion Criteria

Diabetic patients were selected according to diagnostic criteria for plasma glucose concentration.

F-120 above.

PP - 160 above.

Patients with past history of D.M. were selected.

Exclusion Criteria

Un-cooperated and pregnant patients were excluded.

Patients < 16 years old were excluded.

The patients were interviewed with the help of predesigned proforma i.e. case record form.

Residence

Urban: with urbanized population

Rural: village

Occupation

Sedentary	Moderate	Heavy	
Teacher, Tailor, Barber,	Fisherman, Basket maker,	Stone Cutter,	
Executive, Shoemaker, Priest,	Potter, Goldsmith, Agriculture	Blacksmith,	
Retired persons, Landlord,	labour, Carpentor, Rikshaw	Mineworker,	
Peon, Postman, Housewife,	Puller, Fitter, Turner, Welder,	Woodcutter	
Nurses	Cooli, Industrially boy, Weaver,		
	Driver, Beedimaker		

Observations And Results

Age and type of D.M.

Age	Type - 2 D.M. %	Type – 1 D.M. %
16 - 20 years	0	0
21 - 40 years	7	31

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41 - 60 years	88	69
>60	5	0

Male and female percentage

	Type - 2 D.M. %	Type - 1 D.M. %
Male	76	75
Female	34	25

Urban and rural percentage

	Type - 2 D.M. %	Type - 1 D.M. %
Urban	80	75
Rural	20	25

Occupation

	Type - 2 D.M.% disc//	Type - 1 D.M. %
Sedentary	81	78
Non-Sedentary	19	22

Discussion

Age : The most affected age group is 41 - 60 years. The healthy persons mostly belong to the age group 21 - 40 years and hence after then. So it is necessary to rule out the early diagnosis of D.M. by routine checkup in healthy person or screening for D.M. at a 4th decade. Also the type - 2 Diabetes is the disease of middle aged.

Gender: The males were more prone to D.M. The males suffering from type - 2 and typr - 1 were same. The females suffering from NIDDM group were more than females suffering from IDDM group. Aacharya Sushruta has mentioned that Prameya does's occur in female but in this survey Diabetes is also found in female population because of Sedentary habits and lifestyle.

Residence: The patients suffering from type - 2 were from urban area and the patients from rural were less. Changing lifestyle with western acculturation with mental stress may affect.

Occupation: Maximum number of patients having occupation Sedentary type. The previllance of D.M. increases in developed and developing countries due to the Sedentary lifestyle. Less physical activity is the cause for D.M. Ayurvedic text mentioned 'Asyasukh' is the one causative factor for Madhumeha. The shop worker, Clerk, Farm owner, Housewives included in Sedentary habits. Sedentary work seen to be predisposing power.

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Conclusion

The clinical study of 75 patients of D.M. reveals that

- > Type 2 D.M. is middle aged disease
- Females also suffering from D.M.
- Males are more prone to D.M.
- > Urbanization is one affecting factor of D.M.
- > Sedentary work is one of the etiological factor for D.M.

Biblography

- Charak Samhita Chakrapani commmentary Achrya Yadvji Trikamji Chaukhamba Sanskrit Sansthan Varanasi
- 2. Sushruta Samhita Dalhan commentary Achrya Yadvji Trikamji Krushndas Academy Varanasi
- 3. Sushruta Samhita Kaviraj Dr. Ambikadatta Shastri Chaukhamba Sanskrit Sansthan Varanasi
- 4. Ashtang Hridaya Hemadri Arundatta Varanasi
- 5. Madhav Nidan Madhukosh Commentary Yadunandan Upadhyaya Chaukhamba orientalia Varanasi
- 6. Practical Medicine P.J.Mehta National book depot edi 15th

 Davidson's Principles Practice of medicine Edichrstopher Haslett Churchill living stone edi 19th
- 7. API Textbook of Medicine Ed.Sidharth N. Shah Edi 7th Pub. API Rugna Pariksha Dr.Subhash R. Saley Anmol Prakashan Pune



Raktawaha Srotas and its Correlation With Circulatory System: Lifeline of Human Body.

Dr. D. N. Bandapalle

Dr. Pallavi B. Khandare,

Asst. Professor, Dept. of Rachana Sharir Late B.V.Kale Medical College & Hospital, Latur. BAMS, MD (Rachana Sharir). Certi. In cosmetology & Aromatherapy

Abstract:

The body contains numerous channels through which the dhatus, doshas and malas circulate, known as strotas in Ayurveda, these consist of both gross channels, such as the intestinal tract, lymphatic system, arteries, veins, and the genitor-urinary tracts etc. The different places where these processes take place are known as 'Srotas'. According Ayurvedic classic 'Srotamayam hi shariram' means living body is channel or comprised of channes or system. Srotas are so called because they have 'sravana' (oozing) – allow materials to pass through them very slowly. Srotas, in broad term refers to the channels of circulation present in the human body. Anatomically and physiologically, channels of circulation have great importance. Raktavahastrotas originate from the Yakrita (liver) and Pliha (spleen). The chief function of Raktavahastrotas is transportation of Rakta (blood) to the Rakta dhatu. Anatomically, the channels of circulation are distinct from blood vessels including arteries, veins and capillaries and are omnipresent in the human body. From physiological point of view, channels of circulation are primarily responsible for the circulation of three biological humours, tissues and waste-products to organs and organelles. Blood channels originate in the liver and spleen and transport blood to the rakta dhatu (all over the body). This group of channels is often referred to as the circulatory system.

Keywords: Yakrita, rakta dhatu, dhatus, doshas a,malas etc.

Introduction:

Ayurveda is an ancient Indian practice of holistic medical care that centers on the equilibrium of body, mind and soul. Dosha (vitiating factors or physical humors), dhatu (tissue elements) and mala (waste products) are the basic building elements of the body. Their continuous and proper flow in the body, to maintain health, requires hollow spaces or channels. These channels are called as 'Srotas' in Ayurveda. The body contains numerous channels through which the dhatus, doshas and malas circulate that are known as strotas, these consist of both gross channels, such as the intestinal tract, lymphatic system, arteries, veins, and the genitor-urinary tracts etc.

Aims & Objectives:

- 1. To study Raktawaha Srotas according to Ayurveda.
- 2. To review the Circulatory system as per modern science.
- 3. To study the Raktawaha Srotas and its correlation with Circulatory system.

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Methodology:

For the review and conceptual study various textbooks of Ayurveda and modern , Charak Samhita. Sushrutsamhita and articles are reviewed.

Review of Literature:

According Ayurvedic classic 'Srotamayam hi shariram' means living body is channel or comprised of channes or system. Srotas are so called because they have 'sravana' (oozing) – allow materials to pass through them very slowly. Srotas, in broad term refers to the channels of circulation present in the human body.

Srotas in Ayurveda:

To maintain continuity in the life cycle, these bodily elements have to be continuously regenerated, nourished and replenished. The different places where these processes take place are known as 'Srotas'. According to Charaka, the term 'Srotas' carries various meaning like Sira (vein), dhamani (artery), rasayani (lymphatic channel), rasavahini (capillary), nadi (duct), panthaan (passage), marga (track), sthaan (balanced position), ashaya (location/reservoir) etc. are the names of visible and invisible spaces within the body. Charaka defines Srotas as transporting channels of dhatus (tissue elements) undergoing transformation (intermediary metabolite).

Sushruta describes Srotas as structures which originate from vacant spaces (hollow organs), spread throughout the body and purvey materials or elements. Anatomically and physiologically, channels of circulation have great importance. Sushruta says that the channels of circulation are present in intra-cellular, inter-cellular and extra-- cellular spaces) of the human- body. Charaka has described 13 main Srotas in the Vth chapter of Vimansthana depending upon their origin and abnormality produced in them on vitiation.

Raktavaha Strotas:

Moolsthanha shonitvahanam srotasam yakrunmoolam pleehacha \ cha. Vi 5/8

Raktavaha strotas originate from the Yakrita (liver) and Pliha (spleen). The chief function of Raktavahastrotas is transportation of Rakta (blood) to the Rakta dhatu. Anatomically, the channels of circulation are distinct from blood vessels including arteries, veins and capillaries and are omnipresent in the human body. From physiological point of view, channels of circulation are primarily responsible for the circulation of three biological humors', tissues and waste-products to organs and organelles. Blood channels originate in the liver and spleen and transport blood to the rakta dhatu (all over the body). This group of channels is often referred to as the circulatory system.

Human body appears to be accumulation of Srotas (channels) and proper functioning of these channels is the cause of good health. The food and regimen that promote morbidity and go contrary to the well-being of dhatus (tissue elements) vitiate

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channels. Affliction of these channels leads to the vitiation of tissue elements residing there or passing through them, as vitiation of one leads to the vitiation of another. The vitiated channels and tissue elements vitiate other channels and tissue elements respectively.

Raktavaha srotas dushati -

Vidahi nyannapanani snigdhoshnapanani dravani cha Raktavahini dushyanti bhajatam chatapanlaou\\ cha. Vi.5/14.

The main signs of the vitiation of the channels are –

- 1. Atipravrutti increased flow of contents of the channel;
- 2. Sanga obstruction of the flow of contents of the channel;
- 3. Siragranthi appearance of nodules in the channel:
- 4. Vimargagamana diversion of the flow of contents to improper channel.

Various skin diseases, bleeding disorders, jaundice and so on are the disorders produced due to vitiated Raktavaha channel.

Conclusion:

According Ayurvedic classic 'Srotamayam hi shariram' means living body is channel or comprised of channes or system. Sushruta says that the channels of circulation are present in intra-cellular, inter-cellular and extra-- cellular spaces of the human-body. Raktavaha strotas originate from the Yakrita (liver) and Pliha (spleen). The chief function of Raktavahastrotas is transportation of Rakta (blood) to the Rakta dhatu. Overall circulatory system or Rakatavaha srotas is essential system for living human.

References:

- ISSN 2349-638 1. Vaidya Yadavji Trikamji Acharya editor. Sushruta Samhita with N ibandhasangraha commentary by Dalhan and Nyaychandrika Panjika of Sri Gayadasacharya on Nidansthana. Reprint ed. Varanasi: Chaukhamba Orientalia; 2012. Sutrasthana 25/3, p.67
- 2. P. V. Sharma editor-translator. Caraka Samhita Vol-I. Reprint ed. Varanasi: Chaukhamba Orientalia; 2011. Sutrasthana 30/12, p.237
- 3. Acharya Yadavji Trikamji. Charaka Samhita Vol. I. Chaukhamba Sanskrit Sansthana. Varanasi, 1990, Ch. Vi. 3/27
- 4. P. V. Sharma editor-translator. Caraka SamhitaVol-I. Reprint ed. Varanasi: Chaukhamba Orientalia; 2011. Vimansthana 5/3, p.329

Pterospermum Acerifolium (Muchakunda) – A Phytopharmacological Review

Dr. Sujay S. Dhumal,

Asst. professor, Department of Kayachikitsa,

Late B. V. Kale Ayurved College and hospital, Latur.

Abstract

Ayurveda deals with healthy living and treatment of diseases occurring due to varied etiological factors. Initially, the treatment of diseases consisted of administration of herbal drugs by extracting the active principles of drugs by various methods in different formats like juices, decoction, powders etc. Pharmacological study enables us to find source of potential chemotherapeutic drugs and to determine the safety of continued use of medicinal plants. P. acerifolium is used in traditional Ayurvedic medicine for the treatment of headache, bleeding disorders, as an analgesic, in poisoning, skin disorders, etc. P. acerifolium mainly contains flavonoids like Kaemferol, luteolin, malvalic acid, amino acids. The plant is documented to have anti inflammatory, analgesic, antipyretic, antioxidant, antiulcer, anticancer, antidiabetic properties. This paper elaborates the evidence based information regarding the phytochemical reports and pharmacological activity of this plant.

Keywords: Ayurveda, Pterospermum acerifolium, flavonoids, pharmacological activity.

Introduction

Description of *Muchakunda* is not found in *Charaka Samhita*, but *Sushruta* has mentioned it in the treatment of *Ama granthi*^[1] for local application. *Bhavaprakash nighantu* has mentioned it in the *Pushpadi varga*. It is used for headache, bleeding disorders, as an antidote, skin diseases etc. *Muchakunda* (*P. acerifolium*) is found at the height of 5000ft in the Himalayas and seen in cultivation as an ornamental or shade tree.

Scientific Classification:

Kingdom: Plantae

Division: Magniliophyta Class: Magnolipsida Family: Malvaceae

Subfamily: Sterculiaceae Genus – *Pterospermum* Species – *acerifolium* **Vernacular Names**^[1] –

Sanskrit – *Muchakunda*, *Kshatravriksha*, *Chitrak*, *Prativishnuk*^[2]. English – Maple-leaved Bayur tree, Bayur tree, Dinner plate tree

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Hindi – Kanak Champa, Muchakunda.

Bengali – Muskanda

Telugu -Matsakanda

Assamese-Moragos

Tamil – Vennangu

Oriya – Mushkundo

Manipuri- Kwakla

Marathi - Karnikar

Botanical Description

It is a relatively large tree, growing up to 30 meters tall. The bark of the tree is grayish in color and fairly soft. Small twigs and new growth is somewhat feathery and are usually more of a rusty-brown color. The **leaves** of the tree are palmately ribbed and have stipules. The leaves arrangement is alternate. Shape of the leaf being oblong, broadly obovate to ovate. Leaf edges are usually dentate or irregularly lobed. The ventral side of the leaves is a dark green color with a glabrescent texture. The leaves are rough and rubbery so that the loss of moisture in a hot climate is reduced. The dorsal side of the leaves range from a silver to rust color and are pubescent^[3]. **Flowers** are large, white and sweet scented. Fruit is a capsule, angled and furfuraceous.

Distribution And Habitat:

Found in Himalaya at the height of 5000 ft, in Bengal, Chittagong, Manipur, cultivated in South India.

Ayurvedic Properties [4]:

Table No. 1

Rasa	Kashaya, Katu, Tikta
Veerya	Ishat Ushna
Vipaka	Katu
Guna	Pichchhila
Karma	Pacifies Vata, Pitta and Kapha; Vedanasthapana (analgesic),
	Raktastambhana (hemostatic), soothing to the throat, Tvakdosha
	shaman, Shophashamana, Vrananashak, Pamanashana.
Indications	Shirashula, Raktapitta, Kasa, Tvakroga, Shotha, Vrana, Pama, Vatavyadhi etc.

Chemical Constituents:

Leaves- leaves contain majorly flavonoids like Kaemferol-3-o- β -D galactoside as much as 0.3%, while the other flavonoids were identified as luteolin, luteolin-7- o- β -D-glucoside and luteolin 7-o- β -D-glucuronide. **Flowers -** 24 β - thylcholest-5-en-3 β -o-alphacellobicide,3,7-diethy l-7-methyl-1:5-pentacosanolide,n hexacosane- 1-26-diol

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dilignocerate, friedelan- 3-alpha-01 its beta isomer, β -amyrin, β -sitosterol, ntriacontanol, n-hexacosane-1, 2, 6 diol and a mixture of acids and saturated hydrocarbon from the light petroleum extract. **Seeds** - glycoside in the alcoholic extract of seeds and Seed oil contains malvalic acid as a major cyclopropionoid component and amino acids like tyrosine, cysteine, glycine, alanine and sugars like lactose, xylose, rhamnose, and glucose. Barkbark contains a new polysaccharide composed of D-galacturonic acid, D-galactose, and alpha –rhamnose from the acidic portion^[5-10].

Anti Inflammatory And Analgesic Activity

The role of ethanolic extract of Pterospermum acerifolium bark extract demonstrated significant anti inflammatory activity against carrageenan induced, mediators induced and arachidonic acid induced rat paw oedema, significant inhibition of acetic acid induce writhing and tail clip induced analgesia were observed to occur with the extract. On the basis of finding it may be inferred that *P. acerifolium* is an anti-inflammatory analgesic agent that blocks histamine and serotonin pathway^[11].

Antioxidant And Anti-Inflammatory Potential Activity

Leaves of P. acerifolium L. (Sterculiaceae) are used in India for reducing oxidative stress and inflammation. The objective of this study was to investigate the antioxidant and anti-inflammatory activities to justify the use of the plant in folkloric medicine. Antioxidant activity of different fractions were evaluated by using *in-vitro* antioxidant assays models like determination of total phenolics. DPPH radical scavenging assay, nitric oxide scavenging assay, hydroxy radical scavenging assay and superoxide anion scavenging assay. Anti-inflammatory activity was evaluated using carrageenan induced inflammation and thermally induced protein denaturation. Ethyl acetate fraction of P. acerifolium (EAF) showed highest free radical scavenging activity in all the models. EAF also produced significant anti-inflammatory activity in both in-vivo and in-vitro model. The results obtained in this study showed that the leaves of Pterospermum acerifolium L. have antioxidant and anti-inflammatory properties which provide a basis for the traditional use of the plant [12].

Antimicrobial Activity

Successive ethanolic extract of bark of P. acerifolium were fractionated with hexane, butanol, methanol and water. In vitro antibacterial activity was tested by using agar cup and minimum inhibitory concentration method against S. aureus, B. lichenoformis, B. subtilis, E. coli, P. florescence, P. aeruginosa, and S. typhimurium. Although all five extracts showed promising antibacterial species, yet maximum activity was observed in butanol extract. S. aureus was the most sensitive strain. MIC values for most of the extracts ranged from .312 to 5.0 mg/ml; while the least MBC value was observed at 2.5 mg/ml^[13].

Antiulcer Activity

The role of alcoholic fraction of *P. acerifolium* bark extract on oxidative damages in the gastric tissue during alcohol induced ulceration was investigated. The extract showed significant antiulcer activity against ethanol induced ulceration and as well as significant reduction of tissue lipid peroxidation, catalase, superoxide dismutase and glutathione were observed to occur with the extract [14].

Wound Healing Activity

Pterospermum acerifolium, a well-known plant in Indian medicine possesses various therapeutic properties including healing properties and cytokine induction. Wound healing activity of ethanolic extract of *P. acerifolium* flower along with its effect on tumor necrosis factor-α (TNF-a) was assessed using excision model of wound repair in Wistar albino rats. After application of the *P. acerifolium* extract, rate of epithelization with an increase in wound contraction was observed. Animals tropically treated with 10% *P. acerifolium* extract in petroleum jelly, the wound healing process was observed faster as compared to control group which were treated with petroleum jelly alone. A significant accelerated healing was noticed in animals which were additionally pre-fed with 250mg/kg body weight of ethanolic *P. acerifolium* extract daily for 20 consecutive days along with the topical application 10% *P. acerifolium* extract. During wound healing phase TNF-α level was found to be up regulated by *P. acerifolium* treatment. Early wound healing may be pronounced due to *P. acerifolium* extract elevating TNF-α production^[15].

Anthelmintic Activity

Anthelmintic Activity of crude extracts and fractions were investigated against earthworms (*Pheretima posthuma*), roundworms (*Ascardia galli*) and tapeworms (*Raillietina spiralis*) using Albendazole and Piperazine citrate as reference standards. The results of anthelmintic activity revealed that the ethyl acetate fraction of all the parts were most potent which were well comparable with both standard drugs followed by n-butanol fractions of those parts, but at higher doses. All other fractions, petroleum extracts and remaining crude extract after fractionations of those three parts of the plant were endowed with minute antihelmintic property, which were not up to standards. The present study proves the potential usefulness of *P. acerifolium* as good anthelmintic agent^[16].

Antimitotic And Anticancer Activity:

Pterospermum acerifolium is used traditionally in the management of tumors. Ethanol and Water extracts showed good antimitotic activity against meristamatic cell growth. Both extracts also showed good inhibition on yeast cell growth with IC50 47.88 mg/ml and 39.15 mg/ml respectively. The mode of action of both extract with antiproliferative activity is due to fragmentation effect on DNA^[17].

Immunosuppressive Activity:

The hexane and ethanolic extracts prepared from the seeds of plant P. acerifolium were evaluated for their immunomodulatory activities by exploiting their effects on the humoral and cellular immune arms of BALB/c mice after oral administration for 14 days at different log doses. Various immune lymphoproliferative index, oxidative burst in peritoneal macrophages, modulation in T/B cell population and regulation of Th1/Th2 cytokines in mice were monitored to assess the immunomodulatory characteristics of the plant at 3, 10 and 30 mg/kg doses. Both the extracts exerted remarkable dose-dependent immunosuppressive effect with downregulation of all the immune markers studied^[18].

Hepatoprotective Activity:

The hepatoprotective activity of the ethanol extract of the leaf of *Pterospermum* acerifolium was investigated in rats for carbon tetrachloride induced hepatotoxicity. Hepatotoxicity was induced in male Wistar rats by intraperitoneal injection of carbon tetrachloride (0.1ml/kg/d p.o. for 14 d). Ethanol extract of P. acerifolium leaves were administered to the experimental rats (25 mg/kg/d p.o. for 14d) [19].

Antidiabetic:

In vitro alpha amylase inhibition study was carried out on 50% ethanol extract of flowers (PAFEE) and its various fractions. The active ethyl acetate fraction (PAFEF) was sub fractionated into three sub fractions (PAFE1, PAFE2 and PAFE3) and subjected to acute toxicity studies followed by Antidiabetic screening in vivo by streptozotocinnicotinamide induced type II diabetes. Diabetic animals treated with PAFE2 (30 mg/kg) reduced the levels of fasting blood glucose; significantly (P < 0.001) compared to that of diabetic control animals. Histological studies on drug treated groups did not show remarkable positive changes in β cells. PAFE2 showed 32.6 \pm 1.93% glucose uptake over control and, in the presence of PI3K inhibitor wortmannin, declined to 13.7 \pm 2.51%. HPLC analysis of PAFE2 reveals the presence of quercetin and apigenin as major constituents and both are inhibiting the glycogen phosphorylase enzyme in molecular modeling studies. The study evidenced strongly that the probable glucose lowering mechanism of action of active sub fraction PAFE2 is by increasing the glucose uptake in peripheral tissues and by inhibition of gluconeogenesis [20].

Conclusion:

Recently there has been a more attention regarding traditional use of naturally occurring compounds especially herbal compounds as they are generally believed to be safe for the use in humans. In this review, the pharmacological studies conducted on P. acerifolium indicate that this plant is having manifold potential for the treatment of various diseases like diabetes, inflammatory events including liver and joint disorders, cancer,

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wounds, skin diseases, helminthes infestations etc. P. acerifolium showed anti oxidant activity due to presence of highest free radical scavenging activity in all the models. Since there is a great shift of interest towards traditional medicines over conventional modern medicines due to their lesser adverse effects and other benefits, this review concludes that P. acerifolium as a potentially safe and effective plant with important medicinal values.

References:

- 1. Acharya YT, Kavyatirtha NR. 8th ed. Commentary Nibandhasangraha of Dalhana on Sushruta Samhita of Sushruta, Chikitsa Sthana; Granthyapachyarbudagalaganda: Chapter 18, Verse 10. Varanasi: Choukhambha Orientalia; p- 471.
- 2. www.flowersofindia.net/catalog/slides/Kanak%20Champa.html accessed on 14/12/2015
- Dr. G. S. Pandey, Dr. K. C. Chunekar, Pushpadi varga, Bhavaprakasha Nighantu of Shri Bhavamishra, Chaukhambha Bharati Academy, Varanasi, Reprint 2004, page 504.
- https://en.m.wikipedia.org/wiki/Pterospermum acerifolium accessed on 14/12/2015 4.
- Prof. Priyavrat Sharma, Dravyaguna Vijnana, Vol.II, Chaukhambha Bharati Academy, Reprint – 2009, page 80-81.
- Murshed S, Rokeya B, Ali T, Nahas N, Khan AKA, Mushiuzzaman M. (2000). Diabetes Research and Clinical Practice, 1: 50: 224. View at Google Scholar.
- 7. Premlatha B, Govindrajan R. (2005). Cancer-an ayurvedic prospective, Pharmacological Research, 51:22. View at Google Scholar.
- 8. Bishnoi P, Gupta P. C. (1979). Structure of a new Acid-polysaccharide from the bark of Pterospermum acerifolium. Journal of Chemical Society, Perkin Trans, I: 1680-1683. View at Google Scholar.
- 9. Gunasegaran R, Subramanian S. (1979). Indian Journal of Pharmaceutical Sciences: 72.
- 10. Rizvi SAI, Sultana T. (1972). Phytochemical studies of the flowers of Pterospermum acerifolium. Phytochemistry, 11(2): 856-858. View at Google Scholar.
- 11. Roomi MW, Hopkins CY. (1970). Some reactions of sterculic and malvalic acids. A new source of malvalic acid. Can. J. Biochem., 48(7):759-569. View at Google Scholar.
- 12. Manna Ashis Kumar, Jena Jitendra. (2009). Anti Inflammatory and Analgesic Activity of Bark Extract of Pterospermum acerifolium, International Journal of Current Pharmaceutical Research, Vol 1 Issue 1, 32-37. View at Google Scholar.
- 13. Santanu Sannigrahi1, Sambit Parida, V. Jagannath Patro, Uma Shankar Mishra, Ashish Pathak. (2010). Antioxidant and Antiinflammatory potential of *Pterospermum acerifolium*, International Journal of Pharmaceutical Sciences Review and Research, Volume 2, Issue 1,page 1-5. View at Google Scholar.
- 14. S. K. Panda and S. K. Datta, (2011), Antibacterial activity from bark extracts of P. acerifolium (L.) wild, International journal of pharmaceutical sciences and research, Vol. 2(3), page: 584-595. View at Google Scholar.
- 15. Ashis kumar manna, Jitendra jena, Alok kumar behera, Dipankar roy, subhas manna, Dr. sanmoy karmakar, Dr. subrat kar. (2009). Effect of Pterospermum acerifolium bark extract

on oxidative damages in the gastric tissue during alcohol induced ulceration, *International Journal of Pharmacy and Pharmaceutical Sciences*, vol- 1, suppl 1, page 51-58. View at Google Scholar.

- 16. Aswini Kumar Senapati, Ranjan Kumar Giri, Dibya Sundar Panda and Sremantula Satyanarayan, (2011). Wound healing potential of *Pterospermum acerifolium* wild. With induction of tumor necrosis factor _, *Journal of Basic and Clinical Pharmacy*, Vol-002 Issue-004, page 204-208. View at Google Scholar.
- 17. Sambit Parida, V. Jagannath Patro, Uma Shankar Mishra, Lucy Mohapatra, Santanu Sannigrahi. (2010). Anthelmintic potential of crude extracts and its various fractions Of different parts of *Pterospermum acerifolium* linn. *International Journal of Pharmaceutical Sciences Review and Research*, Volume 1, Issue 2, page107-111. View at Google Scholar.
- 18. Shweta Saboo, Deore S. L., Khadabadi S.S., Deokate U. A. (2007). Evaluation of Antimitotic and Anticancer activity of the crude extracts of *Pterospermum acerifolium* wild leaves, Nig. J. Nat. Prod. And Med. Vol.11, page: 75-78. View at Google Scholar.
- 19. Pathak, Manisha; Bano, Nasreen; Dixit, Preety; Soni, Vishal Kumar; Kumar, Padam; Maurya, Rakesh; Misra-Bhattacharya, Shailja (2011), Immunosuppressive activity of hexane and ethanolic extracts of *P. acerifolium* seeds in BALB/c mice.(Report), v.20, no.9, p.1667(7). View at Google Scholar.
- 20. S Kharpate, G Vadnerkar, Deepti Jain, S Jain (2007), Evaluation of hepatoprotective activity of ethanol extract of *Pterospermum acerifolium* ster. leaves, Volume 69 Issue 6 Page: 850-852. View at Google Scholar.
- 21. Rathinavelusamy Paramaguru, Papiya Mitra Mazumder, Dinakar Sasmal and V. Jayaprakash (2014), Antidiabetic activity of P. acerifolium flowers and glucose uptake potential of bioactive fraction in L6 muscle cell lines with its HPLC fingerprint, Biomed research international journal, volume 2014(2014), article ID 459376, 10 pages. View at Google Scholar.



Assessment of Efficacy of Amavatari rasa in Amavata

Dr.Dipti J.Chewale

Dr. Maruti T. Narhare

Lecturer, Dept. of Shalakya tantra Lt.b.v.kale Avurved Medical College, Latur. Lecturer, Dept. of Rasashastra and B. K. Lt.b.v.kale Ayurved Medical College, Latur

Abstract

Amavata a inflammatory connective tissue disorder which attacks the persons and leaves them crippled. Day to day the incidence of rheumatoid arthritis is increasing because of the faulty diet habits, sedentary life consumption of more diary food products, physical exercise immediately after food are the main causes of increasing rheumatiod arthrities.

Researches estimated that 2.9 million people have rheumatiod arthritis, it occurs in all races and ethnic groups. It effects mainly middle used persons but in the older and young people affects with increased frequency females are more affected i.e. 3:1 as compaired to males.

It causes joint pain mainly the small joints of hands, swelling of joints, morning stiffness and fever. Increased ESR, RA+ve, Crp +ve and diminished joint space without osteophytes are the diagnostic features.

Key words Amavatari rasa, Amavata, rheumatoid arthritis

Introduction

In Amavata, both vata & kapha (ama?) in aggravated condition, afflict trika sandhi cause stiffness all over the body (Gatra stabdata)

The acute painful state of Amavata is unbearable and if disease progresses & became chronic then it leaves the patients creepled – in his day today life in the form of reduction in his working capacity in absence of a satisfactory care pts (Patients) are supposed to be on continuos medication.

Rheumatoid arthritis is a chronic disease of the joints, usually polyarticular, marked by inflammatory changes in the synovial membranes & articular structures.

Various classical treatises have given almost similar kind of etiological factors. They are virudha ahara – incompatible food, virudha chesta, heavy fatty oily foods, those have given up physical exercise & those who does indulge in exercise immediately after snigda ahara.

There are so many yogas recommended for amavata by looking it physicians may get confused in which perticular avartha of the disease, these are to be prescribed, so this present study is undertaken to confirm in what stage Amavatari rasa is effective and its overall efficay on amavata.

Amavatari rasa is a powerful anti-rheumatic drug explained by Bhaishajya ratnavali. Which contains parada, Gandhaka, Triphala, Chitraka, Guggulu and Eranda

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taila. The drugs used in the formation are individually, the good anti-rheumatic drugs explained by various acharyas. Whole Sampraptivighataka in action.

In recent years the incidence of amavata is on rising, this may be because of faulty dietary habits & sedentary life style.

Amavatari rasa is a unique combination of drug to treat amavata. It was found mentioned in various rasa shastra classics.

Aims & objective

- 1. To study the Amavata and Rheumatoid arthritis in detail
- 2. Assessment of therapeutic efficacy of Amvatari ras in Amvata

Literature Review

Amavatari rasa is a unique combination of antirhuematic drugs found mentioned by Bhaisajya ratnavali which contains Hingulotha parada, Gandhaka, Triphala, Chitraka, Guggulu & Eranda.

Amavata: A disease entity explained by madhavakara which is increasing in the present era because of the consumption of oetiological factors & practicing sedentary life style. It is characterised by sandhi shula, shota, jadyata & Jwara. With the complications like Deformities, crepitations etc., it has prognosis. With the pathyapathya & a suitable drug it can be treated satisfactorily

Materials & Methods

The material & methods of the present study consists of following headings.

- 1. Selection of patients.
- 2. Duration & way of administration of drug.
- 3. Parameters of assesment.
- 4. Results.

1. Selection of patients :

The patients were diagnosed based on the presentation of history, signs, symptoms & detailed clinical examination, strictly followed inclusion & exclusion criteria

Inclusion Criteria:

- 1. Classical signs & symptoms were considered for selection of patients.
- 2. Patients of Amavata having the history of less than 5 yrs. without complications were selected.
- 3. Patients of Amavata between the age group of 20 yrs. to 50 yrs. of eigher sex was selected.

Exclusion Criteria:

- 1. Patients of Amavata having the history of more than 5 yrs.
- 2. Patients of Amavata less than 20 yrs. and more than 50 yrs.

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- 3. Patients of Amavata having the systamic diseases like diabetis mellitus, hypertension, rheumatic heart disease & heart diseases.
- 4. Pregnant women & lactating mothers.

Grouping:

This is a observational study in a single group. It was conducted on total 30 patients.

Selection of Drug:

The Amavatari rasa which was prepared by mixing Kajjali, Triphala, Shodhita Guggulu, Chitaka & Bhavana of Eranda taila .

Route & Way Administration:

Amavatari rasa 500 mg was given thrice a day orally with koshna jala after food.

Duration of Treatment:

The total duration was 4 weeks and assessment was made before and after treatment.

Parameters for assessment:

- Sarujam shotam painfull swelling of joints
- Shiratam anganam swelling
- Jadya Stiffness
- Jwara fever.

Gastro – Intestinal Symptoms:

Aruchi – Loss of appetite

Apaka - Indigestion

Vibandhata – Constipation

Antrakujanam – Gurgling.

Grading or Soring Pain

- 0 No pain
- 1 Mild Pain on forcible movement upto 60 mts.
- 2 Moderate Pain on normal movemetrs of all affected joints upto 1 4 hrs.
- 3 Severe Pain even at rest for more than 4 hrs. grossly affecting all joints leading to dissability.

Swelling

- 0 No Swellin g
- 1 Mild (Slight) Swelling slightly obvious more in the its in comparision with normal joint.
- 2 Moderate Swelling covers well the bony prominences of affected joints.
- 3 Severe Swelling much elevated so that the joints seems grossly deformed.

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Stiffness

- 0 No Stiffness or losts for 5 mts.
- 1 Mild Stiffness losts for 5 mts. 2 hrs.
- 2 Moderate Stiffness losts for 2 hrs. 8 hrs.
- 3 Severe Stiffness losts more than 8 hrs.

Redness

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

Tenderness

- 0 No Tenderness
- 1 Subjective experience of tenderness
- 2 Winling of face on pressure
- 3 Winling of face with drawl of affected part on pressure.

Crepitus

- 0 No Crepitation s
- 1 Mild Fine Crepitation s
- 2 Moderate Coarse Crepitation s

Jwara / Fever

- 0 No Jwara / Fever
- 1 Temp. 990F to 1010 F
- 2 Temp. 1010F to 1020 F
- 3 Temp. 1030 F & above.

ESR

- 0 Normal
- 1 21 30 mm / hr.
- 2 31 mm / hr to 40 mm / hr.
- 4.-41 mm/ hr & above.

Results

- More patients are in 25-45 yrs of age & females are dominant.
- Occupation was not significant by scattering the patients in different groups almost equally. Middle and poor socio economic status patients are dominating in the study.
- Vat kapha prakruthi patients were maximum
- The patients with mandagni were reported more which signifies the socio economic status and nature of work.

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- The results of the effect of the drug is divided into 3 groups.
- The drug shown highly significant imporvement (P> 0.001), in the associated symptoms and highly significant (P > 0.001) in chief complaints and no effect was shown in RA+ve, Crp +ve, cripitation, deformities and rhuematiod nodules.
- And no effects were produced in particular set of serological tests and deformities. It may be because of the tough anotomical and pathological manifestation.

Discussion

Ama and vata are the root cause of rhuematiod arthritis. Srotorodha by ama and its circulation in the body and gettign lodged in sandhi contributes towards the symptom complex amavata is the etiopathogenosis of Amavata or rhuematiod arthritis.

The constituents of Amavatari rasa rich in katu and tikta rasa, ushna veerya, these qualities will work at the level of ama by Deepana and pachana activities, substantiating the classics tikta deepanani katuni cha. The drug is dominated by madhura vipaka hence it pacifies vata dosa with out increasing the ama qualities. Hence breaking ama and vata complex.

Conclusion

- Amavatari rasa is one of the common formulation recommended by various classics for Amavata.
- Ingredients of Amavatari rasa is a unique combination for samprapti vighatana of Amavata.
- Amavatari rasa eliminates ama in fecilitating samprapti vighatana.
- The treatment adopted is shamana therapy which is effective in reducing the influentory process and given the satisfactory relief.
- Sandhishula, shota, jadyata, ragata, sparshasahatwa are highly significantly (P<0.001) reduced.
- Aruchi, apaka vibandhata jwara, antrakujan, are also highly significantly 0.001) reduced.
- ESR, walking time decreased by administering Amavatari rasa.
- No adverse drug reaction or hyper sensitivity was clinically noticed during the study.

Bibliography

- 1. Shastri Kavi rajsri Ambikadatta- Bhaisajya ratnavali Rajeswara datta shastri published by Chowkamba sanskrit samstana varanasi, 10th Edn.
- 2. Bhavamishra Bhavaprakasha I & II part, Vishwanath Dwivedi sastry, Chowkhamba vidyabhavan varanasi (1974).

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Aayushi International Interdisciplinary Research Journal (Monthly Journal)
Website:- www.aiirjournal.com I Contact:-Pramod P.Tandale 1 Mob. No.08999250451

ISSN 2349-638x Impact Factor 4.574

- 3. Dhanvantari Dhanvantari nighantu Editor P.V. Sharm (1982) Chowkamba orientals.
- 4. Kaideva Kaideva nighantu, editor, P.V.Sharma, Jayakrishnadas Ayurveda series 30, Chowkamba orientals, Delhi (1976).
- 5. Madhanapal Sartha madanaphala nighantu, translated by bhat, C.H.publishers, Halasikar, Hubli (1952).
- 6. Rajavallaba Rajavallaba nighantu, Srivenkateshwar press, Prakashana, Bombay 1917.
- 7. Sharma PV Dravya guna vignana, Vol.II Chowkamba sanskrit samsthana varanasi (1987).
- 8. V.G.Neginahala Dravyaguna vignana, Publication division, Director of Indian System of Medicine and Homeopathy, Govt.of Karnataka (1988).
- 9. Das vaidya baghawana Materia medica of Ayurveda, concept publishing company, New Delhi 1997: 10: 179.
- 10. Dvivedi viswanath Kriyatmaka oushadi parichaya vignana Chowkamba bharati academy Varanasi, III Edition 1982.
- 11. Dutt U.C. The materia medica of Hind, mittada publication, New Delhi, II edition, 1989.
- 12. Karnic C.R. Pharmacopial standards of Herbal plants Sri Satguru Publishers, Indian Books Centre, New Delhi, 1st Edition 1994 Vol.I
- 13. Khandal Santosh Kumar Rasabhaisajya kalpana publication scheme, Jaipura, 1st 1992.



Development of Anatomical Knowledge in Ancient Period

Dr.Rupnar Aruna

Dr. Smita Mule

Assistant Prof.

Assistant Prof.

Rachanasharir dept.

Rachanasharir dept.

Late b.v. kale Ayurved College, latur.

Late b.v. kale Ayurved College, latur.

Abstract:

History can refer academic discipline. It describes a sequence of past events in the manner of, discovery, organization, presentation and interpretation of events. History of anatomy is very interesting. It interprets development of anatomical knowledge from dissection of animals to human. Various anatomists contribute for development of anatomical knowledge from all over world.

So, various anatomists from all over world and their contribution to medical faculty is studied in this article

Keywords: Anatomy, Various anatomists, Dissection of animal body, dissection of human body

1. Introduction:-

Anatomy is the branch of Biology concerned with the bodily structure of humans, animals and other living organisms especially as revealed by dissection and separation of body parts.

Human Anatomy is one of the basic essential sciences of Medicine. It is divided into microscopic and macroscopic anatomy

Macroscopic anatomy or Gross Anatomy describes structures, organs, muscles, and boneset. which are visible to the naked eye.

Microscopic Anatomy is the study of tissues, it may further separated into Cytology, Histology

Embryology is the study of development of the human body from fertilization of the ovum and sperm till Birth.

Development of all branches of anatomy was started from observations of animals, also from dissection of animals to human being.

2. Aims and objectives:

- 1. To study history of anatomy.
- 2. To learn various methods of anatomical dissection and theory of various anatomists all over the world.
- 3. To explain anatomy helps in development of medical knowledge.

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3. Materials and methods:

Information was collected from historical books of anatomy as well as from internet sources. Collection of information was mentioned in this article in chronological order.

Historical aspect of Anatomy:

History of human anatomy is very interesting. In India *AcharayaSushrutstated MrutShodhan Padhatti* to learn Human anatomy. He stated about it in ShushrutSamhitaSharirsthana and explained about how to learn various structures in the body. Study of a

The study of Human Anatomy is ongoing thousands of years.

Egypt:

In whole world Egyptians are played great role for learning the Anatomy. The study of anatomy begins at least as early as 1600 B. C.

The Egyptians preserved dead bodies, known as Mummy and then learned anatomy. This Egyptian treatiseshows that the heart, its vessels, liver, spleen, Kidneys, hypothalamus, uterus and Bladder Show that its vessels, liver spleen, kidneys, hypothalamus, uterus and bladder were identified and also described that the other vessels carries air and Mucus.

Ebers Papyrus (C.1500 B.C.):

He wrote on the heart that it is the centre of the blood supply. It supplies the blood to whole body parts.

Egyptians also known about functions of Kidneys.

Greek advances in Human Anatomy:

Greek is the ancient capital for the study of Anatomy. Various famous anatomists were from Greek.

Alcmaeon:

He began to construct background to the medical and anatomical science. He identified the optic nerves and the tubes known as Eustanchius.

Acron, (480 BC), Pausanias (480 BC) and Philistion of Locri made investigation into anatomy.

Empedocels (480BC)

He argued heart was chief organ of vascular system.

Hippocrati Corpus:

Collected medical texts by various authors. The texts shows description of musculoskeletal structure, functions of Kidneys, the trisuspid valve of the heart and its functions.

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Aristotle-(4thcentury BCE):

He foundcomparative Anatomy.

Praxagoras:

Same time of Aristotle, First to identify the difference between arteries and Veins and relations between organs.

(About 300 to the 2nd Century BC):

First recorded school of anatomy was in Alexandria.

King Ptolemy I Soter

He was the first to allow for medical officials to cut open and examine the dead bodies for the purpose of learning the structures and functions of human body. King Ptolemy also took part in these dissections. Most of early dissections were done on executed criminals

Herophilos and Erasistratus:

Gained permission to perform live dissection /vivisection on Criminals in Alexandria.

Herphilos was the first physician to dissect human bodies and considered to be the founder of Anatomy.

Aristotle made an argument that the heart was the "seat of intelligence" but Herophilos argued that the brain was the "seat of intelligence". Herophilus distinguished between veins and arteries and made many other accurate observations about the nervous system of body.

2ndCentury:

Galen was great anatomist of ancient times. He was able to study all kinds of wounds without performing any actual human dissections. He was able to view much of the abdominal cavity. The information stated by Galen became authorized foundation for all medical writers and physicians for next 1300 years. Galens statement was challenged by Vesalius and Harvey in 16thCentury.

600-1100s:

Galen,s anatomical treatises translated from Arabic into latin , later from the Greek Original.

Early Modern Anatomy:

In 1335**Mondino De Liuzzi**was credited for the first human dissection recorded for Western Europe.

At Bolonga University in 1316 he published a book called "Anathomia" .It consists of detailed dissections that he had performed. This book was used as a text book in universities for 250 years. First time he carried out systemic human dissection.

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The first major development in anatomy in Christian Europe since the fall of rome occurred at Bolongna. Here anatomists dissected cadavers and contributed to the accurate description of organ and their functions.

1400-1900:

Leonardo da Vinci:

In 1489 Leonardo da Vinci made use of his anatomical knowledge in his artwork, making many sketches of skeletals, muscles and organs of human and other vertebrates he dissected.

As anatomist-artists he made many important discoveries and publish a book on Human Anatomy. About Arteriosclerosis and Cirrhosis of liver mentioned in his book. He was the first to develop drawing techniques in anatomy. He made total 500 Diagrams in his 60 notebooks.

Vesalius:

Born and educated in Belgium. He openly rejectedGalens anatomical teaching. He challenged Galen "drawing for drawing and publish a treatise "De humaniCorporisFabrica."

His work played a major role in relation to medicine. His evident skill led to his appointment as professor of surgery and anatomy at the University of Padua.

16-17 Century:

The 16th -17th centuries also witnessed significant advances in the understanding of the circulatory system, blood flow from left to right ventricles, Hepatic vein,, lymphatic system.

1670-1690:

Schwammerdam, Rusysch and others start making anatomical museums and specimens. Bidloo create movement toward greater anatomical realism.

17th and 18th Centuries:

At the beginning of the 17century the use of cadavers for dissection influenced anatomy.

Many famous artists attended anatomy, attended dissections and published drawing for money from Mischelangelo to Rembrandt.

In this century a well-known anatomists Willum Harvey discovered circulation of blood and heart, published a book on embryology. Many European cities, Amesterdam, London, Coenhegan, Pauda and Paris all had royal anatomists.

18-19thCenturies:

In these centuries major anatomist included Cuvier, Mckel, and Henry Greay.

21st century:

The peninsula college of Medicine and Dentstry in the U.K. founded in 2000. It becomes 1st modern medical school to carry out its anatomy without dissection. Now a

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day's study of anatomical structures is done with the help of X-ray, MRI,CTscan and other imaging techniques.

5. Discussion and conclusion:

We know Indian theory of *mrutshodhanpaddhatti*. This type of literary study explains history of anatomy as well as theory of various anatomists.

6. References:

- 1. www.wikipidia.com
- 2. www.mananatomy.com/...anatomy/history-human-anat.
- 3. https://www.britannica.com/science/anatomy.
- 4. B.D. Chourasiya, Hand book of General Anatomy, edⁿ5th



Study of Management of Oligospermia with Kawachbeej Ghana Prayoga

Dr. Mrs Snehlata Bhaurao Patil

M.D. (Stree Rog and Prasuti Tantra) Lecture, Late B.V. Kale Ayurved Medical College, Latur

Abstract :-

Infertility is a problem of global proportions affecting on an average 8-12% of couples worldwide, out of many causes of male infertility Oligospermia is the leading cause.

There is no satisfactory treatment in modern medicine for this condition Ayurveda is a better option for this. In Ayurveda terms like kshina shukra, Apla retas, shukra dosha indicates towards Oligospermia. In this article focussing on the management of Oligospermia through Ayurvedic preparations.

Keywords :- Oligospermia ,Alpa retasa Kshinaretasa,Kawach beej ghana

Introduction:

Inferfility is defined as the inability of a couple to conceive after 1 or more years of regular unprotected intercourse. It is estimated to affect 10% -15% of all couples.

In almost half of such cases, a male factor is involved. Most of the infertile men are reported to have a low sperm concentration and decreased motility as the cause. Alteration in spermatogenesis may result in release of immature or abnormal sperms in the ejaculate.

Oligospermia it termed as Ksheena shukra in Ayurvedic texts which indicates low volume and less number of sperms in seminal fluid According to WHO standards sperm count above 15 milion/ml is considered normal, Count less than this is considered as Oligospermia. Oligospermia contributes to about 13.94 % of causes of male infertility. Recent studies have indicated that the prevalence of Oligospermia is high in the metropolitan cities as well as smaller towns of India According to Ayurveda a healthy life style and healthy diet promotes health in this context Ayurveda provides better solution in the form of Proper dietary management, Life style advice, panchkarma, Yoga, medicinal treatment for management of Oligospermia.

Aim and Objective:

• To study efficacy of treatment of Oligospermia by Ayurvedic Formulation

Review of Literature:

This article is based on a review of Ayurvedic texts, material related to oligospermia and treatment have been collected . The main Ayurvedic texts used in study

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are Charaka Samhita. Sushruta Samhita Ashtang Sangraha, Ashtang hridayam Bhavaprakasha, Sharangdhara Samhita and all available commentaries on these .Also referred to modern texts research articles and relevant materials.

Method and Materials :-

This study is an Open-lable, non-comparative and exploratory study. For this study ready preparation of "Kawach beei Ghan" formulated by Chaitanya Pharmacy is used " Ghanavati 'Is the caliberated concentrated dried extract of the herb.

It disintegrates within 10 minutes, enabling faster action. Even smaller doses are very effective because of higher concentration ratio, Original taste and flavours too. The herbs are tested for quality as per the norms laid down in "Indian pharmacopia .Each ghana contains 150 mg Aq. exrtract of Mucuna Prurita.

Discussion:-

Oligospermia is a condition in which sperm count is reduced.

- * Major causes of Oligospermia :-
 - 1. Congenital: Undescended testes, hypospadias, Kartagener syndrome
 - 2. Thermal Factor: scrotal temperature should be less than 20 F than the body temp. It increases in varicocele hydrocele ,filiriasis. Tight under garments .working in hot atmosphere.
 - 3.Infection: Mumps orchities after puberty, syphilis, Bronchiectasis.
 - 4. Genetics: Klinefelter's syndrome (47xxy)
 - 5. Endocrinal: Hypopituitarism, thyroidism Adrenal hyperplasia.
 - 6. Systemic diseases: AIDS, Renal failure, D.M. Vit A deficiency
 - Addictions: Alcohol, Tobacco addiction
 - 8. Iatrogenic: Radiation Cytotoxic drugs, antihypertensives, some antibiotics, anticonvulsant may hinder spermatogenesis.

Causative factors according to Ayurveda: 1. Ativvavava

- 1. Ativyavaya
- Ativyayam
- 3. Asatmya sevan
- 4. Akala Maithun
- 5. Ayonimaithun
- 6. Amaithun
- 7. Narinam arasadnyanam (Loss of libido)
- 8. Jara, chinta, shokam, Bhaya, Krodha
- 9. Vegavarodha
- 10. Vyadhikaran
- 11. Dosha dhatu vaishamya

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Investigations:-

- 1. CBC ,Urine routine
- 2. Ultrasonography of scrotum
- 3. atleast two semen sample analysis
- 4. Physical Examination
- 5. Hormonal assay
- 6. Genital Tract imaging
- 7. Testicular biopsy
- 8. FNAC of testies

Management through Modern Medicine:

- 1. In Obstructive Azoospermia -Microsurgical reconstruction
- 2. Anti-sperm antibody-Immune-suppression by cyclic steroid
- 3. Varicocele Varicocelectomy
- 4. In obstraction of ejaculatory duct transurethral resection of ejaculatory duct (TURED)
- 5. Artificial insemination
- 6. In vitro fertilization (IVF)
- 7. ICSI (Intracytoplasmic sperm injection
- 8. GIFT
- 9) ZIFT

Management according to Ayurveda:

According to Ayurveda ,normal characteristics and quantity of shukra dhatu is : sphatikabham (alum white) Dravam (gel like), snigdham (Viscid) Madhuram (sweet in taste) , Madhugandhi (Smells like honey) shukra dhatu normal quantity is about 1/2 anjali.

According to Ayuveda shukra doshas can be very well managed by using Rasayna and vajikarana Chikitsa. Variety of drugs are suggested in the text in this context.

Kapikachu or Kawach beej is also praised as a noble aphrodisiac . It is well-known as Mucuna Pruriens. In Mucuna pruriens , the primary compound found is L-dopa / Levodopa.

It is a precursor to dopamine adrenaline and non-adrenaline. Dopamine stimulates pituitary gland and, maintanes healthy release of growth hormones throughout life. Thus it protect body from debilites and weaknesses, so it helps in the problem of loss of libido. It boost-up functions of testicles, improve its link with pituitary gland and promotes production of healthy and motile sperms in higher number. It increases blood circulation to genitals, decreases anxiety and psychological stress. It increases stamina and vigour Improves muscle tone and increases level of bio-available testesterone. It improves semen quality by preventing cellular oxidative stress, stimulates sperm production and maintances

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healthy sperm balance in the ejaculate. Prevents damage to sperm caused by free radicals, stress or age.

It has palatable taste It is used in many invigorating medicines as well as it is used as a supple mentary food product since from years. It's ghana vati is very effective, palatable. It can be taken along with milk or alone It's reference is given in "Bhav Prakash" Purva Khand page No 467. It is adviced to take two tablets twice a day with milk for atleast three months

Conclussion:-

As per above discussion, we can conclude that Ayurvedic formulation are simple, effective, harmless and quiet economical options for treating oligospermia ,Kawach beej Ghana vati is very assuring remedy in this condition,

Reference / Bihliography:

- 1. Bhavprakash samhita uttarkhand, chikitsaprakarana, Vaikaranadhikara 72/9 Purva khand page No 467. Bhaprakasha of shree Bhavmishra edited with vidyotini Hindi Commentary by Pt. Shri Bhramha shankar Mishra, Chaukhamba Sanskrita Bhavan, Varanasi edition-2012
- 2. Charak samhita chikitsa sthan, Ayurveda Dipika Ayushi Hindi commentary second part 30/196-203 Page No 826, Chaukhamba orientalia, Varanasi, edition 2012
- 3. WHO Laboratory Manual for the examination of Human semen and sperm cervical Mucus interaction -4th ed. Cambridge, Uk. Cambridge University press 1999;10;128
- 4. Text book of Gynaecology by D.C. Dutta 4th edition
- 5. Data Base on medicinal plants used in ayurved Vol. 1-Page 202



Effective Role of Yoga in Infertility

Dr. Sanyogita R Londhe

Dr. Pallavi U Jadhav

Asst-Prof Kriya Sharir Dept. Late B. V. Kale Manjara Ayurved Medical College & Hospital, Latur.

Asst-Prof. Dravyaguna Dept. Late B.V. Kale Manjara Ayurved Medical College & Hospital, Latur.

Introduction

In today's high-profile lifestyle era 20-25% couples are affected through infertility. There are several reasons like fast and modern life style, age factor etc. which can cause infertility in you. Although we live in today's modern lifestyle the basic thing is negative or inferior complex, stress, anxiety which tends to physical and mental illness, in form of instability, prone to addiction which affects to reproductive organs because these factors affect hormonal balance. No direct correlation has been documented between yoga and fertility. But a 1993 study found that women undergoing infertility treatment have more levels of stress and depression in compare to other diseases. Specific yoga practice including quiet asana, breathing technique and meditation can be used to improve fertility by balancing hormonal imbalance. These yoga practices enhance fertility by stimulating hormone levels and improving blood and nutrients supply to reproductive organs. For older couples yoga can slow down the aging of organs and tissue which are detrimental for ability to get pregnant.

Aim and Objectives:

- 1. To re-evaluate, discuss, and elaborate the yoga poses and theireffect on fertility.
- 2. To understand the health-related problems of the infertile couples; changing life style is a risk factor for fertility and its management through Yoga.

Materials and Methods:

This article is based on a review of Ayurvedic texts. Materials related to yoga, its physical, psychological benefits and other relevant topics have been collected. We have also referred to the modern texts and internet media to collect information on the relevant topics.

Conceptual study:

What is Yoga?

Yoga practice includes asana, breathing technique and meditation i.e. relaxation stage. In practice it can be said that the various posture brings about many important results

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physical and otherwise. For example, during some of them various nerve centres are activated these effectively help to control the irregularities in body and the purification of our mental nature i.e. suppression of some animal passions. In padmasana the energy column becomes absolutely straight. The energy column is probably the space inside the spinal cord through which CSF is flowing. So, the flow of CSF should be remaining unobstructed, uninterrupted. The normal tendency of CSF is flowing downward because it is secreted at the top from choroid plexus in lateral ventricle of brain. That CSF which drops on top of the hypothalamus probably takes hypothalamic releasing factors in it, travels downward and gets absorbed in vein. Probable aim of all these sitting postures is to reverse this flow so that hypothalamic releasing factors are not wasted. They are stored there controlling the ageing process of human being. Thus that results into averting physiological aging process because hypothalamus controls food fear and sex. Hatha yoga declares that practicing of asanas will give stability health and normal physiological function of body.

Physical benefits

- 1. Increased strength
- 2. Muscle toning
- 3. Proper body alignment
- 4. Proper breathing pattern
- 5. Boosts blood circulation

Psychological benefits:

- 1. Acquisition of a positive attitude
- 2. Reduced level of anxiety
- 3. Minimize mental fatigue
- 4. Balance in mind and body www aiirjourna

Physiological benefits

Endocrine System: Responsible for hormone regulation and reproductive health.

Nervous System: Moving from a sympathetic (fight or flight) state to a parasympathetic state (which is essential for the reproductive system to work).

The Health Benefits of Yoga for Men

Men are subject to infertility problems like low sperm count, which is quite often related to high stress levels. When they tend to suffer from continuous stress, cortisol is released into the blood stream causing low sperm count and low sperm motility leading to

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low fertility. Regular Yoga practice helps release stress and most importantly yoga can help regain sexual stamina.

The Health Benefits of Yoga for Women

Many women are not aware of the health benefits of yoga to increase fertility and improve their chances of getting pregnant. Yoga can assist women with infertility release stress and re-gain a sense of wholeness and inner peace. Many women notice a more regular menstrual cycle and an easier period. Better sleep and better relationship with their partner is an added bonus of yoga practice.

Most Important Health Benefits of Yoga

- 1. Yoga simulates the internal organs of the body.
- 2. Yoga increases flexibility and tones your muscles.
- 3. Yoga detoxifies the body by increasing blood circulation to the reproductive organs.
- 4. Yoga stimulates ovulation and improves sperm count.
- 5. Yoga rejuvenates your cells, tissues, and organs, giving you an overall younger look.
- 6. Yoga harmonizes your mind and your body to helps you release stress.
- 7. Yoga improves digestion.
- 8. Yoga improves sleep patterns.
- 9. Yoga helps couples increase chances of conception by increasing emotional connection and intimacy.
- 10. Yoga increases sexual performance.

Yoga Poses for Fertility

Hero Pose

There are many grounding yoga poses, but this one is very simple to execute. It also energizes your lower body and brings power to your mind by increasing focus and concentration. It empowers you and releases any fears that may create mental blocks.

- Sit on your knees.
- Lift your buttocks slightly so that you can move your feet apart, placing them just on either side of your buttocks.
- Keep your knees together.
- Place the palms of your hands on your lap.
- Stretch your torso up and look straight ahead.
- Continue breathing slowly and stay in this pose as long as you want.

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Cobra Pose

There are many yoga poses that bring energy and vitality to your reproductive organs, but this one is very effecting in increasing blood flow as well.

- Lie face down with your feet together and your toes pointing behind you.
- Place your hands flat on the floor close to your body and beside your rib cage.
- As you inhale, gently push off your hands, lifting your head and chest off the ground and tilt your head back.
- Feel your chest moving forward as well as upward, this will help you from straining the lower back. Go as far as it feels comfortable.
- Exhale and gently move your head toward the floor with your forehead almost touching it.
- Lift yourself up to a sitting position going through a kneeling position.
- Do not forget to breath.

Relaxation Pose

This pose is the most relaxing of all the yoga poses. You should always start and end your practice with this pose. If you do not have time for other poses, just do this one. This pose will help you reduce stress and find a way to connect your mind with your body. Forming this connection as often as possible adds a tremendous healing power to your body. If you have to choose only one pose to practice to reduce your stress levels and increase the chances of conception, this is the one. Practice it every day for at least 20 minutes. This yoga for fertility pose is indicated for both partners.

- Lie on the floor and relax.
- Relax your body and let your jaw become loose.
- Close your eyes and pay attention to your breathing pattern.
- Inhale a long and slow breath, followed by an equally long and slow exhalation.
- Feel your abdomen lifting during the inhalation and visualize healing and soothing energy of white, pink or orange colour fill your pelvic organs.
- During exhalation, feel your abdomen going down and imagine all the blocks that prevent you from getting pregnant going away.
- Continue this practice for 5 to ten breaths, and then allow your breath to assume its own natural rhythm.
- If your mind wonders and you start to think about things that make you tense or worried, simple acknowledge your thoughts and then send them away in your next exhale breathe.
- To come out of this yoga pose, bend one knee and roll over to your side.
- Stay there for a couple of breaths before getting up slowly.

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The Lotus Pose (Padmasana) Although you will not be able to do this your first try, with practice you will be able to easily do a lotus pose. The lotus poses centre the body, aids the abdominal muscles and reproductive areas.

- Start by sitting down cross-legged as you normally would.
- Then slowly lift the right leg, bending at the hip not the knee.
- Place the right foot lightly in the bend of your left arm and the right knee in the bend of your right arm.
- Relax and slowly put the right foot over the left thigh with the right knee touching the floor.
- Repeat the sequence with the left leg.
- Let your index and thumb fingers of each hand touch and rest each arm on your legs.

Conclusion

In today's world the worst challenges faced by couples is Infertility. Yoga can help people cope with the challenges of infertility. Simple postural, breathing, relaxation and meditation practices would lead to enhancement of fertility. The practices include specific postures, mantras and breathing techniques. These exercises enhance fertility by stimulating hormone levels and improving blood and nutrients supply to reproductive organs. In doing this they maximize the vitality of these organs. Regular Yoga practice helps release stress and most importantly yoga can help regain sexual stamina. Thus, Yoga can be an effective approach for many couples to let their dreams come true.

References

- 1. Yoga of the millennium based on comparative study of yoga-upnishads and yog sutras by Dr. Mrs. Anuradha Oak
- 2. Stress management through yoga and meditation by Pandit Sambhaji Nath.
- 3. International journal of drug formulation and research *Review Article* promotion and improvement of fertility by yoga byVinayak M Gaware, Ramdas T Dolas, Kiran B Kotade, Kiran B Dhamak, Sachin B Somwanshi, Atul N Khadse, Vikrant K

Critical Review of Yoga, Ayurved and Modern Medicine in the Management of Spondylosis

Dr. Rahul A. Jadhav,

MD (Swasthavritta) Lecturer, Department of Swasthavritta.

Late B. V. Kale Ayurved Medical College And Hospital, Latur.

Abstract

The Biggest Killer in the world today is the Modern Lifestyle; like high stressful job, sedentary life style, wrong food habits, lack of exercise and improper sitting postures creates spine disorders. That's why spondylosis is not just an degenerative disorder of vertebrae also a life style disorder. Management of spondylosis has been a challenge for health care professional due to the lack of curative approach in the main stream medicine and unreliable outcome of surgical intervention. Life style disorders in general require a holistic approach for long term and curative management, Ayurveda and Yoga sciences aim at developing the physical, mental, intellectual, emotional and spiritual levels of human being with the holistic approach. In ayurved spondylosis has been categorized under vata vyadhi. There are number of medicines described in the texts for vata vyadhi and many of them are in regular practical use. Also shodhan chikitsa like Basti karma has been proved very effective in the management of vata vyadhi. Practice of yoga can lead to postural corrections, relaxation of muscles and structural changes in the joints which helps in the regeneration & realignment of the bones & cartilages. Yoga can be more reliable in long run because of lack of significant drawbacks in its therapeutic use. Yoga is not just an exercise but the physio-psyche-spiritual experience. Even thought the proper management and prevention of spondylosis can be done with the help of yogic therapy, holistic approach with combination of Ayurvedic treatment with yogic therapy can benefit the patients with spondylosis than the singular use. This critical review is an effort to summarize and evaluate different ideas and information to better understand Spondylosis and possible role of different management approaches after taking into consideration both the strengths and weaknesses of the material under review based on classical and contemporary sources. This article expresses the writer's point of view in the light of what is already known on the subject and what is acquired from related texts.

Key words:- Yoga, Ayurved, Spondylosis, Basti, Physical Therapy.

Introduction

Ayurveda is a science of life with complete holistic approach towards preventive, curative and spiritual line of treatment.

Aurveda and yoga are based on the knowledge of veda and darshan shastra hence are unique and eternal sciences. Both the sciences have evolved from the same philosophy, culture and country. They look at human beings from the same holistic angle. Ayurveda is the science of life or longevity. Yoga is the science of linking the individual self with the universal self; both the sciences aim at developing the physical, mental, intellectual, emotional and spiritual levels of human being.

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Yoga therapies prescribe specific regimes, posture, breathing exercises and relaxation techniques to suit individual needs.

स्थिर सुखम् आसनम् | पा यो २ ४६

Its means is a posture which is steady and comfortable. Asana is capacity to hold still for a long time in a composed and peaceful state, with minimum energy expenditure. Asana are physio-psyche-spiritual postures.

Modern Medicine is the science and practice of the diagnosis, treatment, and prevention of diseases. Medicine encompasses a variety of the prevention and treatment of illness. Contemporary medicine applies biomedical sciences, biomedical research, genetics, and medical technology to diagnose, treat, and prevent injury and disease, typically through pharmaceuticals or surgery, but also through therapies as diverse as psychotherapy, external splints and traction, medical devices, biologics, and ionizing radiation, amongst others.

In the desire for more and more comfortable and easy life, man is changing his life style, form the pre-vedic period to modern era, continuously. Ayurveda-the science of life had observed all the changes and was proved to be much effective in each stage of change. Man has changed his habits of eating, sleeping and also habit of travelling. Being a medical science, ayurveda is always in connection with habits and rules of community. Various communal activity and needs are described in ayurveda, regarding their effect on the health.

The Biggest Killer in the world today is the Modern Lifestyle; like high stressful job, sedentary life style, wrong food habits, lack of exercise and improper sitting postures creates pain in the cervical and lumbar region. That's why spondylosis is not just an degenerative disorder of vertebrae but it's a life style disorder

An axial endoskeleton, first as a notochord & then a vertebral column, provides the basic distinguishing feature of the phylum, "the vertebrata" to which of course, mankind belong. In the modification & elaboration to various forms of locomotion, the vertebral column was exposed to new patterns of force in the distribution of weight & muscular tensions. The intervening arrangements of the skeleton, muscles & other appendage structures permit some degree of angulations, torsion or displacement. Forming junction regions of greater pliancy between their individual components. These conditions can lead to spondylosis.

This critical review is an effort to summarize and evaluate different ideas and information to better understand Spondylosis as an lifestyle disorder of musculo-skeletal system and possible role of different management approaches after taking into consideration both the strengths and weaknesses of the material under review based on classical and contemporary sources.

This article expresses the writer's point of view in the light of what is already known on the subject and what is acquired from related texts.

Observations

Spondylosis

Spondylosis is a broad term meaning degeneration of the spinal column from any cause. In the more narrow sense it refers to spinalosteoarthritis, the age-related wear and tear of the spinal column, which is the most common cause of spondylosis. The degenerative process in osteoarthritis chiefly affects the vertebral bodies, the neural foramina and the facet joints.

Spondylosis sign and symptoms

- When the space between two adjacent vertebrae narrows, compression of a nerve root emerging from the spinal cord may result in radiculopathy; which is sensory and motor disturbances, such as severe pain in the neck, shoulder, arm, back, or leg, accompanied by muscle weakness.
- Less commonly, direct pressure on the spinal cord (typically in the cervical spine) 2. may result in myelopathy, characterized by global weakness, gait dysfunction, loss of balance, and loss of bowel or bladder control.
- 3. The patient may experience shocks (paresthesia) in hands and legs because of nerve compression and lack of blood flow.
- 4. If vertebrae of the neck are involved it is labelled cervical spondylosis. Lower back spondylosis is labeled lumbar spondylosis.

Causes of Spondylosis

- ISSN 2349-6387 Spondylosis is caused from years of constant abnormal pressure, from joint subluxation or poor posture, being placed on the vertebrae, and the discs between them.
- 2. The abnormal stress causes the body to form new bone in order to compensate for the new weight distribution. This abnormal weight bearing from bone displacement will cause spondylosis to occur. Poor postures and loss of the normal spinal curves can lead to spondylosis as well.
- 3. Spondylosis can affect a person at any age; however, older people are more susceptible.

Diagnosis of Spondylosis

1. Cervical Compression Test is performed by laterally flexing the patient's head and placing downward pressure on it. A positive sign is neck or shoulder pain on the

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ipsilateral side, that is, the side to which the head is laterally flexed. This is somewhat predictive of cervical spondylosis.

- 2. Lhermitte sign: feeling of electrical shock with neck flexion;
- 3. Reduced range of motion of the neck, the most frequent objective finding on physical examination.
- 4. MRI and CT scans are helpful for pain diagnosis but generally are not definitive and must be considered together with physical examinations and history.

Management of spondylosis

Many aproches and different medicinal sciences are being used in the management and treatment of spondylosis.

Modern medicine

Treatment is usually conservative in nature. Patient education on lifestyle modifications and nonsteroidal anti-inflammatory drugs (NSAIDs) and physical therapy, chiropractic care are common forms of manual care that help manage such conditions. But any of these treatment measures does not cure the degeneration.

Surgery is advocated for cervical radiculopathy in patients who have intractable pain, progressive symptoms, or weakness that fails to improve with conservative therapy but Surgical indications for cervical spondylosis with myelopathy remain somewhat controversial. By far the most effective management with long term goals are the physical therapy and spine traction.

Spinal traction is a form of decompression therapy that relieves pressure on the spine. It can be performed manually or mechanically. Spinal traction is used to treat herniated discs, sciatica, degenerative disc disease, pinched nerves, and many other back conditions.

I.Mode of action of spinal traction.

Spinal traction stretches the spine to take pressure off compressed discs. This straightens the spine and improves the body's ability to heal itself.

II.Method of administration of spinal traction

Spinal traction therapy can be administered manually or mechanically, depending on your needs.

- a) MANUAL SPINAL TRACTION: In manual spinal traction, a physical therapist uses their hands to put people in a state of traction. Then they use manual force on the joints and muscles to widen the spaces between vertebrae.
- b) MECHANICAL SPINAL TRACTION: In mechanical spinal traction, you will lie on a table that has special tools to stretch the spine. A physical therapist will attach a series of ropes, slings, and pulleys to your body to mechanically relieve pressure.

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III.RESULTS OF SPINAL TRACTION

The results of spinal traction include pain relief, proper spinal alignment, and decompressed joints. Spinal traction stretches the muscles and bones in the back to combat the effects of gravity. Under the right circumstances, this could significantly improve the way you move and feel throughout the day.

IV.SIDE EFFECTS OF SPINE TRACTION

Spinal traction can sometimes cause pain that is worse than the original condition. Those with osteoporosis and certain types of cancer should not use traction therapy.

Spinal traction is known to cause muscle spasms. Most doctors are prepared for this to happen during or after therapy.

Drawbacks of Modern Medicine

Lack of curative approach and limitations of traction therapy is the major drawback of modern medicine in the management of spondylosis.

Ayurved medicine

Ayurvedic approach for this condition is both conservative and curative. In ayurved spondylosis has been categorized under vata vyadhi as Manyashoola, prushtashoola and katishoola. There are number of medicines described in the texts for vata vyadhi and many of them are in regular practical use. They are as good as the medicines of modern science in pain management without any unwanted side effects and the additional effect that they stimulate the process of healing. However many of the treatments for cervical spondylosis have not been subjected to rigorous, controlled trials.

The Panchkarma:

It is the Shodhana Chikitsa which aims at removing the excess of dosha. Panchakarma is a five-fold therapy; it is highly individualized based on the needs of the individual depending on the Ayurvedic constitutional type, Imbalances of dosha, age, digestive strength, immune status, and many other factors. Most notably Basti karma has been proved very effective in the management of vata vyadhi like spondylosis along with some purva karma like Snehana, Swedana, Dhara, Kati basti and Manya basti. Nasya karma has also been indicated in management of manya graha i.e. neck stiffness and has been proven effective.

Mode of action of Basti:

Vata is a very active principle in pathogenesis. If we can control vata through the use of basti, we have gone a long way in going to the root cause of the vast majority of diseases.

Vata is the main etiological factor in the manifestation of diseases. It is the motive force behind the elimination and retention of feces, urine, bile and other excreta. Vata is mainly located in the large intestine, but bone tissue (asthi dhatu) is also a site for vata.

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Hence the medication administered rectally effects asthi dhatu. The mucus membrane of the colon is related to the outer covering of the bones, which nourishes the bones. Therefore, any medication given rectally goes into the deeper tissues, like bones, and corrects vata disorders

Classification of Basti

There are Eight main types of basti, according to traditional texts, each with their own indications and contra-indications as listed below.

- 1. 1.Anuvasana (oil enema) is used in pure vata disorders and when a person is having excess hunger or dryness related to vata imbalances.
- 2. Niruha-Asthapana (decoction enema) is used, among other conditions, for evacuation of vata, nervous diseases, gastro-intestinal vata conditions, gout, certain fever conditions, unconsciousness, certain urinary conditions, appetite, pain, hyperacidity and heart diseases.
- 3. Uttara Basti (through the urethra with men or vagina with women) is used for selected semen and ovulation disorders and for some problems involving painful urination or bladder infections. This is not to be used for someone with diabetes.
- 4. Matra Basti (daily oil enema) is used by someone emaciated by overwork or too much exercise, too much heavy lifting, walking too long a distance, too much sexual activity or someone with chronic vata disorders. It does not need to be accompanied by any strict dietary restriction or daily routine and can be administered, in the appropriate cases, in all seasons. It gives strength, promotes weight and helps elimination of waste products.
- 5. Karma Basti (schedule of 30 bastis),
- 6. Kala Basti (schedule of 15 bastis; 10 oil + 5 decoction)
- 7. Yoga Basti (schedule of 8 bastis; 5 oil + 3 decoction).

 In karma, kala and yoga bastis, it is better to give both types of basti in combination and not oil and decoction separately. The conditions under which these are recommended are too detailed to be able to list in this article. In general, the indications and contra-indications that apply to basti also apply here.
- 8. Bruhana Basti (nutritional enema) is used for providing deep nutrition in select conditions. Traditionally, highly nutritive substances have been used, such as warm milk, meat broth, bone marrow soup and herbs like shatavari or ashwagandha.

Drawbacks of Ayurved Treatment.

The major drawback of basti is cost. Like most panchkarma methods the basti treatment can be very expensive. Another drawback of ayurved treatment in general is lack

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of awareness in rural population. Ayurvedic treatment is not easily accessible for most of the rural population.

Yoga shastra

Yoga has a great role to prevent and cure many of the so called life style disorder. Assanss can be practiced without causing any undue disturbances in their daily routine of life by anybody irrespective of age, sex, place, climate or any other such factor.

By performing the asana superficial muscles relax and after holding the position gradually nervous system relaxes and stimulate Golgi tendon reflex responsible for relaxing muscles and also relaxes deep muscles. This relaxation allows flexing of muscles and one can stretch muscle without effort even more. Continuous following of asana lead to postural corrections, relaxation of muscles and structural changes in the joints which helps in the regeneration & realignment of the bones & cartilages which can be classified into these different stages.

Reaction Phase (>4 days)

Supports Tissue Healing Process Where Range of motion is within the Pain-free range without resistance.

Regenerative Phase (0-6 week)

Optimize the Normal regenerative phase (Elimination of the Debris, Revascularization, Fibroblast proliferation) Minimize Inflammation, protects Neurovascularization, limit duration of Inflammatory response, stimulate Protein production.

Remodelling Phase (1-3 months) +

Influence the Remodelling phase (Contraction of Scar tissue, Maturation of Collagen, Increase in Tensile strength, Re-establishes Range of movement, enhance Proprioception

Many asana are useful for the purpose but following is the list of asana by the order of their efficacy and which are easy to do and don't require much training.

For Cervical spondylosis:

- Bhujangasana
- Makrasana
- Ushtrasana
- Gomukhasana
- Ardhamatsyendrasana
- Parvatasana

For lumbar spondylosis:

- Shalabhasana
- Pavanmuktasana
- Bhujangasana
- Ardhakatichakrasana
- Trikonasana
- Padmasana
- Padottanasana
- Pashchimottanasana

Pranayama for spondylosis:

- Anulomvilom
- Suryabhedi
- Nadishudhhi
- Bhramari

Procedure of Aasana:

During the initial phase asana should be practiced under supervision and guidance of a trained professional or vaidya

Total time for procedure is 10-15mins. (Relaxation + Asana)

Division of which is as follow

- Stretching exercise for 2-3 mins
- Prnayama for 1-2 mins.
- Procedure time for one Aasana is 8-10mins.

With determination and help from yoga any person can tackle the problem of spondylosis or any other musculo-skeletal disorders and achieve much more because yoga is not just an exercise but the physio-psyche-spiritual experience.

Drawback of Yoga therapy

The only possible drawback of yoga therapy in the management of spine disorders is lack of awareness and availability of professional yoga trainer.

Conclusion

Spondylosis and other spine disorders are result of stressful job, sedentary life style, wrong food habits, lack of exercise and improper sitting, walking and working postures. Spondylosis is a broad term meaning degeneration of the spinal column from any cause.

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The degenerative process in osteoarthritis chiefly affects the vertebral bodies, the neural foramina and the facet joints. This problem should be addressed with holistic approach. Modern medicine can give pain relief in acute conditions but it lack an effective and reliable curative approach. Ayurveda is a science of life with complete holistic approach towards preventive, curative and spiritual line of treatment and Yoga is the science of linking the individual self with the universal self; both the sciences aim at developing the physical, mental, intellectual, emotional and spiritual levels of human being. In ayurved spondylosis has been categorized under vata vyadhi as Manyashoola, prushtashoola and katishoola. There are number of medicines described in the texts for vata vyadhi and many of them are in regular practical use. They are as good as the medicines of modern science in pain management without any unwanted side effects and the additional effect that they stimulate the process of healing. Also shodhan chikitsa like Basti karma has been proved very effective in the management of vata vyadhi like spondylosis. However Many of the treatment regimes for spondylosis have not been subjected to rigorous, controlled trials. Panchkarma methods like the basti treatment can be very expensive.

Yoga has a great role to prevent and cure many of the so called life style disorders.

By performing the asana superficial muscles relax and after holding the position gradually nervous system relaxes and stimulate Golgi tendon reflex responsible for relaxing muscles and also relaxes deep muscles. This relaxation allows flexing of muscles and one can stretch muscle without effort even more. Continuous following of asana lead to postural corrections, relaxation of muscles and structural changes in the joints which helps in the regeneration & realignment of the bones & cartilages. Yoga can be more reliable long term therapy regime because of lack of significant drawbacks in its therapeutic use. With proper training anyone can perform yoga and its almost costless as it doesn't require any specialized instruments. Yoga is not just an exercise but the physio-psyche-spiritual experience. Even thought the proper management and prevention of spondylosis can be done with the help of yogic therapy, holistic approach with combination of Ayurvedic treatment with yogic therapy can benefit the patients with spondylosis than the singular use.

Bibliography

	0 1 0				
1.	Charak Samhita	Pt. Kashinath Shastri	21^{st}	Chaukhamba Bharati	1995
		Dr. Gorakhnath Chaturvedi		Academy, Varanasi -1	
2.	Sushruta Samhit	K. L. Bhishagratna	5^{th}	Chaukhamba Sanskrit	1996
				Series Office, Varanasi	
3.	Sushruta Samhita	Kaviraj	11^{th}	Chaukhamba Sanskrit	1998
		Dr. Ambikadatta Shastri		Sansthan, Varanasi- 1	
4.	Ashtang Hridayam	Kaviraj Atridev Gupta	12^{th}	Chaukhamba Sanskrit	1997
				Sansthan, Varanasi- 1	

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		Anveshan (11 & 12 th	'Aug.	2018)		
,		rdisciplinary Research Journal (Month I Contact :-Pramod P.Tandale 1 Mob. No			ISSN 2349 Impact Fact	
5.	Ashtang Hridayam	Prof. K. R. Srikantha Murthy	3 rd	Krishn	adas Academy	1998
				Varana	asi — 1	
6.	Charak Samhita	Dr. R. K. Sharma	6^{th}	Chauk	namba Sanskrit	2000
		Vd. Bhagwandas		Series	Office, Varanasi	
7.	Ashtang Hridayam	Dr. Kunde Revised		Chauk	hamba	1997
	With Sarvangasundar	ra- Pt. Krishnashastri Navara		Surabl	narati	
	Arundatta & Ayurveo	da		Prakas	han, Varanasi -1	
	rasayan-Hemadri					
8.	Ayurveda Mahakosh	•			ertha Laxman	1968
		Venimadhavshastri Joshi		Shastri	Joshi,	
		& Ayurveda Visharad		Mahara	ishtra rajya	
		Narayan hari joshi		Sahitya	Sanskrit	
				Manda	la, Mumbai – 1	
9.	Shabda Kalpadruma	Raja Radhakanta Deva	3 rd	Chaukl	namba Sanskrit	1967
				Series	Office, Varanasi	
10	. Vaidyaka Sabda Sind	hu Kaviraj Nagendranath Sen	4^{th}	Chaukha	amba	1999
		#		Oriental	ia, V <mark>a</mark> ranasi –1	
11	. Gheranda Samhita	Swami Digambarji	2^{nd}	Shri O.F	. Tiwar	1997
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		Dr. M. L. Gharote				



Pharmacodynamics of Rasavana Karma: A Conceptual Review

Vd. Pallavi Udhavrao Jadhav

Vd. Sanyogita R. Londhe

Associate professor (Dravyaguna) Lt. B.V.KaleAyu.Med.Coll. & Hosp. Latur

Associate Professor (Sharir Kriya) Lt.B.V.KaleAyu. Med.Coll. & Hosp.Latur

Abstract:

'Ayurveda' the science of life deals with every aspect of life. Ayurveda has two main aims:

- 1. Prevention and promotion of life.
- Cure from disease.

Rasayana karma is employed for fulfilling both aims of Ayurveda. According to treatment Ayurveda divided into eight main branches. Rasayana is one of the eighth important branch of Ayurveda. Today, reprehensible food habits, incorrect life style, stress, environmental pollution etc. are exerting very harmful effects on human being. Thus they are susceptible to develop premature ageing and various life threating disorders like cancer. Therefore to get rid of these harmful effects, Rasayana therapy is coming in consideration. It has been proved scientifically that Rasayana drugs plays important role as antioxidant, immunomodulatory, antistress and adaptogenic effects. This article review the pharmacodynamics of Rasayana drugs according to Ayurveda and modern aspect. **Keywords:** Rasayana, Pharmacodynamics, Antioxidant, Immunomodulatory, Adaptogenic.

Introduction:

Ayurveda is the ancient system of medicine. It has two main aims 1. Prevention and promotion of health 2. Cure from disease¹. In Ayurvedic system human body is considered to be made up of *Panchamahabhutas* in the form of *Dosha*, *Dushya* and *Mala* at the physical level and Satwa, Raja, Tama at the mental level. The imbalance in these constituents is considered as basic cause of any disease. Imbalance in these constituents occurs due to uncontrolled or wrong dietarycontrol, lack of exercise, environmental factors like pollution, radiation and mental stress which leads into disease formation, premature ageing and hamper good quality of life. For the management of these vitiated factors, which improves imbalanced life style a special group of medicines are recommended. This group of medicine are called as 'Rasayana', which are said to restrict the ageing process in the body. It prolongs the life span and helps to maintain a good quality of life. AcharyaDalhan has made its use mandatory to enjoy the full span of life³. This theory also strengthens the mind with its best qualities which facilitate the person to possess psychological wellbeing.

Aim: Conceptual review of pharmacodynamics *Rasayanakarma*.

Objectives:

- 1. To study the Rasayanakarma according to Ayurveda.
- To study Rasayanakarma according to modern view.

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Definition of Rasayana

The word *Rasayana* is composed of two words i.e. *Rasa* and *Ayana*. '*Rasa*' means fluid or juice or the essence of the end product of digestion. '*Ayana*' means pathway by which *Rasa* reaches the targeted body tissues⁴.

According to *AcharyaSushrutra* the substance which decrease the ageing process, increase the longevity and mental as well as physical strength and which destroys the disease process is called as *Rasayana*².

According to *AcharyaCharaka*, the substance which invigorate a healthy person by producing the best quality of *Rasa*, *Rakta* and other *Dhatus* are called as *Rasayana*¹. "Drug, diet and regimens which destroys the old age and disease is called as *Rasayana*." That means by taking *Rasayana* a person always remain healthy and young. This did not mean that one will not die. It means that even when a person at the age of 80s or 90s can able to perform normal duties and do not depend on others.

Classification of Rasayana

There are various classification for *Rasayana* therapy. Some of them are as follows:

A. As per scope of use

- 1. *KamyaRasayana*³ It is used to fulfill a wish/ desire/ to serve a special purpose. It is of three types
- a) <u>Pranakamya</u> Used for achieving/ maintaining best quality of *Prana* (life energy) in the body e. g. AbhayamalakiRasayana
- b) <u>MedhyaRasayana</u> It is used for enhancing the memory and intellect. E. g. Bramhi Rasayana
- c) <u>SrikamyaRasayana</u> It is promoter of complexion e. g. <u>Manjishta</u>
- 2. NaimittikaRasayana³ It is given to combat or balance a specific cause, which is causing a disease in the body e.g. PippaliRasayana, BhallatakaRasayana

B. As per method

- 1. KutiPraveshikaRasayana¹ also called indoor therapy.
- 2. *VatatapikaRasayana*¹– also called outdoor therapy.

C. As per contents of Rasayana

- 1. AushadhaRasayana based on drugs and herbs e.g. Haritaki, Amalaki etc.
- 2. AaharaRasayana based on diet and nutrition e.g. Ghruta, Dugdha (milk) etc.
- 3. AcharaRasayana based on conduct and behavior e.g. Sadvrutta

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Mode of action of RasayanaKarma according to Ayurveda

It has been explained by *AcharyaDalhan* on the basis of *Rasa*, *Guna*, *Veerya*, *Vipaka*, *Prabhava* of *Rasayana* drugs³. *Rasayana* drugs acts on:

- 1. Rasa nutrient value of
- 2. Agni Digestion and metabolism
- 3. Strotasa micro circulation and tissue perfusion

So by improving nourishment it improves the quality of *Dhatus* (tissues) and resulted into *Jaranash* (longevity), *VyadhiNash* (Immunity), *MedhaVriddhi* (mental competence) and overall results of all these into rejuvenation.

Pharmacological action of Rasayana drugs

The possible mechanism by which action of *Rasayana*can be interpreted with modern aspect are as follows⁸:

- 1. Antioxidant action
- 2. Immunomodulatory action
- 3. Antistress adaptogenic effect
- 4. Antiaging action

Antioxidant action

Rasayana drugs acts as antioxidants. Antioxidants are the substance, which quenches the free radicals and reduce oxidative stress. Any chemical species capable of independent existence having one or more unpaired electrons is termed as free radical. These are highly unstable and reactive in nature and cause oxidative chain reaction. The free radical oxidation moves from molecule to molecule, cell to cell causing immense damage to human body. The antioxidant medicines working on lipid are capable of preventing lipid peroxidation and result in repair of already peroxided lipid. Thus it results in increased cell membrane fluidity and induces better functioning of associated membrane enzymes and channels⁸.

Well known antioxidants include a number of natural enzymes like superoxide dismutase (SOD), glutathione (GPX) etc and other substances such as Vit. C, Vit. E, beta carotene etc. Antioxidants plays major role in preventing many diseases like coronary heart disease, diabetes mellitus, reduces risk of cancer and age related macular degeneration. Also helpful in delayed ageing.

Amalaki is one of the Rasayana drug. Main constituent of Amalaki are Vit. C, carotene and riboflavin. It is having a role in cellular oxidation reduction⁸. Withanolide in Ashwagandha also acts as antioxidants by increasing levels of three natural antioxidants SOD, GPX, catase⁸.

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Immunomodulatory action

Immunomodulators are used to enhance immunity. It is defined as "a biological or non-biological substance that directly influences or modifies one or more components of immunoregulatory network to achieve an indirect effect on a specific immune function." Certain *Rasayana* drugs acts as immunomodulatory. Strengthening of immunity is done in various ways by improving bodily defense mechanism like increasing the WBC count, improving immune function, increasing number of T cells and B cell.

e.g. Guduchi, Yashtimadhu, Bala etc.

Antiaging Action

Ageing is progressive change related to passage of time. From the age of 50-60 age related changes began to reflect like reduced power of muscle, reduced vision, memory, locomotion function. Gradual decrease in homeostasis and immune function is predisposed them to infection, digestive problems and malignancy. *Rasayana* drugs acts as antioxidants and strengthen the body cells. So that it prevent premature ageing⁸.

Antistress – Adaptogenic Effect

Rasayana drugs can neutralize the negative effects of stress on physiology and homeostasis i.e. antistress effect. A long term administration of such drugs may enhance one's own tolerance level and thus help the person to cope up with stress in better way i.e. adaptogenic effect⁸.

Radio-Protective Effect

The early or acute effects of irradiation result from the death of a large number of cells in tissues with a rapid turnover rate. Injury resulting from irradiation of biological tissue is a consequence of transfer of radiation energy to critical macromolecules or indirectly through the action of free radicals. Antioxidant enzymes act as the first line defense against free radicals.

The radioprotective agents are chemicals that reduce the biological effects of radiation by the scavenging of free radicals or repairing of radiation injury⁸.

e. g. *Triphala* provided protection against both gastrointestinal and hematopoietic death by their free radical scavenging property.

Benefits of Rasayana : Rasayana therapy has following effects:

- **1. Physical Effects**: Longevity, perfect health, youthful age, successful words (*Vakasiddhi*), excellent luster and complexion, optimum physical and sensory strength, cures morbid sleep, drowsiness, physical and mental fatigue, laziness and weakness. It balances *Tridoshas*, stimulates digestion and metabolism¹.
- **2. Psychological Effects**: One can attain excellent memory, intelligence, intellect, excellent retention ability (*Shrutdhara*)²

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3. Divine Effects: Attainment of *Moksha*, reversal of age, immortality, bring good fortune, prosperity, and enhanced life span up to ten thousand years¹.

Some commonly used herbal drugs in Rasayana therapy⁷

Sr.	Drug	Latin name	Family	Action
no.			·	
1.	Haritaki	Terminalia chebula Retz.	Combretaceae	Eliminates waste products and improves digestions
2.	Amalki	Emblicaofficinalis Gaertn	Euphorbiaceae	Stops ageing process by decreasing the catabolic activity
3.	Ashwaga ndha	Withaniasomnifera Linn.	Solanaceae	Cures and corrects nervous disorders
4.	Satavari	Asparagus racemosusWilld.	Liliaceae Dinan	Promotes lactation in lactating mothers, useful in infertility, libido and women's health
5.	Pippali	Piper longum Linn.	Piperaceae	Useful in respiratory and gives strength to tissues
6.	Bala	Sidacordifolia Linn.	Malvaceae	Gives strength to body tissues
7.	Brahmi Shankpus hpi Vacha	Bacopamonnieri Linn. Convolvulus pluricaulis Chois Acoruscalamus Linn.	Scrophulariaceae Convolvulaceae Araceae	Improves our memory power, gives sharpness and intelligence
8.	Guggulu Punarna va	Commiphoramukul Engl. Boerhaviadiffusa Linn.	Burseraceae Nyctaginaceae	Promotes waste product digestion in tissue and promotes kidney function

Some Ayurvedic Medicines like

 $MedhyaRasayana^6$ – Improves intellectual power and memory power.

HaritakiRasayana¹ – Improves Strength and gives healthy life and longevity.

Chyawanprash⁶ – Improves Immune System of body and helpful in respiratory system.

Discussion

Rasayana drugs are used for preservation of positive health. Sushruta defines healthy man as one who has equilibrium of Dosha, normal functioning of Agni, normal

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condition of seven *Dhatus*, beside his soul, the sense organs and mind should be happy and cheerful. *Rasayana* stands as an answer to solve the problem of healthful longevity including mental development and resistance against disease. *Rasayana* drugs acts on fundamental aspects of body i.e. *Agni*, *Strotasa* and *Dhatus*. Different *Rasayana*drugs act with predominance effect at different level.

Rasayana effect is not a specific pharmacological action but is a complex phenomenon operating through a different mechanism involving the fundamental factor like RasaSamvahan, Dhatus, and Strotasa. It may ultimately leading to achieve the comprehensive effect as stated by Charaka "Labhopaya Hi ShastanamaRasadinam Rasayanam". It produces the Rasayana effects mentioned in term of Vayasthapana, Ayushkar, Medhakar, Urjaskar.

Modern researches are also done and covered various pharmacological screening of most of these *Rasayana* herbs and medicines. The *Rasayana* activity of herbs can be interpreted with modern aspect like antioxidant, immunomodulatory, adaptogenic etc.

Conclusion

RasayanaChikitsa helps to promote and preserve health and to cure disease. It also plays imp role as a preventive medicine and in management of chronic degenerative disease. Therefore Rasayana drugs can be used as dietary supplement that can be taken daily to support healthy living.

References

- 1. Dr.Brahmanand Tripathi, Charak Samhita, Chikitsa Sthan, Chapter 1/1/5, Chaukhambha Surbharati Prakashan 2007.
- 2. Kaviraj Ambikadatta Shastri, SushrutaSamhita, Chapter- 1/4chaukhamba Sanskrit Sansthan, Varanasi 2007.
- 3. Vaidya Yadavaji Trikamaji Acharya, Dalhan Nibandh SangrahaTika On Sushruta Samhita, Chikitsa Sthana, Chapter 27/1, Chaukhmbha Sanskrit Sansthana, 2009.
- 4. Waman Apate, Sanskrit Shabdkosha, Anil Prakashan Delhi 2007
- Yadav Trikamji Acharya And Ram Narayana Acharya Editors, Charaka Samhita With Chakrapani Commentary, Chikitsasthna, Varanasi Chaukhamba Surbharati Prakashan, 2005
- 6. Dr. Brahmanand Tripathi, Charak Samhita, Chikitsa Sthan, Chapter 1/3/20, Chaukhambha Surbharati Prakashan 2007.
- 7. Acharya Priyavata Sharma, DravyagunaVigyanaII, Chaukhmbha Bharati Acadami, Varanasi 2012
- 8. Vd. Mukund Sabnis, Chemistry N Pharmacology Of Ayurvedic Medicinal Plants

Ayurvedic Review of Neonatal Jaundice

Dr. Atul Ravindra Kolapkar

Lecturer, Kaumarbhritya Department, LBV Kale Ayurved Medical College, Latur

Abstract

Jaundice is the most common abnormal finding during early neonatal period. In most of the cases, level of serum bilirubin is not raised that much so as to cause fatal brain damage. It is the most common disease during neonatal period occurring mostly due to increased hemolysis, decreased hepatic clearance, enterohepatic circulation, immaturity, blood group incompatibility and infections. Its Ayurvedic management includes use of proper antenatal care, Suryadarshana, Chandradarshana, madhu mixed with ghrita or ananta with madhu and ghrita, Stanyashodhakchikitsa and some medicines like Kumarkalyanarasa, Triphal swarasa.

Key Words :- Neonatal jaundice, kumarkalyan rasa, chandradarshan.

Introduction

Jaundice is the yellow discoloration of the skin and sclera due to raised serum bilirubin. It is the most common abnormal finding during early neonatal period. Most of the cases of neonatal jaundice are physiological and the level of serum bilirubin is not so much raised to cause fatal brain damage due to bilirubin encephalopathy but every case of neonatal jaundice should be managed very sincerely to prevent such consequences because of poor blood barrier during neonatal period. Though modern science has developed many modalities to manage neonatal jaundice but Ayurvedic approach for its prevention and treatment is not less important.

Why jaundice is more prevalent in newborn?

If we assess neonatal jaundice according to adult parameter of jaundice estimation, it seems that most neonates get jaundiced. It is due to physiological polycythemia, shorter lifespan of fetal RBC, limited hepatic uptake, conjugation and excretion of bilirubin due to transient deficiency of receptor proteins and UDPGT enzyme in newborn especially in premature. It is also due to paucity of bacterial flora in the gut and over activity of betaglucuronidase enzyme in the newborn. So the increased bilirubin production, reduced hepatic clearance and enhanced enterohepatic circulation are the sole causes of increased prevalence of jaundice in newborn.

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2 Causes of neonatal jaundice:

Most common cause of neonatal jaundice in India in order of incidence are physiological jaundice, im-maturity, blood group incompatibility, antenatal and postnatal infections, G-6PD deficiency,cephalohematoma, certain drugs and breastmilk jaundice.

In about one third cases the causes of neonatal jaundice are still unknown. The main textbook on Ayurvedicpediatric, Kashyapa Samhita describes the feature of jaundice as yellow discolouration of the eyes, nails, face, stool and urine with laziness (nirutsah),loss of digestive power (nastagni),desire to take blood (rudhirspriha).Pishachi Jataharini which is known to its yellow colour causes death of the baby after delivery on first day.4Another reason is Paittik Stanyadusti especially Durgandhit Stanyadusti.Baby feed-ingon milk vitiated by Pittadosha produces symptoms such as excessive thirst, feverish body, sweating and loose motion.

Ayurvedic approach for the management of neonatal jaundice:

Firstly it is important to diagnose the probable physiology and pathology of jaundice. Baby should be clinically screened minimum twice a day from the birth in a good daylight and its appearance, rate of increase and severity should be estimated so that starting of modern management like phototherapy and blood transfusion if needed could be done to prevent fatal bilirubin encephalopathy.

Use of proper antenatal care to the mother

Avoidance of pitta vitiating aharvihar during pregnancy and after delivery, Avoidance of dhoompana (smoking) and swedana because it may produce vivarnata(discolorations) to the fetus. Use of Ayurvedic drugs for the common problem of pregnant mother in spite of harmful allopathic drugs. Ajeerna (indigestion) should be avoided durating lactation.

Suryadarshana and Chandradarshana

In Kashyapa Samhita there is indication of Suryadarshana (putting the baby in sunlight) and Chandradarshana (putting the baby in moon light) of baby during 1st month of life. It may be a type of phototherapy for preventing the neonatal jaundice on that time. Suryadarshana and Chandradarshana to the baby during 1st month of life shows that AcharyaKashyap knew well about the need of light for the newborn baby.

Use of jatakarma samskar

In this ceremony, there is use of madhu mixed with ghrita or ananta with madhu and ghrita. Initiating early feeding with madhu-ghrita may help in disturbing the enterohepatic circulation which is an important cause of neonatal jaundice in exclusively mother milk fedbabies. Besides interrupting enterohepatic circulation of bilirubin, madhughrita also provides nutrients and energy which is helpful tomaintain glucose level and

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immunity, ultimately maintaining the general condition of the body .Acharya sushruta and Vagbhatta described 1st three days regime after birth.First day Ananta with Madhusarpi thrice, on second and third day Ghrita medicated with Lakshmana, Exclusively breast fed babies are likely to have higher bilirubin level due to inadequacy of lactation during 1st three days of life. This three days regiment help in this condition.

Conclusion

Jaundice is the most common disease during neonatal period mostly due to increased hemolysis, decreased hepatic clearance, enterohepatic circulation, immaturity, blood group incompatibility, infections, pattik stanyadusti or excessive vitiation of pitta in the body. Ayurvedic management of newborn jaundice mostly comprises of proper antenatal care, Suryadarshana and Chandradarshana, use of madhu mixed with ghrita or ananta with madhu and ghrita, Stanyashodhak chikitsa and some medicines likes Kumarkalyanrasa, Tri-phla.

References

- Meharban Singh, Care Of The Newborn, Published by Sagar Publication New Del-hi, 6thedition 2004Page 239.
- Meharban Singh, Care Of The Newborn, Published by Sagar Publication New Del-hi, 6thedition 2004, Page 240
- KashyapaSamhita, Sutrasthan 25/35, Kashyapa Samhita with "Vidyotini" Hindicommentary by Shri Satyapala Bhish-gacharya, Chaukhambha SanskritSansthan Varanasi, 2004
- Kashyapa Samhita Kalp sthan Jataharini/43 Kashyapa Samhita with "Vidyotini" Hindi commentary by Shri SatyapalaBhishgacharya, Chaukhambha SanskritSansthan Varanasi,
- 5. Carak Samhita Chikitsa Sthan 30/245, Carak Samhita, Vidyotini Hindi Commen-tary By Kashinath Shastri And Gorakh-nath Chaturyedi, Published By Chau-khambha Bharty Academy Varanasi, Re-print Year 2009.
- Madhavnidanam balroga 68/2, Madhavnidanam, Vimala-Madhudhara hindiCommentary & by BrahmanandTripathi, Vol 2, Reprint Ed 20027.Kashyapa Khilsthan 10/21, 23, Kashyapa Samhita with "Vidyotini" Hindicommentary by Shri Satyapala Bhish-gacharya, Chaukhambha SanskritSansthan Varanasi, 2004

Shirodhara in Vyanga- A thought

Dr. Pallavi B. Khandare

BAMS, MD (Rachana Sharir). Certi. In Cosmetology & Aromatheropy.

Dr. D. N. BandapalleAssociet Professor.

Dept. of Rachana Sharir, Late B.V.Kale Medical College & Hospital, Latur.

Abstract-

Vyanga is one of the Kshudra roga, Also it is a distressing and metabolic disturbance disorder. Vyanga (hyperpigmentasion) manifest form of beauty has enhanced various means such as Psychological disturbance, Stress, Anger. This task of enhancement of complexion itself is termed as varnya characterized by Neerujam, Tanu, Shyavarnam mandal on face. Various treatment modilities such as Nasya, Raktamokshana & Lepas have been mentioned by different Acharyas which are attributed to the Varnya karma⁹. Shirodhara (oil dripping therapy) for the treatment of depressive disorder & Through Ayurveda has its own details & deeper sense regarding the subject but all the literature concerned with Varna is scattered throughout, so an attempt will be made in this study to systematically compile & review the relevant literature.

Key words – *Vyanga*, Stress, Depressive disorder, *Shirodhara*, *Nasya*, *Varnya*.



Introduction-

In *Vyanga* an important sign is the presence of *Niruja*(painless), *Tanu* (thinning), *Shyava Varna Yukta Mandala* on *Mukhpradesh* (hyperpigmented patches on face)¹.

The Nidan of *Vyanga* is *Vata* which gets aggrevated by anger and stress, emotional disturbance, mental health leading to constipation, anorexia, insomnia, restlessness which

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aggrevates *Pitta Dosha* reaching to face quickly gives rise to a hyperpigmented patches on the skin.

Nidan Pariversion

Ch.viman 6/15.

On the basis of above Siddhanta in traditional Ayurveda mental emotional illness is treated with Shirodhara therapy 10 . In certain disease we focus on the stress, psychological condition is the main $Hetu^4$. Face is the most important and beautiful organ of the body which can be affected by certain anomalies at any age. Early physical & psychological precautionary measures are essential in either of the sexes as any minor alignment may affect from unattractive look to a permanent disfigurement, which may result in inferiority complexion or sometime even isolation. So this disease is the one responsible for all these.

Such diseases are counted under *Kshudra roga* which mainly affect the glowing complexion of a person by producing *Shyava Varna Mandalas* on *Mukh Pradesh*.

Aim -

A conceptual study of Shirodhara with respect to Vyanga

Objective-

- To understand Shirodhara karma in Bruhattrayee & Laghuttrayee
- To study of *Vyanga Vyadhi* from Ayurvedic as well as from modern text
- To understand its clinical importance & mechanism

Material & Method-

Review of literature regarding *Shirodhara* with special reference to *Vyanga* is collected from different Ayurvedic Samhitas & modern text

Literature review-

Vyanga is a Kshudra Roga having simple etiology & symptoms but in exceptional cases this can produce a marked cosmetic disability & gives rise to much mental stress⁴. As Vyanga is a distressing & metabolic disturbance disorder there is a definite need for treatment & a cosmetic value too essential.

क्रोधायास प्रकुपितो वायुःपित्तेन संयुतः । सहसा मुखमागत्य मंडलं विसृजत्यतः ॥ नीरुजं तन्कं श्यावं मुखे व्यङतमादिशेन ॥

स्.नि. १३/४५-४६

In the disease *Vyanga* important sign is the presence of *Neeruja*, *Tanu*, *Shyava Varnayukta Mandala* on *Mukhpradesh*⁴. according to modern view the patches can be taken under the heading of pigmented disorder. The disease Vyanga can be correlated with

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hyperpigmentation with special reference to melasma. in this the patches of hyperpigmentation are seen especially on cheeks, nose, forehead & chin. Skin disease melasma affects bodily but gives lot of psychological disturbance⁷ wheather we admit it or not but in society places it has high value on appearance. Other than psychological disturbance other symptoms & signs can be seen. These are excess oilyness of face, constipation, anger somnolescence, restlessness, sexual dysfunction, anorexia & sweating⁸ etc.

In traditional Ayurveda mental & emotional illness is treated through *Shirodhara* (oil dripping therapy). *Shirodhara* therapy is characterized by dripping of oil on the forehead⁹. It is also helpful in headache, mental stress, insomnia, anorexia, depression, motor neuron diseases & several type of mental disorders.

Observation-

A study shows that the incidence of melasma is the highest in summer where as in winter the numbers are lower also those woman with a light brown complexion & living in regions with intense sun exposure are more vulnerable to this condition, this is because when the skin is exposed to sunlight more melanin pigments are produced by the female sex harmones estrogen and progesteron⁷. The interesting fact is that the possibility of melasma is higher in the patients with thyroid disease. This condition is also prevalent among those who are under high stress due to the over secretions of melanocytes stimulating harmones(MSH)⁷. Melasma is also detecting rarely in cases of allergic reaction to medications & cosmetics.

Discussion-

Shirodhara has the important role on psychiatric disorders⁶. Above study shows that Shirodhara reduces psychoneuroimmunological activity by balancing the levels of various neurotransmitters including serotonin, thyroid releasing harmone (TSH) & catecholamine resulting in sympathetic suppression, psychoimmunological changes in peripheral circulation⁸. Due to Shirodhara stress descreases leading to decrease in constipation, anorexia, insomnia, restlessness, sexual dysfunction & improve the thinking capacity as a result there is improvement in formation of Rasdhatu further leading to increase in Ras Sarta³. According to Acharya Charka, Rasa Sarta is equal to Twaksarta⁶. These all helps to reduce hyperpigmentation & Improve in the health of skin & its complexion luster. Side by side Pitta residing in Twaka that is Bhrajaka Pitta⁵ is responsible for digestion & absorption of Abhyang, Parishek, Awghah, Lep etc. & also it

helps in expression of Varna of the Twaka & enables the digestion & utilization of substances used for the increasing complexion⁶.

यत्त त्वति पित्तं,तस्मिन भ्राजकोऽग्नि इति संजा।

सः अभ्यंगं परिषेक अवगाह अवलेपनादिना क्रिया दृव्यानां।पक्ता छायानां च प्रकाशनम्॥

(स्.सू२१/२०)

Conclusion-

The study shows that *Shirodhara* therapy reduces stress, restlessness, constipation, sexual dysfunction, anorexia which help to improve health of skin & Brajak Pitta in vyanga disease which helps to reduce hyperpigmentation. But this treatment is not enough for the reduction of Shyava Varnayukta Mandala on Mukhpradesh, some external application of drug is needed.

References:-

- 1) Pdt. Kashinath Shastri ed. Charaka Samhita Sutra 8/11, 12 8th ed. 2004. Chaukhamba Sanskrit series, Varanashi.
- 2) Dr. Ambikadatta Shastri ed. Sushruta Samhita Vol 1 Shareera 4/4 2nd ed. 2005. Chaukhamba Publication, Varanasi
- 3) Pdt. Kashinath Shastri ed. Charaka Samhita Sutra, 8/10 8th ed. 2004.
- 4) Pdt. Kashinath Sastri ed. Charaka Chikitsa 15/17, 8th ed 2004, Chaukhamba Sanskrit series, Varanasi
- 5) Pdt. Kashinath Shastri ed. Charaka Samhita, Shareer 7/48 8th ed. 2004 Chaukhamba Sanskrit series, Varanasi
- 6) Acharya Priyayat Sharma ed. Astanga Hridya, Sutra 12/1, 1st ed. 1978 Chaukhamba Publication, Varanasi.
- 7) R.G. Valia ed. text book of Dermatology, Vol-1, 1st ed 1994, Bhalam publication House
- 8) Buhrman S. Ayurvedic Psychology and Psychiatric Approaches to the treatment of common Affective Disorders. The protocol J Botanical Medicine 2(1): 1-8.
- 9) Uebaba K, Ogawa H et.al. Psycho immunological effects of Ayurvedic oil dripping treatment. J altern complement med 2008:14(10): 1189-1198.
- 10) Pdt. Kashinath Shastri ed. Charaka Samhita viman 6/15, 8th ed. 2004, Chaukhamba Sanskrit series, Varanashi.

Efficacy of Kalyanaka Ghruta in Chronic Alcoholic Nidranasha.

Dr. Rahul M. Nagargoje

Asst-Prof Agadtantra Dept Late B. V. Kale ManjaraAyurved Medical College & Hospital, Latur.

Dr.Sanyogita R. Londhe

Asst-Prof KriyaSharir Dept Late B.V. Kale Manjara Ayurved Medical College & Hospital, Latur.

Abstract: -

In the current scenario; alcohol addiction is one of the major problems faced by the society. As a doctor it is our responsibility to help such alcohol addicts by counselling and treating them to recover from this addiction. It was with this intention that the disease Madatyaya has been chosen for the study. A study was conducted on patients of Madatyaya to assess the clinical efficacy of 'KalyanakaGhruta'. 20 patients of Madatyaya were selected in Control group and 20 patients in Trial group by random selection method. Control group was not given any medicine; however they were observed for 28 days for all parameters. Trial group patients were administered KalyanakaGhruta in the dose of 20gm with KoshnaJala at Rasayankala for the duration of 28 days. Gradation scale was used for the purpose of case taking.

Key words: -KalyāņakaGhrūta, Madatyaya.

Introduction:-

Ayurveda is a science of Life which deals with the prevention of disease and the treatment of disease. Agadtantra that deals with the diagnosis and treatment of various poison (Visha) - vegetable, animal, mineral, chemical and the combination of poisons. AgadtantraststesVishagunas to be similer to those of the Madya (Alcohol) viz. Tikshna, Ushna, Ruksha, Sukshma, Amla, Vyavayi, Ashukari, Laghu, Vikasi and Vishada. These gunas are also opposite to those of Oja.

Madya is a poison which when taken consistently and excessively causes Dhi, Dhruti, Smrutiharan Such Consistency in taking alcohol cause Madatyaya (Alcoholism). Symptoms like Aruchi, Trishna, Nidranasha, Kamp, Hrullas, Daha, Pralap etc. The habit of alcohol consumption leads to its addiction and causes alcohol intoxication. Nowadays, alcohol abuse is widespread in most parts of the world and in the current scenario; alcohol addiction is one of the major problems faced by the society. Excess alcohol intake affects every organ of the body and results not only in physical deterioration but also in tremendous social and economic loss. It may lead to neurological disorders, liver cirrhosis, impaired mental function, skeletal myopathy, cardiomyopathy etc. Besides this there are many other withdrawal symptoms like nausea, vomiting, giddiness. Alcohol addiction of a person indirectly affects his entire family. As a doctor it is our responsibility to help such alcohol addicts by counseling and treating them to recover from this addiction. It was with this intention that the disease Madātyaya has been chosen

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for the study. Ayurved has described various yoga in the management of madatyaya amongst which the 'KalyānakaGhrūta' has been quoted to be an effective medicine due to its ingredients.

Aim:-

• To study the efficacy of "KalyāṇakaGhrūta" in management of Alcoholic Nidranasha.

Objectives:-

- 1. To collect the literature on Madatyaya and alcoholism according to Ayurved and modern science.
- 2. To collect literature of "KalyāṇakaGhrūta", its preparation, dosage etc. according to Ayurved.
- 3. To evaluate the effect of "KalyāṇakaGhrūta" in Madatyaya by conducting clinical trials.
- 4. To record other effects if any during treatment.

Literature review:-

Charak and Vāgbhat says that madya has ten guna, but Sushrutquotes only eight gūna except laghu and amlagūna. Due to the gūnas of madya counteracts sheetagūna by virtue of usnagūna, it suspends all functions of the mana by its teeksnagūna, it reaches every part of body by virtue of suksamagūna, due to its visadagūna it destroys kapha and śukra, it aggravates vāta due to its rukṣagūna; it is fast in its actions by virtue of its āshukārigūna; it is exhilarating on account of its vyavayitva; it spreads all over the body by its vikāsigūna. Madya is amla rasa pradhana along with another rasa and hence is rochana and deepana too. Some state that Madya has five rasa except lavana rasa.

Madatyaya historical review:

In CharakSamhita Madatyayachikitsa is described in 24th chapter of Chikitsasthana after Vishachikitsa. In this text, attributes of madya, its importance in the present and past, ill effects due to improper usage of madya are described. Disorders due to madyasevana are classified according to dosha predominance. In SushrutSamhita Panatyayapratishedham is described in 47th chapter of Uttartantra after the chapter on Murcha. In AshtangSangraMadatyayanidana is described in the 6th chapter of nidanasthana. In chikitsasthana, 9th chapter too mostly Charakacharay's version is followed. In AshtangHriday Madatyayanidana, 6th chapter is described in nidanasthana along with mada, Murcha and sanyasa. Chikitsa of madatyaya is described in Chikitsasthana, 7th chapter again following Charakacharay's version.

Effect on Sleep:-

Alcohol intoxication can help a person fall asleep more quickly, but if the intake in anevening is more than one or two drinks, the sleep pattern can be significantly impaired.

Materials:-

- 1] KalyāņakaGhrūta
- 2] Gandharvharitaki
- Kalyanaka Ghruta: All herbal ingredients are taken in equal parts i.e. 1 karsha, Goghrut 1 prastha and Jala 4 prastha. Sidhaghruta is prepared for medicinal purpose as per the procedure quoted in Sharangdharsamhita.

Type of study:-

Clinical - Randomized single blind method.

Study design:-

- 1. The market preparation of a reputed and licensed pharmacy, as a trail drug has been purchased and its standardization has been issued by same.
- 2. The selected patients are randomly categorized into two groups of 20 patients each. Here A is control group and B is trial group.
- 3. This division has been done in a way so as to obtain homogenous groups w.r.t. age, type and quantity of alcohol, duration of intake, socio-economical status and occupation.
- 4. A special proforma of case paper is designed which will include details regarding types of addiction, sevan kala, frequency and quantity of intake as also trividha-ashtavidha-dashvidhapariksha. Nidanpanchak had primarily be taken into consideration.
- 5. Consent of patients was taken prior to commencement of clinical trials.
- 6. Both groups were received mruduvirechana with Gandharva-haritaki at Nisha kala with koşhnajala for the first seven days. The doses of the same were calculated in accordance with koshthapariksha.
- 7. The patients of Group- A were not received any dravya.
- 8. Patients of Group- B was administered the trial dravya in prescribed dose, personally at the appropriate time.

Criteria for inclusion:-

- 1. Patients with long term alcohol consumption.
- 2. Age group of 18 years and above.
- 3. Sex male

Criteria for exclusion:-

1. Age below 18 years (as number of patients of this category is negligible in the centre).

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- 2. Female patients (as they are not admitted in this particular unit).
- 3. Patients with high risk diseases e.g. severe jaundice, ascitis, liver cirrhosis, acute hepatitis, liver abscess.
- 4. Patients suffering from hypertension (150/100 mm of Hg), diabetes, cardiac disease etc.
- 5. Patients with hyperlipidemia.

Criteria of assessment:-

Subjective parameter of Nidranasha

Nidrānāśha

Gradation has been done according to WHO guidelines: -

NO.	LAKSHANA	GRADATION	
	Nidranāsha	1 = Kalantarennidra for app.5- 6 hrs at astretch.	
1		2 = Khanditnidra for app.2-3 hrs at astretch and	
		total app.4-5 hrs.	
		3 = Khanditnidra app.3-4 hrs followed by a nidra	
		4 = Anidra or hardly 1-2 hrs.	

Statistical Analysis: -

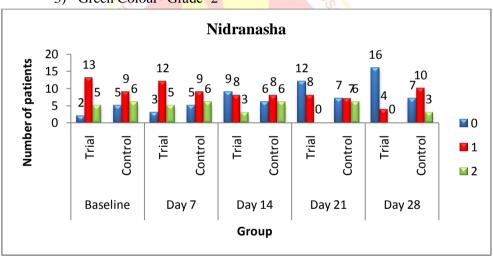
1. Nidranasha

	Group	N	<mark>idrana</mark> sha grad	le 🤗	Total
	Aal	0	1	2	
Baseline	Tri <mark>al</mark>	2	13	5	20
	Control	5	9	6	20
Day 7	Trial	3SM	12,34	5	20
	Control	5	9	6	20
Day	Trial	M914 -	8 100	3	20
	Control	6	8	6	20
Day 21	Trial	12	8	0	20
	Control	7	7	6	20
Day 28	Trial	16	4	0	20
	Control	7	10	3	20

	Mediaı	P-value	
	Trial	Control	
0	1	1	0.718
1	1	1	0.862
2	1	1	0.265
3	0	1	0.046*
4	0	1	0.009*

In subjective parameters colour indication in the graph is as follows: -

- 1) Blue Colour- Grade '0'
- 2) Red Colour- Grade '1'
- 3) Green Colour- Grade '2'



Discussion: -

Introduction:-

In the current scenario; alcohol addiction is one of the major problems faced by the society. As a doctor it is our responsibility to help such alcohol addicts by counselling and treating them to recover from this addiction. It was with this intention that the disease Madatyaya has been chosen for the study.

Literature review:-

Madya:-

According to Amarkosha, the word 'mada' is derived from the word 'madee' which gives the meaning 'harsha' It is defined as which does the action maadvata is called

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madya. In short, the dravya which produces disturbance of the intellect faculty by virtue of its tamoguna is called as madya.Madya has 10 attributes.

Madātyaya:-

The Atyayata (disorder) produced by Madya is called as Madātyaya. Excessive intake of madya andmithyaahara-vihara leads to dośaprakopa which causes Rasavaha and Annavahasrotoduşati. Obviously Hruday which is the moolasthana of Rasavahastroats, also get vitiated.

Alcohol & Alcoholism:-

The term alcohol, in common use, refers to ethyl alcohol which is a colourless, volatile liquid with characteristic smell and sweet fiery taste. Alcohol requires no digestion prior to absorption. About 20% is absorbed from the stomach and 80% through the upper part of the small intestine. Food delays its absorption and the delay is most marked in the presence of fat and protein. Alcohol is excreted through all the routes of excretion. About 5% of ingested alcohol is excreted in the breath and about 5% in the urine. It is a disease condition manifested by long term consumption of alcohol. It has been defined as a chronic behavioural disease characterized by drinking of alcohol to an extent that it interferes with the drinker's health, social relationship and economic stability.

Kalyanakaghrūta:-

Kalyanakaghrūta is Tiktarasatmak, ushnaveery, and having laghu, rukshagunātmaka and vāta-pittaşmaka in nature and agnideepan, ojovardhak, vişghna, balya, bruhana, medhya properties.

Subjective parameter:-

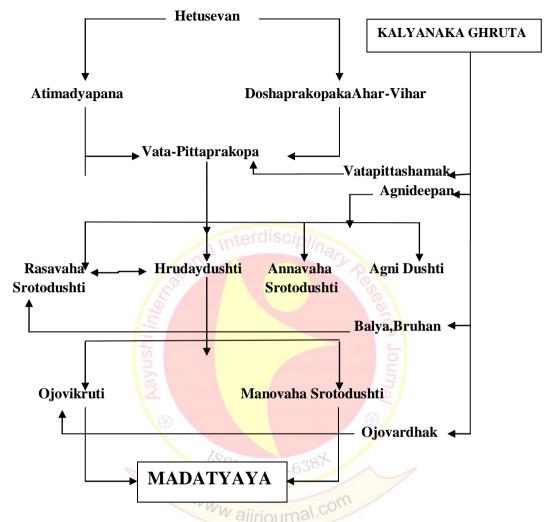
Subjective parameter which is Nidranasha showed significant results in trial group.

Nidranasha:-

Madya because of ushna, teekshna,laghuguna and long term consumption causing nidranasha by vatapittaprapok, dhatukshaya and rajovrudhi.Kalyanakaghruta is pachan, bruhan, balya, vatapittashamak, rajonashakandrasaojovardhak, may improves quality of nidra, hence getting result.

Samprapti Bhanga:-

In samprapti of madātyayadośhaprakopa, agnidushti, rasavaha-annavaha-manovahasrotoduşati with ojo-vikruti are main factors which may be counteract by vātapittaśamak, agnideepan, balya-bruhana, medhya, ojovardhaka property of 'Kalyanakaghrūta'.



Causes of results in control group:-

- 1) Complete abstinence of alcohol intake.
- 2) Nutritious & balanced Diet regimen.
- 3) Supplemented by yoga, medication, and counselling.

Conclusion: -

Significant results were observed in the symptom of Nidranasha.

To conclude, "**Efficacy of KalyanakaGhrūta in Chronic Alcoholic Nidranasha**" proved that trial drug 'KalyanakaGhrūta' was clinically effective and statistically significant in symptoms of Nidranāsha.

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References:-

- 1. R.K. Sharma BhagwanDas,.Charak Samhita,Chaukhambha Sanskrit Series,Varanasi 2nd Edition, 2000.
- 2. P.V. Sharma, Sushrut Samhita, ChaukhambhaVishwabharati, Varanasi, 1st Edition2001.
- 3. Dr Ayodhya Prasad Achal, Agadtantra, Chaukhambasurbharati Prakashan, Varanasi, 2ndEdtion, 1994.
- 4. Dr. Ranade, Dr.Paranjape, VyavaharAyurvedVaAgadtantra, Anmol Prakashan, Pune, Reprint 2000.
- 5. Dr. C. K. Parikh, Parikh's Textbook Of Medical Jurisprudence Forensic Medicine and Toxicology, CBS Publishers and Distributors, New Delhi, 6th Edition.



Haritakyadi Yog in Shoth -A Literary Review

Vd. Smita Mule

Assistant Professor Panchkarma Dept. LBVK Ayu College, Latur Vd. Aruna Rupnar Assistant Professor RachanaSharir Dept. LBVK Ayu College, Latur

Abstract-

Ayurveda is a science of life & based on theory of tridosh.ie Vat,Pitta & Kapha.So disease is explained as disturbance in the equilibrium of these three.And when they are in perfect balance & harmony, a person is said to be healthy

When equilibrium of these factors is disturbed, the condition is called Vikar/Vyadhi /Disease or Gada. Charakacharya explained Ashtomahagad in 9th chapter of Indriyasthan ¹

Shotha vyadhi is included in Ashtamahagad. Shotha is explained as a seperate disease. It is also seen as symptom of many diseases. Considering severe intensity & high occurance, it requires due attention.

For this purpose Haritakyadi yog explained in Chraksamhita Chikitsasthan chapter 12th is selected. It is a combination of Haritaki Choorna, ShunthiChoorna & Devdaru Choorna in equal proportion with sukhoshna jal as anupan.²

Key wards –Haritakyadi Yog, Shotha

Aim – A literary review of Haritakyadi yog in Shoth

Objectives-

- 1) The pharmacological study of haritakyadi yoga
- 2) Effect of Haritakyadi yog on shotha

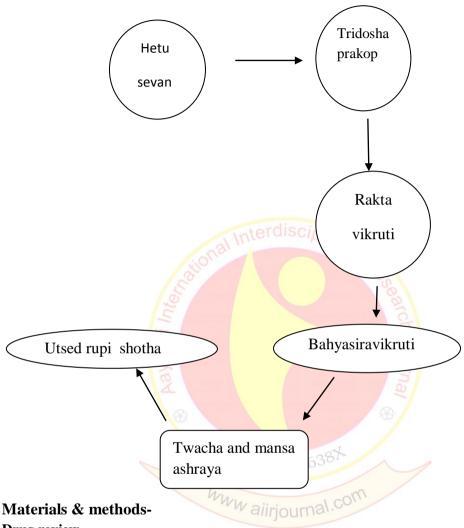
Shoth Review- Shoth references from different samhita

- 1)Charak Samhita-Indriyasthan chap 9th Sutra sthan chap 18th, Chikitsasthan chap 12th
- 2)Sushrut samhita-Chikitsasthan chap 23rd
- 3) Ashtang hridayam-Nidansthan chap 13th, Chikitsasthan chap 17th
- **4)Madhavnidanam**-chap 36th &37th
- 5)Harit samhita-Trutiya sthan chap 26th

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Smprapti-Samanyasamprapti



Drug review-

Haritakyadi yog is a combination of haritaki choorna, shunthi choorna &devdaru choorna in equal quantity. We get this reference in Charak samhita Chikitsa sthan chap 12th& also in Bhel samhita chapter 17th .3

Detail study of yog contents-

1) Haritaki-Terminalia chebula 4

Family- combretaceae

Rasa-Five rasas except lavan,

Virya- Ushna,

Vipak- Madhur

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Gun-Laghu, Ushna

Chemical composition-Chebulinic acid, tannin & yellow coloured volatile oil

2) Shunthi-Zinziber officinale⁵

Family –Zinziberaceae

Rasa-katu

Virya-Ushna

Vipak-Madhur

Gun-Katu, Ushna, Laghu

Chemical composition-Gingirol, Gingirin

3) Devdaru -Cedrus deodar 6

Family-Pinaceae

Rasa-TIkta.Katu

Virya-Ushna

Vipak-Katu

Gun-TIkta.Katu.Ushna

Chemical composition-Terpentine, Sequiterpine, volatile oil

Discussion-

- Haritaki is kaphaghna by katu ,tikta ras & ushna virya
- Pittaghna by madhur, tikta, kashay ras & madhur vipak
- Vatagna by madhur, amla ras& ushna virya.
- Haritaki is kledaghna & anulomak .It reduces kleda by increasing amount of urine (mootrasya kledvahanam)
- Mutravah strotas is also involved in shotha vyadhi &alpa mutra pravrutti is one of the symptoms. So by increasing the amount of mutra, increased Ab dhatu is removed & shotha is decreased.
- Shunthi has kaphavataghna action by katu ras, ushna virya & snigdha guna. Also it has toyavsh-shoshani & vibandbhedani effect which also decreases Shotha.
- Devdaru is Kaphavatshamak .Kaphagna by tikta ras &ushna virya while vatagna by snigdha guna &ushna virya.
- Anupan of Haritakyadi yog is sukhosna jal which is kaphagna & vatashamak effect.So Haritakyadi yog is useful in kaphaj & vataj shoth along with sukhoshna jal as anupan.

Conclusion-

Haritakyadi yog is cost effective and easily available herbal remedy for vataj &kaphaj shotha. However ,further study is nessesary.

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References-

- 1) Charak, Charaksamhita revised by Drudhabal, commentary of Chakrapani Datta's Ayurved Dipika of Chaukhamba Prakashan, Varanasi Chikitsasthan chap 12th /22.
- 2) Bhel,Bhel Samhita,V.S.Venkata Subramaniyam Shastri,C. Rajrajeshwar Sharma Chaukhamba Orientaliya ,Varanasi,Chikitsasthan chap 17th/22
- 3) Bhavprakash, Bhavprakash Nighantu, Chaukhamba Prakashan, Varanasi
- 4) Bhavprakash, Bhavprakash Nighantu, Chaukhamba Prakashan, Varanasi
- 5) Bhavprakash, Bhavprakash Nighantu, Chaukhamba Prakashan, Varanasi
- 6) Charak ,Charaksamhita revised by Drudhabal, commentary of Chakrapani Datta's Ayurved Dipika of Chaukhamba Prakashan ,Varanasi Indriyasthan chap 9th/8-9



Irritable Bowel Syndrome (IBS) - A Review Article

Dr. Anil Ramrao Pawar

(MD Kayachikitsa) Assistant Professor Late B.V. Kale Ayurved medical college & Hospital, Latur

Abstract:

Irritable bowel syndrome (IBS) is a highly prevalent gastrointestinal motility disorder associated with abdominal pain & altered bowel habits. Worldwide prevalence of IBS is 10-20% & it is grow-ing. The chronic and bothersome nature of IBS symptoms often negatively affects patients quality of life and activity level. Advances in clinical investigations have led to a greater understanding of this disorder & its physiologic & psychosocial determinants. Many theories have been put forward regarding the aetiology of IBS, but the exact cause is still uncertain. The development of stepwise, symptom-based diagnostic strategies that allow for a diagnosis of IBS to be made without the need for extensive laboratory testing; and the development of treatment options targeting underlying pathophysiologic mechanisms that provide relief of the multiple symptoms associated with IBS.

Keywords: Irritable bowel syndrome (IBS)

Introduction:-

Irritable bowel syndrome (IBS) is a functional bowel disorder characterized by abdominal pain with altered bowel habits in the absence of detectable structural abnormalities. It is a disorder that is hard to define, the exact cause is unknown and there is no cure, but it is not associated with the develop- ment of any serious disease like cancer or does not cause permanent damage to the digestive tract. It tends to appear in people aged in their twenties, although it may develop in younger and older peo- ple, it is unusual for IBS to first appear in someone aged over 40 years. It's usually a lifelong problem & have a significant negative impact on quality of life and social functioning, it can be very frustrating to live with it and can have a big impact on your everyday life, negatively affecting patient activities of daily living (e.g. sleep, leisure time), social relationships, and productivity at work. IBS symptoms tend to come and go over time & often overlap with other functional disorders such as fibromyalgia, headache, backache & genitourinary symptoms. Patient with IBS, more commonly than others, have gastroesophageal reflux, symptoms relating to the chronic fatigue syn- drome, and psychiatric symptoms such as depression and anxiety.

Aim & Objectives :-

Aim:-

To review Irritable bowel syndrome (IBS).

Objectives:-

- 1. To study IBS aetiology, clinical features, diagnostic criteria.
- 2. To explore various treatment options for IBS.

Materials: Various texts, online resources, Databases, and Journals were reviewed during this work.

Methods:- Literary data collected, summarized & tabulated.

Literary review :-

Aetiopathogenesis: Although the exact pathophysiology of IBS is not fully understood, there are many theories have been put forward.

1) visceral hypersensitivity - It is defined as heightened experience of pain in the internal organs due to an enhanced perception of mechanical triggers applied to the bowel. Although visceral hy- persensitivity is seen as integral to IBS, only approximately 30 to 40 percent of people with IBS have been found to have an exaggerated sensitivity to distension within the colon. And, interesting- ly, there is not necessarily a direct correlation between this enhanced sensitivity and the severity of a person's IBS symptoms.

It appears likely that the visceral hypersensitivity seen in some IBS patients as a result of changes in nervous system functioning on both the level of the intestines and the brain. The nerve pathways in the gastrointestinal tract become sensitized to stimulation, resulting in overactivity and pain amplification.

- 2) Serotonin dysregulation Serotonin (5-HT), acting particularly through the 5-HT3 and 5-HT4 receptors, plays a significant role in the control of gastrointestinal motility, sensation, and secretion. Furthermore, it is observed that plasma 5-HT concentrations are reduced in IBS patients with con- stipation, but raised in those with diarrhea, especially those showing postprandial symptoms, pro- vide further support for its involvement in the motor and sensory dysfunction associated with this condition. Thus there has been considerable interest in these receptors as possible therapeutic tar- gets for IBS, with agonists at the 5-HT4 receptor predicted to enhance gastrointestinal propulsion (prokinetics) and antagonists at the 5-HT3 receptor to slow gastrointestinal transit and reduce vis- ceral sensation.
- 3) Altered central nervous system processing- Alterations in the bi-directional signaling in central nervous system between the brain and the gut may play a significant role in the pathophysiology of IBS. Several mechanisms may be involved in the disruption and

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impairment of the brain and gut axis (BGA) that includes altered stress response, CRF release and processing, serotonin signaling and release, inflammatory insults and deranged conduction and processing of information.

4) Altered gut microbiota- Gut microbiota is thought to play important role in the pathogenesis of IBS. This is evident from the fact that IBS occurs more frequently after intestinal infection or antibiotics treatment. Studies have shown that the alterations of the intestinal microbiota are observed in IBS patients.

Considering the relationship between alteration of gut microbiota and inflammation of gut, manipulation of gut microbiota by probiotics appears to be an ideal treatment modality for IBS as it restores the intestinal microbiota. Clinical studies and systemic meta-analyses have shown that some strains of probiotics have beneficial effects in selected patients. However, a number of con-troversial issues regarding the roles of probiotics in pathogenesis and treatment of IBS remain to be clarified.

Triggers (Things that bring on an episode of IBS):- These vary from person to person, the most common triggers include:

- Alcohol, drinks containing caffeine or chocolate, beans, cabbage, dairy products, spices, fruits, fatty or fried food.
- Eating too quickly or too much. Stress and anxiety.
- Hormonal changes Gastrointestinal infection.

IBS Subtypes:-

- 1. IBS with constipation (IBS-C) (constipation predominant)
- 2. IBS with diarrhoea (IBS-D) (diarrhea predominant)
- 3. IBS mixed type (IBS-M) (mixed diarrhea and constipation)
- 4. IBS unclassified (IBS-U) (the symptoms cannot be categorized into one of the above three subtypes)

Symptoms :- Chronic abdominal pain (stomach pain or cramps) – usually worse after eating

- Bloating or distension of abdomen- 'gas'
- Abnormal stool form (hard / loose)
- Abnormal stool frequency

IBS can also cause: Non-GI symptoms

- Straining at defecation
 Lethargy
 Insomnia
- Urgency Backache
- Feeling of incomplete evacuation Headache
- The passage of mucus per rectum
 Urinary symptoms: Nocturia, Frequency
 & urgency

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- Nausea -Incomplete bladder emptying
- Heartburn
- Dyspareunia in women

Warning symptoms/signs 'red flags':- signs that signal the presence of a serious underlying dis- order

- Old age Fever Acute presentation
- Blood in stool Persistent, severe pain
- Vomiting Dehydration
- Weight loss Pallor or anemia
- Abnormal abdominal examination /LNE

Diagnostic Criteria:-

Historically, IBS has been a diagnosis of exclusion. However, more recently, clinicians are encour- aged to diagnose IBS based on a comprehensive history, using symptom-based criteria and consid- ering the presence or absence of specific alarm features.

The Rome IV criteria -

Recurrent abdominal pain at least 1 day per week in the last 3 months associated with 2 or more of the following:

- Related to defecation (complaints may be increased or unchanged by defecation)
- associated with a change in frequency of stool
- Onset associated with a change in form (appearance) of stool (lumpy or hard; loose or wa- tery)

Differential diagnosis:-

- Colonic cancer. Coeliac disease.
- Inflammatory bowel disease (IBD): Crohn's disease, ulcerative colitis.
- Gastroenteritis eg, giardiasis. Diverticular disease.
- Gynaecological problems-pelvic inflammatory disease, endometriosis, ovarian tumours.
- Anxiety \pm depression, somatisation and panic disorders.

Investigations:

The American College of Gastroenterologists does not recommend laboratory testing or diagnostic imaging in patients younger than 50 years with typical IBS symptoms. Screening studies to rule out disorders other than IBS include the following:

- Complete blood cell count with differential count :- To screen for anemia, inflammation, and infection.
- metabolic panel :- To evaluate for metabolic disorders and to rule out dehydration /elec- trolyte abnormalities in patients with diarrhea.

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- Stool examination :- for ova, parasites etc.
- Further evaluation :-

Sigmoidoscopy Imaging studies

Management:-

- Patient education & support :- Reassure patient that there is no serious organic disease or alarming symptoms.
- Diet: Belatedly perhaps, the role of dietary components in the precipitation of symptoms, or even in the basic pathogenesis of IBS, is now being addressed. To date, two mechanisms, intolerance and hypersensitivity, have been addressed in clinical trials, although it is highly plausible that other mechanisms e.g., stimulation of gut hormones and interactions with the microbiota may also be relevant. Low-FODMAP diet:- Studies have shown that up to 70% of IBS patients benefited from eating a low FODMAP diet. FODMAPs are fermentable oli- go-, di-, monosaccharides and polyols, which are poorly absorbed in the small intestine and subsequently fermented by the bacteria in the distal small intestine & proximal large intestine. This is a normal phenomenon, common to everyone, they produce beneficial alter- ations in the intestinal flora that contribute to maintain the good health of the colon. The resultant production of gas potentially results in bloating and flatulence. A low-FODMAP diet might help to improve short-term digestive symptoms in adults with IBS, but its longterm use can have negative effects because it causes a detrimental impact on the gut micro-biota. It should only be used for short periods of time and under the advice of a specialist. Fiber in IBS:- soluble fiber supplementation (e.g., psyllium/ispagula husk) acts as a bulk- ing agent & for IBS-D patients allows for a more consistent stool, For IBS-C patients it seems to allow for a softer, moister, more easily passable stool. Insoluble fibres (e.g. Bran) may exacerbate symptoms and provide little relief.

• Medications :-

Abdominal pain

-Antispasmodics

-Antidepressants -TCA's

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-SSRI's

Bloating/Distention

- Antiflatulents

- Antispasmodics

- Dietary modifications

Constipation

-Fibre

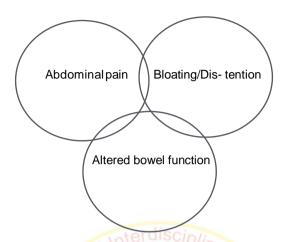
-Fibre -Laxatives

Diarrhoea

- Antidiarrhoeal agents

- Loperamide

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Class of Drug	Drug	Mode of action	Used in	Adverse effects
Bulking agents	Psyllium, Wheat bran, corn fiber, Calcium polycarbophil,	Accelerate intestinal transit, add fluid to stool mass, and create gellike matrix in stool	Constipation, Diarrhea	May increase intestinal gas, bloating, and abdominal discomfort.
Osmotic laxatives	Magnesium hydroxide, Sodium phosphate, Lactulose, Sorbitol solution	Poorly absorbed ions or sugars that cause an influx of fluid and electrolytes into the intestine	Constipation	Diarrhea, dehydration, electrolyte disturbances.
Stimulant laxatives	Senna, Bisacodyl, Castor oil, Aloe	Reduce water and electrolyte absorption by stimulating colonic neurons and irritating the colonic mucosa	Constipation	Dehydration, electrolyte disturbances, significant cramping, and diarrhea (these laxatives should be avoided in IBS)

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Antidiarrheal agents	Loperamide	Delay intestinal transit and may enhance resting internal anal sphincter tone	Diarrhea	May cause constipation: should not be used in patients with IBS-C
Antispasm- odic agents	Hyoscyamine, Dicyclomine	Anticholinergic effects and decreased spontaneous activity of intestinal smooth muscle	Diarrhea, abdominal pain	Anticholinergic adverse effects at high doses (including urinary retention and constipation) Use with caution in patients with IBS-C
Antidepressants	Desipramine, Amitriptyline, Trimipramine, Doxepin, Paroxetine, Fluoxetine	Decreased gut sensitivity, decreasing experience of abdominal pain	Pain	Constipation, dry mouth, and dizziness are common adverse effects of TCAs
		Antianxiety and antidepressant effects		Diarrhea, nausea, nervousness, and fatigue are common adverse effects of SSRIs
5-HT3 receptor antagonists	Alosetron (available only in U.S.)	Reduce visceral sensitivity and colonic transit	Abdominal pain, diarrhea, urgency	Alosetron: Black box warning regarding serious consequences of constipation; ischemic colitis (reported during clinical trials and in postmarketing surveillance)

Emerging medications for IBS:-

Drug Class	Drug	Mechanism of Action	Used in	Adverse effects/ comments
Newer GI serotonergic agents	Cilansetron (5- HT3 receptor antagonist)	Inhibits colonic motility and reduces visceral hypersensitivity	IBS- D	-Constipation -Cases of ischemic colitis have been reported -Currently in phase 3 clinical trials.
	Renzapride (mixed 5-HT4 receptor agonists/5-HT3 receptor antagonist	Accelerates colonic transit and reduces visceral hypersensitivity	IBS- C	Hypotension & somnolence
Alpha2- Adrenergic agonist	Clonidine	Reduces colonic motor activity and pain sensitivity	IBS-D	Does not cross the blood-brain barrier (and is therefore unlikely to cause central side effects typical of opioid agonists, including constipation)
Kappa-Opioid receptor agonists	Asimadoline	Reduces colonic sensation without affecting GI motility	IBS-C	headache, diarrhea, and nausea A phase III clinical trial in patients with IBS-C began in mid-2005
Chloride Channel Openers	Lubiprostone	Increases intestinal fluid secretion, thereby softening the stools, promoting bowel movement	IBS-C	abdominal pain, headache

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2,3 Benzodiazepin es	Dextofisopam	Decreases autonomic function by binding to 2,3 benzodiazepine receptors	IBS- C and IBS- M		ntly in phase II trials in the e treatment of IBS
Guanylate cyclase-C	MD-1100	Act locally on intestinal epithelium to enhance secretion and motility and reduce visceral sensation	IBS- C		ase II study with patients BS-C is underway.

Discussion:-

Advances in research over the past several decades have paved the way for an enhanced understanding of the underlying pathophysiology of IBS; development of standardized symptom-based approaches that can be implemented in making a positive diagnosis; and devel-opment of innovative treatment options that target multiple IBS symptoms. nonpharmacologic options such as exclusion diets, dietary changes, peppermint oil, exercise, relaxation therapy, or acupuncture have been evaluated. Although many unanswered questions remain, the progress is promising and it has equipped physicians better to efficiently diagnose IBS and choose from a growing armamentarium of treatment options.

Conclusion:-

In recent years, numerous studies have been conducted to understand the pathogenesis and treatment of IBS. However, IBS remains one of the most difficult GI disorders to manage regardless of its benign nature.

When diagnosed according to current criteria, IBS is associated with a good prognosis and the diagnosis is unlikely to be changed to that of an organic disease during follow-up. It is important that people try to identify their own triggers so that they can avoid or minimize IBS symptoms.

Currently, treatment strategies are patient specific, depending on severity of the disorder, focusing on symptom control and improvement in quality of life. Most of the patients have mild symptoms, have little or no psychosocial difficulties & do not seek health care often, treatment usually involves education, reassurance & dietary & lifestyle changes. Patients with moderate symptoms have altered gut physiology e.g. worsened with

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eating or stress &releived by defeacation, treatment includes gut acting pharmacologic agents such as antispasmodics, antidiarrheals, fibre supplements & the newer gut serotonin modulators. A very small group of patients have severe & refractory symptoms having constant pain & psychosocial difficulties, this group of patients are best managed with antidepressants & other psychological treatments.

References:-

- 1. Harrison's principles of internal medicine 18th edition vol. 2 ch.296 p.no. 2496-2501.
- 2. American College of Gastroenterology Functional Gastrointestinal Disorders Task Force. Evidence-based position statement on the management of irritable bowel syndrome in North America. Am J Gastroenterol. 2002;97:S1–S5. [PubMed]
- 3. Manning AP, Thompson WG, Heaton KW, Morris AF. Towards positive diagnosis of the irritable bowel. BMJ. 1978;2:653–654. [PMC free article] [PubMed]
- 4. Rome IV diagnostic criteria for functional GI disorders released at DDW. June 23, 2016. Accessed 8/11/16 at: http://bit.ly/28QsQMu.
- 5. Drossman DA. Functional Gastrointestinal Disorders: History, Pathophysiology, Clinical Features and Rome IV. Gastroenterology. 2016;150:1262-1279.
- 6. Cash BD, Epstein MS, Shah SM. A novel delivery system of perpermint oil is an effective therapy for irritable bowel syndrome symptoms. Dig Dis Sci 2016; 61:560–571.
- 7. Longstreth GF et al:Functional bowel disorders. Gastroenterology 130:1480, 2006



Comparative Study And Effect of Jatamasyadi Vati And Taildhara in The Management of Uccha Raktachapa (ETH)

Dr. Anand M. Pawar

Dr. Sumol M. Bhosle

M.D.(Panchakarma), GAU, Jamnagar Prof ,HOD,Panchakarma Dpt.

MD,(Rachna Sharir)

Late B.V.Kale Ayurved College and Hospital, Latur

Introduction

The 21th century is described as the age of anxiety and stress. The present man is constantly facing symbolic stress and anxiety due to sedentary life style and busy schedules . This stress and strain of day to day life affects one's bodily organs through several psychosomatic mechanisms. The development of medical science has helped us to conquer disease like TB, plague, chickenpox etc., but stress related diseases are rapidly growing. Among the several psychosomatic diseases, the cardiovascular disorder like Hypertension is quite significant. 'Hypertension' (persistent raised arterial pressure) although, the handy literature is not observed in Ayurvedic classic, review of previous theoretical and clinical works on this topic point out certain mode of involvement of dosha and dushya in the genesis of it. Most of efforts shows a prime role of vata in association of remaining dosha pitta and kapha. Also, Acharya Charaka permit to treat such disease without nomenclature by judging the involvement of dosha dushya only (Cha.Su.20).

Hypertension:

Synonyms: High Blood Pressure, Hyperpiesia

High blood pressure or hypertension is a circulatory state, arise from any cause, in which the pressure of the blood with in the arteries becomes elevated beyond normal limits. In general the term includes any rise in arterial pressure whether temporary involving systolic pressure, diastolic pressure or both of renal or normal origin. (British Encyclopedia of Medical Practice P.508)

According to W.H.O the blood pressure of 160/95 mm of Hg or higher should always be considered as hypertension (High blood pressure). Blood pressure in between is considered as borderline or possible hypertension. The rise of persistent systemic arterial diastolic blood pressure above 100 mm of Hg. or more, is more risky than rise of systolic blood pressure. Generally systolic and diastolic hypertension occur together. Systolic hypertension is caused from increased cardiac output or arterial rigidity in aged. Arterial rigidity by arteriosclerosis, affecting intima of arterioles and capillaries of vital functional organs is pathogenic. Diastolic hypertension develops from the increased vascular

resistance to the blood flow at the level of arterioles. In capillaries the blood flow is slow, hence, there is no development of resistance. (Quarterly Medical Review, 1984)

Classification of Hypertension by Etiology:

- A. Essential or Primary Hypertension
- B. Secondary Hypertension

Essential Hypertension;

Synonyms: Primary Hypertension, Idiopathic Hypertension

Blood pressure is caused by various comlpete series of factors controlling blood vessels calibre response control of fluid volume within and outside the vascular bed, and resultant cardiac output. All such factors are interrelated with each other making it difficult to determine a single or sure causes for hypertension. Thus, when the definite cause can not be determined or established the hypertension is called as essential hypertension. It was named as essential under belief that it springs up as essential for proper circulatory functions of the blood in all organs. But now it is defined as hypertension, the causes of which are not definitely known. Constant diastolic hypertension above 90 mm of Hg. Or systolic above 140 mm of Hg. or both, considering age factor rise and judging transient fluctuation with due care can be termed as essential hypertension. About EHT we may conclude that –Among all hypertensives 95% patient suffer from EHT. The constitutional (genetic) dietary and environmental factors are involved in rising arterial pressure in EHT. This is associated with impaired endotheliun mediated vasodilatation.

Murdhataila (Shirodhara):

Acharya Charaka has defined snehana as the treatment includes in sdhadvidhopkramas, which produces viscosity, softness, solubility and kleda in the body (Cha.Su.22/10). There are two routes to administer the sneha the body viz. external and internal. External by Abhyanga, Murdha taila, Tarpan etc. and internal by Pana, Basti, Nasya etc. Murdha Taila including four therapeutic processes namely, Abhyanga, Seka, Pichu, Basti. They are told uttrottara gunaprada. (A.H.Su.22/23) But as Murdha Taila is concerned, Abhyanga is used in day to day life routinely and Seka or Dhara in most of the diseases. Dhara is not only used in psychic diseases but, also used in psychosomatic diseases like psoriasis. Dhara is done by different medicaments like taila, takra, kshira, kwatha etc. In the southern Dhara therapy is most commonly practiced. this dhara process can be included under parishekasweda.

Method of preparation of Tail dhara:

Here in present study a medicated oil Brahmijatamsyadi is used for the process .Before the Shiorodhara head is massaged with bala oil.

Duration of Tailadhara: 21 days at morning hours for 45 minutes.

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Aims And Objects:

- 1). To understand the clinical utility of Tailadhara.
- 2) To study the role of Tailadhara in the management of Essential Hypertension.
- 3) To evaluate the effect of Jatamasyadi vati in the management of Essential Hypertension.

Material And Methods:

For this study 25 patients of Essential Hypertension were selected randomly from the O.P.D. and I.P.D. of the Department of *panchakarma*, late B.V.Kale Ayurved Collge Latur

Criteria of Diagnosis: Three consecutive readings of blood pressure were taken in supine posture and their average was utilized for diagnosis. A patient with persistent blood pressure above 140/90 mm of Hg was designated as hypertensive. The following investigations were undertaken to exclude other pathologies as well as to assess the condition of the patients:

- a. Hematological Test- Hb%, TLC, DLC, ESR.
- b. Bio-chemical Test-BSL, Blood Urea, Serum triglycerides, Serum Cholesterol.
- c. Urine Analysis- Microscopic and routine examinations.
- d. ECG
- e. Chest X-rays.

Study Design:

The 25 patients having Essential Hypertension were sub-divided into three groups of 10 patients, 9 patients and 6 patients respectively, randomly selected in view of comparing the efficacy of the therapies. The treatment schedule decided for each group was as under:-

GROUP	NO.OF PTS.	DRUG	DOSE	DURATION
1	10	Medicated tailadhara	2 litres/day	21 days
2	9	jatamasyadi vati	6gm/day	45 days
3	6	Medicated Tailadhara &	2litres/day & 6 gm/day	21 days &
		Jatamasyadi vati		45 days

Criteria For Assessment:

1) On the basis of cardinal sign i.e. persistent elevated blood pressure. By noting the alterations in the systolic and diastolic blood pressure, before and after treatment.

2) A- On the basis of gradation of general symptomatology:

Present Before Treatment -- 2
Improvement after Treatment -- 1
Absent After Treatment -- 0

B- Effect of therapy on various biochemical parameters

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3)On the basis of total effect of therapy

The total effect of therapy was assessed by determining the percentage of score reduction.

Assessement	Score
EXCELLENT RESPONSE	>75%
MARKED RESPONSE	50 - 75%
MILD IMPROVEMENT	25 - 50%
NO RESPONSE	< 25%

Table No. 1 Sign & Symptoms of 25 Patients of EHT

Sign/ symptoms	No	Total	%		
	Group 1 Group 2 Gro		Group 3		
Shiroruk	7	6	6	19	76
Bhrama	27	6	2	15	60
Tamodarshana	5	6	3	13	52
Shvasha krichhrata	7	6	2	17	68
Nidranasa	5	5	4	14	56
Hrid dravata	8	6	4	18	72

Effect of Therapies on Cardinal Signs:

Table No. 2
Alterations In Blood Pressure, Before And After Treatment

B.P.	Mean		T	P
	BT	AT		
S.B.P.	167.60	158.80	9.24	< 0.001
D.B.P.	102.20	98.60	5.01	< 0.001
S.B.P.	165.11	138.22	8.50	< 0.001
D.B.P.	98.22	87.11	8.87	< 0.001
S.B.P.	159.67	135.33	5.58	< 0.01
D.B.P.	100.00	86.67	6.14	< 0.01

Table No. 3
Effect on Bhrama

Bhrama	Mean		T	P
	BT	AT		
Group 1	2.00	1.00	3.87	< 0.05
Group 2	2.00	0.50	5.20	< 0.05
Group 3	2.00	0.00	-	-

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Table No. 4
Effect On Shvasha Krichhata

Shvasha –	Mo	ean	T	P
Krichhata	BT AT			
Group 1	2.00 1.00		3.46	< 0.01
Group 2	2.00	0.43	7.78	< 0.001
Group 3	2.00	1.00	-	-

Table No. 5 Effect On Nidranasha

Nidranasha	M	ean	T	P
	BT	AT		
Group 1	2.00	1.50	2.24	>0.05
Group 2	2.00	0.50	6.71	< 0.01
Group 3	2.00	0.75	5.00	< 0.01

Table No. 6 Effect On Hriddravata

Hrid –	Mean		T	P
Dravata	BT	AT		
Group 1	2.00	1.50	2.24	>0.05
Group 2	2.00	0.43	7.78	< 0.001
Group 3	2.00	0.80	3.21	< 0.05

Table No. 7
Estimation Of Overall Response In Each Group

ASSESSMENT	GROUP	1	GROUP	2	GROUP	3
	No. of pts.	%	No. of pts.	%	No. of pts.	%
Excellent response	1	10	1	10	2	20
(> 75%)						
Marked response	4	40	5	50	3	30
(50 - 75%)						
Mild improvement	4	40	3	30	1	10
(25-50%)						
No response	1	10	-	-	-	-
(< 25%)						

Conclusion

From this comparative clinical study, the final conclusion drawn from the proper reasoning of the relevant information A critical look back at the historical review shows that *rasa vikshepana*, *anudhavana* etc. words resembling with blood circulation were prevalent in classics, also knowledge of Nadi (Pulse) and function of *Dhamani* has been described in ancient Ayurvedic literature.

As per cardinal sign i.e. persistent rise in blood pressure, *Ayurvedic* Point of view, it is evident that there is predominance of *vata pitta dosha and kapha* as its accompaniment with rasa and *rakta dushti* and the symptomatology of the disease also based upon *dosha dushya* prominence. *Dhamani upalepa* (Atherosclerosis) is one of the main incidence in EHT and is stated in kapha *nanatmaja vyadhis*. Hence, the EHT can be assigned as *Tridoshaja Vyadhi* with predominance of *vata & pitta*.

Regarding the *nidana* factors mainly genetic, dietary, psychological and environmental factors were observed practically, Hence, it is known as multifactorial disease. *Taila dhara* with *jatamasyadi vati* offered better results in pacifying the entire range of symptomatology and mainly the cardinal signs in comparison to single therapy alone. When Tailadhara and *jatamasyadi vati* given separately, was found to be effective in regression of cardinal signs as well as associated symptomatology. But, it was judged to be less effective as compared to combined therapy. From the significant results obtained in Group 1 and Group 2, it can be concluded that *Tailadhara* and *jatamasyadi vati* is more effective in mild hypertension, on the other hand moderate and severe ranges of EHT can be normalized in a better way by Tailadhara and jatamasyadi vati combined therapy. As the study was concluded over a small sample, a similar study performed over a large sample for a longer period would have procured much sharper and more accurate results.

References:

- Charaka Samhita By Chakrapani with Ayurveda Dipika commentary Nirnaya Sagar Press - Bombay.
- 2. Sushruta Samhita With Nibandha commentary by Dalhana and Nyaya Chandrika by Gayadas. Revised by Yadav Sharma & Rama Acharya.
- 3. Ashtanga Hridaya With Sarvanga Sundari commentary Nirnaya sugar press Bombay (1993).
- 4. Bhava Prakasha Bhava Mishra, Trans. By Shastri G.M., ed. Sastu Sahitya, 1963.
- 5. Text book of medical physiology Arthur C. Guyton & John E. Hall, 9th edi., Prism books pvt. Ltd., Banglore, 1996
- 6. Principles of Anatomy & Physiology Gerard J. Tortora & Sandra Grabowski, 8th edi., Haper Collins college pub., 1996
- 7. Principles & practice of medicine Davidson, 18th edi., Harcourt pub. Ltd., 1999
- 8. Nigam U.S.: A clinical study of Nasya Karma on Nasagata Roga & its scientific evaluation (K.C.), 1981.
- 9. Harrison's principles of internal medicine 18th edition vol. 2

Observational Study of Frozen Shoulder (Avabahuk)

Dr. Savita P Bharati

MD (Avurveda) Pg DHHM,EMS Dept of Rachana sharir Late, B. V. Kale Avurvedic Mahavidyalaya & Hospital, Latur

Dr. D. N. Bandapalle

Assot. Professor. Dept of Rachanasharir, Late. B. V. Kale Ayurvedic Mahavidyalaya & Hospital, Latur

Abstract

In frozen shoulder, the girdle of shoulder will be stiff because of which free movement of the joint becomes impossible.

In medical terms it is called adhesive capsulitis of shoulder joint. It may happen after an injury or use or from a disease such as diabeties or a stroke. The disease involving the neurological, musculo sketetal, psychosomatic and G.I.System disorder.

It is more similar to vatta vyadhi in ayurveda. It is co related with the ayabahuka in ayurveda. Which is not mentioned in nanat maja vatta vyadhi but acharya sushruta and other considered it as a vatta vyadhi. It is accured by the vitatation of vatta dosha

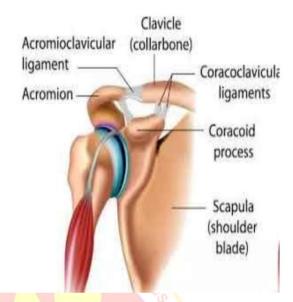
Key words – Avabhuka, dusha, nanat maja.

Introduction:-

Avabhuka is a disease that usually affects the ansa sandhi (shoulder joint). It is occured by vatta dosha ansha shosha (waisting of muscles) is the primary stage of the disease. The stiffness of joint is contributed by kapha dosha. Due to involvement of kapha dosha in many patients cold exposure and at night the stiffness worsens.

Waisting of shoulder is due to loss of sleshak kapha. Vata is considered as a chief factor provoking vata dosha result in the instantaneous manifestation of disease. Which can even prove to be fatal? Avabahuka is one of the disease that hampers the day to day activity of an individual. The fact that vata vyadhi is one among the Astamahagad is itself explanatory. Symptoms like shoola during movement, restricted & so on are manifested. It is mentioned that Ansa shosha is produced by dhata kshyaya & shuddha vatta janya & vatta kapha Janya. Vattakar ahara hetu vatakar wiharaj hetu like over exertion of the joint wresting etc cause frozen shoulder.





Aim: -

To study the frozen shoulder in ayurveda.

Objectives –

To study the literature of the disease in modern & ayurvedic view.

Review of literature

The bones ligaments & tendons of the shoulder joint are covered in as capsule of connective tissue it can be imagine as a ball containing joint in it frozen shoulder occurs when this capsule thickness and tightens around the shoulder joint restricting its movement. The thickening and tightening of shoulder joint capsule can be due to following reasons.

- 1. After effect of injury
- 2. Over use of the joint
- 3. Diseases like diabetes stroke etc.
- 4. Degenerative disorders in chronic, rheumatoid, arthritis & cervical, spondylosis etc.

Due to above reasons the tissue around the shoulder joint are stiffened. The scar tissue developed around the structure of the joint & cause restriction of the movement, pain & difficulty to work.

Stages of Frozen shoulder

- i) Freezing stage shoulde movements cause pain movement of shoulder reduce.
- ii) Frozen stage pain may decrease but stiffness increases.

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Causes as per Ayurveda -

1.External causes -

Injury to the vital part of the body (marma)

Excess exposure to wind, a.c sleeping wrong posture.

2.Internal causes -

Vatta aggravating diet and activites

Excess of pungent, bitter and astringent tasting foods.

Materials & methodology

Two types of materials are used for present study.

A) Clinical study -

For that patients are selected from OPD of our college & hospital.

B) Literary study -

Required literary information for the study are taken from both ayurvedic & modern books from liberary.

C) Exclusive criteria

Patients with secondary systematic involvement like renal failure, stroke, hyper tension etc.

Pregnancy and lactating womens are excluded.

Patients above age of 60yrs are excluded

D) Inclusive criteria-

Patients having classical signs & symptoms are selected.

Patients in the middle age group have mostly seen lie above age 22 yrs

Table 1.:
Observation in patients: symptom wise

Main sysmtpoms	score
a) Shoola	
No pain	0
Mild pain	4
Moderate pain do work normally with support	3
Severe pain, unable to work	3
b) Stambha (stiffness)	
No stifness	0
Mild support	2
Moderate	2
Severe unable to lift	6

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C) Anche chech(westing of muscles)	

C) Ansha shosh(wasting of muscles)	
No wasting	0
Mild wasting of muscles	3
Moderating wasting of muscles	3
Severe wasting of muscles	4

Table 2 – Sex wise Distribution

SEX	NO OF PATIENTS	PERCENTAGE
Females	06	60%
Male	04	40%

Discussion

According to symptoms patients having diseases of frozen shoulder Patients 60% suffering severe pains 20% having moderate pains 20% having mild pains. Stiffness occurs 40% to mild & moderate scene Sense stiffness is seen in 60% of patients

Conclusion

Stress of physical work and direct injury are pre disposing factors for the disease Maximum incidence of the disease was seen in the age group of 30 - 40yrs

- Females are more affected to the diseases than males
- Low economic status group 40% are occurred by the disease which are
- More exposure to wind & over used of joint
- In high economic status patients which are mostly working in A.C. are seen

Reference

- Sushrut Sanhita by Dr.Bhaskar Ghanekar, Reprint 2004. Shareer sthana 5/22,
- 2. sushrut Sanhita by Prof. K R Srikanth Murtey, Edition 2007, Shareer Sthana
- 3. Human Anatomy by B D Chaurasiya, Edition 2016
- 4. Charak Sanhita by Brahmanand Tripathi, Edition 2016

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Study of Concept of MutravahaStrotas (Urinary System)

Dr. Anjali S. Nichale

Dr. Sunildatta V. Mulje

PG Scholar

Guide, HOD.(Rachna sharir)

Rachna sharir Dept.

Late.B.V.Kale Ayurved Mahavidyalaya

Late.B.V.Kale Ayurved Mahavidyalaya,Latur

Latur

Abstract

In Ayurveda many important theory like Dosh, Dhatu, male, Agni, panchmahabhut, sidhant describing with that srotasvichar are also described in Ayurveda because srotasvichar is important for sharirvyapar. Now a days no of patients are reporting to the different hospitals for the disorders of mutravahasrotas, so it become necessary to know details about this. The disorders of the mutravahasrotas are described by ancient ayurvedic scientists.

Key words: srotasvichar, srotasvichar, srotasvichar.

Inroduction

Ayurveda is the most ancient medical science which deals with preventive as well as curative measure of various diseases. The disorders of the *mutravahasrotas* are described by ancient ayurvedic scientists. Now a days no of patients are reporting to the different hospitals for the disorders of *mutravahasrotas*, so it become necessary to know details about this.

All sharibhava devopled in their srotas. Mutra is also one of the sharirbhava, so mutra is forming in the mutravahasrotas

Review of Literature

According to sushrutas,

¹Basti & medhraare the moolsthana of mutravahasrotas.

According to charkacharya,

²Basti & Vankshanoare the moolsthan of mutravahasrotas.

Srotasmoolsthana is one of the important part of srotas. Regulations and functions are controlled by their moolsthana. So it is a "prabhavsthan". If any abnormality occur in moolsthana than it effect onsrotas functions.3

As per description in *ayurvedic* literature about urine formation is that, in *Grahani* due to *samanvayusarkittvibhajan* occur. After *vibhajankitt bhag* passed in *pakavashaya* and from this liquid part is absorbed by *pakavashaya*, this is know as *poshakmutra*. This *poshakmutra* with *rasa* circulated all over body and carry *cleda* with him. when these *cledayuktmutra* reach in *vrukka*. Here with the help of micro tube *cleda* is seprated. In

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vrukka seprated mutra come to basti and collected. While mutra veg controlled by pranvayu and mutravisarjan occur due to apanavayu.

Drushati Hetu,

⁴Mutraveg vidharn, to take annpan&jalpan duringmutra veg, dharana of mutra-veg& due to injury.

Aim

Study of concept of *mutravahasrotas*(Urinary system).

Objective

- 1) To study Rachanatmak concept of mutravahasrotas.
- 2)To study the kriyatmakconcept of mutravahasrotas.

Material

- 1) charak samhita
- 2) susrut samhita
- 3) ashtang hrudaya
- 4) literature like reasearch papers, case jounal & various different text will be referred

Method

Study of concept regarding *mutravahasrotas* for individual *samhita* with their comment & then these compare.

Study of concept regarding *mutravahasrotas* for individual *samhita* with their comment & then these compare.

	Mooisthan	Dushati lakashana	
susrutmat	basti & medhra	anadha bastita	
		mutra nirodha, stabdhmedhrata	
charakmat	basti & vankshano	bhumutrata, alpmutrata, varanvar	
		mutrapravruti, sashul mutrapravruti,	

Inclusive Criteria

- 1) Rachanatmak aspect of mutravahasrotas from susrutsamhita, charaksamhita, ashtanghrudaya.
- 2) Kriyatmak aspect of mutravahasrotas from susrutsamhita, charaksamhita, ashtanghrudaya.

Exclusive Criteria

Literature from Madhavnidan ,Bhavprakash, sharangdh are not included.

Observation

Study will be done by comparative study of *mutravahastrotasa* from *samhita*.

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Conclusion²

- 1) Basti & Vankshano are themoolsthan of mutravahasrotas.
- 2) In treatment of srotodrusti, moolstana is important.
- 3) According to avurvedic literature, *mutra* is fromed by *kittbhaga*.

References

- 1) Susrutasamhita of maharasi susruta ediated by kavirajaambika-duttashastri forward by dr. ranajivanamehatapublishedbychaukhamba Sanskrit sansthan(sha/9)
- 2) Charakasamhita of agniveasavol-II edited sansth aacharya vidyadharshukla & prof. ravi Tripathi Published by chaukhamba Sanskrit Pratisthan(vi/5)
- 3) Charakatikavimanstha 5/16
- 4) Charakasamhita of agniveasa vol-II

5) edited sansthaacharya vidyadharshukla & prof. raviDatta Tripathi Published by chaukhamba Sanskrit Pratisthan(vi/5)



Hrudaya – Shonita Kapha Prasadaja Bhava

Dr. Laxmikant B. Pethkar

Dr. Prof .Sunil V.Mulje

M.D. (Rachana Sharir) Final Year

Guide, HOD. (Rachana Sharir)

Late.B.V.Kale(Manjara)

Ayurved Medical CollegeAnd Hospital, Latur.

Abstract

Hrudaya is most important marma and pranayatana. It is also moolsthana of rasa and raktavaha srotas. Hrudaya is Chaitanyasangraha and site for mana, budhi, oja, chetana. hrudaya is described as "pundarika sadrusham" just like the bud of lotus, which is directed downwards, by Acharya Sushruta (su/sharirsthana-4/31).

Hrudaya is made up of <u>specilised</u> tissue called myocardium with four chambers of valves in between them and working in rhythmic manner continuously. In ayurveda myocardium can be correlated with mamsa dhatu and those rhythmic contractions are due to vayu specially prana and vyana vayu. Hrudaya is sthana of sadhak pitta, avalambaka kapha and oja.

Role of dosha's has mentioned in development of various orgens but the role of shonita and kapha in development of Hrudaya has to be clarified and the statement "shonita kapha prasadajam hrudayam" has to be supported authentically.

Key Words: hrudaya. kapha, shonita,dosha

Introduction

Since from ancient time to till all we know that Hrudaya is very important for our life or it is very special for being a live. All our acharyas gives the detail information regarding hrudaya, their functions, structure, and how important is that for our body. One of very important system of our body is circulatory system which is plays an impotant work in the development and nourishment of body.

The hrudaya is considered as place for chetana. The hrudaya is one

Among dashapranayatana . The Charak and Vagbhata considered hrudaya and Shir as separate Pranayatan .

According to Acharya Sushruta the hrudaya develops in four month of garbha. And he explain that hrudya is formed by essence of shonita and kapha. Seat for satwa, oja, tamaguna chetana, antartma & Sadhakpitta.

According to Acharya Charka hrudaya develops in third month in garba & he explains it is a matruja avayava, one among the doshapranayatna, moolasthan for pranavaha srotass, one among trimarma & kostanga. He termed hrudaya as chatanyasangraha and the site for mana, budhi, oja & chetana.

According to Vagbhata hrudaya develops in third month & he consider it is the rasatmakavahanyo i.e. here rasa means rasa & the rakta were circulated through it by

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doshamoola sira to entire body. He termed it as joythi and seat for vyanavata & avalambaka kapha .

Also as per Acharya Sharangdhara Kashyapa, Bhavaprakasha, Harita, Yogavasishta, Vivekmartanda has different opinion about the hrudaya.

Aims & Objective:

 To Clarify the concept of "shonitakaphaprasadajamhrudayam as per ayurveda

Review of Literature

Literature reviewed from ayurvedic classics. Acharya Sushruta explained the hrudaya in (su. Sha. 4/31) & (su.sha.3/18).

Acharya Charaka explained in (cha.sha.4/11).

Vagbhata explained in (astang.san.su.2/16).370150/p//

Like this different opinion are found in Kashyapa, Bhavaprakasha, Harita.

Materials & Method:

Literary &conceptful study were undertaken by data compiled from bruhatrayis& other classical texts including journals, papers presented, previous thesis work done & correlated, analyzed with the knowledge of contemporary science on the subject.

Report from scanning centre& reports of histology in relation with heart tissue from internet will be collected according to availability.

Published latest & related thesis, journals, encyclopedia abstracts, materials, from internet will be correlated & analyzed with the knowledge of contemporary sciences on the study.

Methodology;

The attempt is made here to clarify the openion in regards with हृदय development as explained by different आचार्य's like, चरक, वारभट, and काश्यप in thiird month, सुश्रुत, भाविमश्र in fourth month and हारित in fifth month.

Observation And Discussion:

The 'शोणित'' will devolops in fifth month of intrauterine life. The literature reveals that blood is the main factor in the formation of देह. विशुद्धरक्त enhances the properties like the बल (Strength), वर्ण (Colour), सुख (Happiness) जिवन (Life) i,e the sense reception by sence organs though there is the involvement of मन also but all these are under the role of रिधिर (रक्त) the blood only. If the रक्त (Blood) gets vitiated there is the depletion of धातू's because of inturn vitiation of वात. That's why the life is under the controle of रक्त , inturn

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रक्त is also called as प्राण. The दोष's does the function of धारणकर्म in normal state. The शोणित is the main factor in the formation of देह (Body), like other three दोष's. Because of these reason the शोणित is considered as चतुर्थ दोष by सुश्रुत.i.e. देहस्य रुधिरं मूलं (Body)

The general Qualities of कफ is one which is formed out of जिय धातु, शिररस्थधातुविशेष: i.e. a type of धातु, and which is adherent to the structures for free mobility and nourishment. Which is a binding soft tissue some what hard in nature, Which gives the strength, Heavy, Helps in lubrication of joints, Slippery, jelly like, Cold, which causes Stiffness, Whitish in nature. The अवलम्बककफ is a type of कफ situated specially in उर:प्रदेश, helps in the drawing and receiving function of the heart i.e. the संकोच and विकास action of the cardiac tissue. These qualities are same for five types of कफ. The type of कफ present in the हृदय as explained that the अवलम्बककफ helps the heart to function properly. i.e

The general Qualities of कफ is one which is formed out of जिय धातु, शिरस्थधातुविशेष: i.e. a type of धातु, and which is adherent to the structures for free mobility and nourishment. Which is a binding soft tissue some what hard in nature, Which gives the strength, Heavy, Helps in lubrication of joints, Slippery, jelly like, Cold, which causes Stiffness, Whitish in nature. The अवलम्बककफ is a type of कफ situated specially in उर:प्रदेश, helps in the drawing and receiving function of the heart i.e. the संकोच and विकास action of the cardiac tissue. These qualities are same for five types of कफ. The type of कफ present in the हृदय as explained that the अवलम्बककफ helps the heart to function properly. i.e हृदयावलंबनं हृदय स्वकर्मसामर्थ्यम्।

Conclusion:

- ह्रदय is मात्रज अवयव.
- ह्रदय is प्राणायतन.
- > Anatomically हृदय is considered as उरोहृदय.
- 🗲 हृदय is Cardia, Heart Present in Thoracic Cavity.
- ➤ ह्रदय is embryologically derived from शोणित (i.e. from blood forming cells angioblasts) and essence of कफ (Cardiac jelly) Contains (Glycosaminoglycane, Hyluronic acid, Gelatinous acellular collagen fibrils and material elastin).

Reference:

1. Parishabdam shabdaartha shariram, acharya raghuveer Prasad trivedi. Publication: Baidhyanath ayurveda bhavan limited Kalkatta. Edition: 2nd 1979.

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- 2. Parishabdam shabdaartha shariram, acharya raghuveer Prasad trivedi. Publication: Baidhyanath ayurveda bhavan limited Kalkatta. Edition: 2nd 1979.
- 3. Susruta Samhita, Trivikrama Yadava. Dalhanacharya Virachita, Publication: Choukhambha Surabharati Prakashana. Reprint: 2010.
- 4. Susruta Samhita, Trivikrama Yadava. Dalhanacharya Virachita Tika, Publication: Choukhambha Surabharati Prakashana. Varanasi. Reprint: 2010.
- 5. Charaka Samhita, Professor Ramaharsha Simha. Chakrapanidatta Virachita Tika Publication: Choukhambha Surabharati Prakashana. Varanasi. Reprint: 2011.
- 6. Astanga Sangraha, Dr. Shivaprasad Sharma. Shashilekha Sanskrit Commentry, Chokhambha Sanskrit Series office, Varanasi. Published: 2006.
- 7. Bhaavaprakasha Samhita By Acharya Bhavamishra
- 8. Kashyapa Samhita by Harita Samhita. Ramavalamba Shastri, Publication: Prachya Prakashana Varanasi. 1st Edition:1985.



Anatomical Consideration of Moolasthan of Srotas With Body Organs

Dr.Hanuman R Kadam

Dr. Sunil.V. Mulje

BAMS MD(SCHOLAR)

H.O.D. of Rachana Sharir Dept.

Late.B.V. Kale Ayurved medical college,

RachanaSharir dept. Late.B.V. Kale Ayurved medical college, Latur.

Latur

Introduction-

Ayurveda and modern science is the ocean for knowledge. Ayuevedahas described knowledge in Sanskrit language which is very difficult to correlate with the language of modern medicine.

As Acharya Charak is father of medicine, they describe Ayurvedic formulae for treatment of disease, at same time Acharya Sushruta is considered as father of surgery, they describe all human body batter in very elaborative manner.

According to them body is made of from *Ashthi-Sandhi-Snayu-Peshi-Kala-Srotas*etc. Now a days physician correlate Ayurvedic concepts with modern terminology for better understanding and to know the actual pathophysiology of disease in modern concept.

Aacharya Sushruta and Charakadiffers in opinion about numbers of Srotas and Moolasthana of Srotas.

But as the AcharyaSushruta is father of ShareerRachana we have to consider the concepts of body parts and systems as per there opinion.

In this paper attempt has been made to consider the Moolasthan of Srotas with body organs of modern science.

Aims And Objectives-

- To study the Moolasthan of Srotas according to Sushruta.
- Anatomical consideration of thereMoolasthan of Srotas with body organs.

Literature Review-

- Description of strotas and its moolasthan is found in Su.Sha. And Cha.VI.
- As per there opinion body having two **Type of Srotasa**
 - 1-Antarvaha Stotas
 - 2-Bahirvaha Strotas

Antarvah Stotas-

- According to Acharyaa Sushruta-11 in numbers.
- According to Acharyaa Charaka-13 in numbers.

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Difference-

Charak= Describe 3 Different Srotas Than Sushruta

- 1.Asthivaha Srotas
- 2. Majjavaha Srotas
- 3.Swedavaha Srotas

Sushruta Described 1 Different Srotas Than Charak

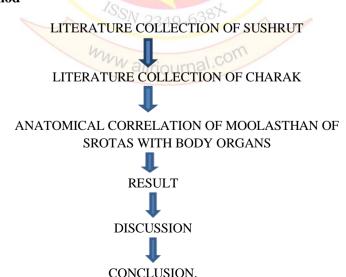
1. Artavavaha Srotas

As per Sushruta the Srotas mentioned by Charaka are SarvaDehik so they does not have any specific moolasthan or not necessary to describe them as separate srotas.

Antarvah Srotas And There Moolastahan As Per Sushruta=

- 1. Pranvah Srotas=Hruday, Rasavahi Dhamanya.
- 2. Udakavah Srotas=Talu,Klom. Ale (CISCIA)
- 3. Annavah Srotas=Aamashay,Annavahi Dhamanya.
- 4. Rasavah Srotas=Hruday, Rasavahi Dhamanya.
- 5. Raktavaha Srotas=Yakrut, Pliha,&Raktavahi Dhamnya
- 6. Manasavaha Srotas=Snayu, Twak.
- 7. Medovaha Srotas=Kati, Vrukka.
- 8. Shukravaha Srotas=Vrushan, Shepha
- 9. Mutravaha Srotas=Basti, Medhra
- 10. Purishavaha Srotas=Pakvashay, Guda
- 11. Aartavavaha Strotas=Garbhashay, Aartavavahi Dhamanya

Material And Method



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Observation-

- 1. Pranvaha Srotas=Hruday, Rasvahi Dhamanya= Heart and Pulmonary veins.
- 2. Udakvaha Srotas=Talu Klom=Stomach and Oesophagus.
- 3. Annavah Srotas=Aamashay, Annavahi Dhamanya= Palate and Pharynx.
- 4. Rasavah Srotas=Hruday, Rasvahi Dhamanya= Heart and Oesopharyngeal Nerve.
- 5. Raktavah Srotas=Yakrut-Pliha, Raktavahi Dhamnya=Liver, Spleen, Artery, vein.
- 6. Manasavah Srotas=Snayu, Twak= Tendon and Skin.
- 7. Medovah Srotas=Kati, Vrikka= Lumbar region and Kidney.
- 8. Shukravah Srotas=Stanya, Vrushan=Breast and Testis.
- 9. Mutravah Srotas=Basti, Medhra.
- 10. Purishavah Srotas=Pakvashaya, Guda.
- 11. Artavavah Srotas=Garbhashay, Artavavahi Dhamanya=Uterus.

Discussion-

According to data collection and literature review we can correlate Moolasthan of Srotas with body organs. It is helpful for physician in practice or for better understanding of patho-physiology of disease.

It is also helpful to understand the diagnosis of Ayurvedic science in to modern science and diagnosis of modern science in to Ayurvedic science which is ultimately help for treatment and understanding of disease.

Conclusion-

The Moolasthan of Srotas can be correlated with organs for better understanding

Refferences-

- 1. Dr.Ambikadatta shastri, sushrutsamhita, choukhambaprakashan, reprint 2014 su.sha.9
- 2. Pro.Ravidatta tripathi, charaksamhita, choukhambaprakashan, reprint 2013 cha.vi.5
- 3. Dr. Ya. Go. Joshi, charaksamhita, vaidyamitra prakashan, 6th edition chavi. 5
- 4. Dr.Bramhanand tripathiCharaksamhita,choukhambaprakashan,reprint 2006 cha.vi.5
- 5. B.D chaurasias human anatomy 6th edition 2017
- 6. Dr.Bhaskar GovindGhanekarsushrutsamhita Su.Sha.9
- Vd. Yadavji Trikamji Acharya, Sushrutsamhita, Chaukhamba oriantalia, 5th edition 1992

Understanding Ashayas with Modern Aspect

Dr. Jyoti Baburao Patil.

Dr.Prof. Sunildatta V. Mulje

BAMS, MD (Scholar), Rachana Sharir dept. Guide ,HOD (Rachana Sharir.) Late. B.V. Kale Auv. Medical college,

Late. B.V. Kale Auy. Medical college, Latur.

Latur.

Abstract:

According to Ayurveda, 'Ashaya' means a place where a substance stays for some time. Ashaya is also called as 'Adhar'. An organ with a cavity is also called as 'Ashaya.' There are 7 ashayas present in males. There is one more Aashaya present in females which is called as 'Garbhashaya' where an 'embryo' or 'Garbha' exists. (Shushrut sharir 5/8) Sharangdhara has mentioned another specific Ashaya in females. i.e. 'Satnyashaya.' According to modern' "Ashayas' can be compared with an organ with a Cavity or an organ where substances e.g. food, urine, etc. are collected or stay for some time.

Key Words:- Aashay, Cavity, Urine, Garbhashaya, Garbha, Stanyashaya.

Introduction:

In Ayurveda so many structures are described such as Koshtha, Kala, Srotas, Ashaya, etc.

Out of these Ashaya means a place where a substance stays for some time.

There are 7 Ashayas i.e. Vatashay, Pittashay, Kaphashay or Shleshmashay, Raktashay, Amashay, Pakwashay, Mutrashay. Besides these there are 2 Specific Ashayas in females. i.e. Garbhashay and Stanyashay.

According to modern; these *Ashayas* can be compared with an organ with cavity where blood, urine, etc are collected.

Aim and Objectives:

- 1) To study Ashayas in detail according to Ayurveda.
- 2) To study Ashayas with modern aspect.

Material Method-

- The data is collected from different samhitas and modern text.
- The given data is analyzed and understand in *Rachnatmak & Kriyatmak* view.

Review of Literature:

According to Sushruta, there are 7 Ashayas i.e. Vatashay, Pittashay, Shleshmashay, Raktashay, Amashay, Pakwashay and Mutrashay, In female there is one Aashay i.e. Garbhashay.

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Sharangdhar has mentioned a specific *Aashay* in female i.e. *Stanyashay*.

Observation

1) Vatashay: Vatashay means where vata dosha is present. Here Vatashay is referred to Pakwashay.

Pakwashay is related to all the movements of processed food. So that we can compare Pakwashay with 'Large Intestine' which includes all the parts from caecum to Anus.

2) **Pittashay :** In *Pittashay, Pitta dosha* is present. *Pitta dosha* is related to digestion.

According to modern; *Pittashay* can be compared with organs that are concerned with the process of digestion. These organs are duodenum, Liver, gall bladder, pancreas, etc. Because these organs produce and secret digestive juices and enzymes.

- 3) Shleshmashay: Shleshmashay is the site for kapha dosha. According to Ayurveda; Urasthan is the main site for kapha. So, that we can compare Shleshmashay with lungs.
- 4) Raktashay: Raktashay is the site for blood storage And liver, spleen is the moolasthan of Raktavaha srotas. According to modern, Liver and spleen form and store most of the blood in the body. Liver is richest in Iron and iron is the main component of blood cells also distruction of blood cells is occur in spleen. So, that we can compare these major organs with Raktashay.
- 5) Aamashay: 'Aam' means 'undigested food'. 'Aamashay' means Aam (Undigested food) is stored for some time in the stomach also Aamashay is a moolashtan of Aannawaha srotas. Where is the place of kledak kapha. According to modern, it acts as a reservoir of food & helps in digestion of carbohydrates, protin & fats.

So, that *Aamashay* can be compared with the stomach.

6) Pakwashay: 'Pakwa' means 'digested food.' According to Ayurveda; pakwa or digested food is stored in Pakwashay.

Digested food is absorbed into the large intestine. So; that Pakwashay can be compared with large intestine.

7) **Mutrashay :** Mutra or urine is stored in Mutrashay. With modern aspect; urine is formed in kidneys and then it is transferred and stored in the bladder.

So, that we can compare *Mutrashay* with bladder.

8) Garbhashay : It is present only in females. *'Garbha'* or 'Embryo' is formed and developed in *Garbhashay*.

It is the most important Aashay in female because of its function.

Uterus can be compared with *Garbhashay*; where the feotus is going to underdevolopment because of its similarity with *Garbhashay*.

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9) Stanyashay: It is mentioned by Sharangdhar. *Stanya* or breasts develop after puberty and filled with milk during pregnancy due to hormonal changes in female.

Discussion -

Aashaya means something is *Dharan* there is something placed, stored for some time. According to chakrapani, In vatashaya there is storage of *Purish mala* for some time and karma of *vata* present in *Pakvashaya* is *Nishkraman* of *mala*.

In Pittashay the Aashraya sthan of Agni & Pittadharakala is in Grahani & there is the Karma of digestion of food.

The Yakruta & Pleha is formed from Rakta dhatu & it is the storage of Rakta so it is Raktashaya

In the *Aamashay* there is storage of food in stomach & also its is *Moolasthan* of *Annavahasrotas*. The *Pakvashay* storage of digested food in large intestine & absorbtion of essential nutrient. In *Mutrashaya* storage of urine in urinary bladder. The growth & development of feotus is formed in *Garbhashaya*. So there is storage of feotus for 9 months so it is the *Aashaya* on the karam of *Dharan* (storage).

Conclusion:

From above, we can conclude that there is a lot of similarity between *Aashayas* and different organs mentioned in modern texts On the basis of *Dharan* (storage) karma.

e.g.: - Similarity between Aamashay and stomach, Mutrashay and Bladder, etc.

References:

- 1.Sushrut Samhita by Dr. Bhaskar Govind Ghanekar, Edition 2012 Meharchand Lachaman Das Publication, New Delhi.
- 2. Sushrut Sanhita, Translated by Atrideva, 7th Reprint 2015. Choukhamba Sanskrit Pratishthan, New Delhi.
- 3. Charak Sanhita by Ravidatta Tripathi, Edition 2015 Choukhamba Sanskrit Pratishthan, New Delhi.
- 4.Charak Sanhita by Brahmanand Tripathi, Edition 2016 Choukhamba Surgharti Prakashan, Varanasi.
- 5. Asthang Sangrah by Ravidatta Tripathi, Edition 2015 Choukhamba Sanskrit Pratisthan, New Delhi.
- 6. Asthanghrudayam by Brahmanand Tripathi, Edition -2015
- 7. Human Anatomy by B. D. Chaurasia, Seventh Edition 2016 CBS Publishers & Distributors.
- 8. Gray's Anatorn by Standring, 41st Edition 2015. Publisher: Eisevier Health UK.
- 9. MOORE Clinically Oriented Anatomy, Seventh Edition, South Asian Edition.

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To Elaborate the Concept of Tarunasthi

Dr.Sunil V. MuljeGuide & HOD
Dept.of Shareer Rachana
Manjara Ayurved College & Hospital Latur.

Dr.Pratibha Purushottam Kulkarni M D Second Year Dept.of Shareer Rachana

Abstract:

Asthi is the main supportive compact and dense tissue of the body. It constitutes total skeletal frame work of the body. Bones offer prime support to the body. Present study is conceptual study of Tarunasthi. As the structure of Tarunasthi is similar to Asthi according to Ayurveda and similar to Cartilage according to Modern science. Introduction aim and objectives have been mentioned and detailed study of Tarunasthi is discussed and conclusion is drawn thereafter.

Introduction:

Acharya Sushruta, Pioneer of Rachana Shareer explained that organs of the body destroy after death except the bones. Bones do not decay after the death and remains as far longer duration. The shape the body is due to the articulation of the bony framework. The bony framework supports the body just like trees stand on support of their inner wood. According to Ayurveda, Asthis are of six types and according to modern science bones are of six types, in which our acharyas has mentioned Tarunasthi under the asthi prakaras but the same is not mentioned by modern science under the the types of bones hence whether to understand cartilage as Tarunasthi..? because modern science has elaboratively described cartilage as a different structure other than bones.

Acharya Sushruta has explained Tarunasthi as one amongst them in the chapter of 'shareer shankhya vyakaran'. Acharya Vagbhata of Asthangsangraha ,in the chapter of 'Angavibhag Shareer' and Acharya Bhavmishra in the 'Garbhavyakaran adhaya' explained the same concept in the view of all these acharyas ,the bones of Ear, Nose, Eyelids of eyes and Neck are considered as Tarunasthi.

The word 'Taruna' Is derived as 'Nuthanah iti Dharati, which means newly born or newly produced therefore by analyzing and understanding the concept of Tarunasthi later comparing with modern concepts on the basis of modern parameters, it is understood that Tarunasthi may be compared with cartilage of the body because during embryological development, the cartilage which are precursors in the development of bone get arrested and supports the non skeletal structures like ear,larynx ,tracheobronchial tree .someof the precussors undergo retrogressive changes and the formation of bones takes place .

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Aims & Objectives:

Aim:

- 1. To study characters of *Tarunasthi* according to Avurveda
- 2. To study characteristics of *Tarunasthi* according to Modern science.

Objective:

- 1. To study review of *Tarunasthi* in details
- 2. To study review of Cartilage in details
- 3. To compare guna and karma of Asthi and Tarunasthi

Review of Related Literature:

'Tarunasthi - yani ghanatmana prapnuvanti pani'

In the process of Tarunasthi nirmitti, due to less agni and less kharatva it remains mrudu (soft)

Defination of Asthi: 'Asyate iti asthi...!' asthi means remains in body.

Asthi dhatu is sthir, katthin, and gives support to organs and other rachanas of sharer. After death muscles, soft organs and other all rachanas get decomposed but due to hardness (kathinyatva) of asthi, it remains well in condition for a long time and therefore it is called as *dhehasara*.

Functions of Asthi:

Asthi gives shape to body (e.g chest shoulder) asthi gives kathinta (hardness) to body. Asthi gives supports to Muscles, Arteries, Veins and Nerves

- To Lookafter body weight (Standing Position)
- To Protect important organs
- To help to do the various activities of the body by the help of Asthisandhi (e.g. walking,running)

Number of Asthi:

In Ayurveda there are differences between number of asthi according to various granthas as given below.

Charak sanhita & Vaghbhat sanhita -360, Sushrut Sanhita & Bhel Sanhita-300 Modern Science - 206

Comparative Structures:

According to Modern Science According to Ayurveda

Kapalasthi Flat Bones Ruchakasthi Dentures/Teeth Tarunasthi Cartilages **Curved Bones** Valayasthi

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Nalakasthi

Long Bones

Annasthi

Irregular ,Short Bones

Materials & Methods:

Materials: Review of avurvedic and Modern Texts. Journals and internet articles.

Methods: Conceptual study and Cadaveric Dissection

Human Cadveric dissection of Earpinna will be done to study the structural relation of Tarunasthi as a Asthi.

Inclusion: Both male and female cadaver of any age will be included

Exclusion: Cadavers of childrens, poisioning, accidents, burn cases and decayed etc. will be excluded for the study.

Discussion:

घ्राणकर्णग्रीवाक्षिकोषेसू तरुणानि !

🚬 स.शा. ५/२० .अ.सं.शा.५/७२

When dissection was carried out to reaccess the location of Tarunasthi then the place of Tarunasthi (Ghrana, Karna, Greeva & Akshikosh) were verified as a told in above mentioned sutra. Charakacharaya mentioned Tarunasthi as a supplementary diet for the management of Asthikshaya

Asthis of Ayurved science can be compared with bones of the modern science. Microscopically, the bone is of four types namely Lamellar, Fibrous, Dentine and Cement. As per Ayurveda, as asthis are of above mentioned five types. Ruchakasthi considered in Ayurveda can be compared with with dentine and cement .So all the remaining four types except Tarunasthi are acceptable in both sciences.

If Tarunasthis are compared with cartilage of modern science then the clear demarcation is seen between bone and cartilage. It will be clear with the help of following www aiirjournal.com table.

Cartilage **Bone**

	G
1.Cells are called osteocytes & osteoblasts	Chondrocytes & chondroblasts
2.Bones are Opaque	Cartilages are semiopaque
3.It is highly vascular & has nerve supply	No nerve or blood supply
4.Major portion of adult skeletal	Major portion of embryonic skeletal
5.Greater regenerative power	Less regenerative power
6.Forms whole body skeletal	Supports non skeletal organs of body
7. Contains bone marrow & blood cells	Does not cotain bone marrow

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Conclusion: Reviewing the available literature, the following conclusions are obtained.

Asthi is one of the sharer *Dhatu* which is constructed the support of the body. It is classified into five types viz. Kapalasthi, Ruchakasthi, Tarunasthi, Valayasthi and Nalakasthi. Asthi can be co-related with bones of modern science. Hyline cartilage is a prototypical form of bone.

Tarunasthi is a type of asthi according to Ayurveda, it is synonymous to the cartilage of modern science. All the three types of cartilage i.e Hyline cartilage, Fibrocartilage and Elastic cartilage, constitute an Ayurvedic term *Tarunasthi*.

Reference

- 1) Sushrut Sanhita by Dr.Bhaskar Ghanekar, Reprint 2004, Shareer sthana 5/22, Page 160
- 2) Sushrut Sanhita by Prof. K R Srikanth Murtey, Edition 2007, Shareer Sthana 5/20, Page 86

3) Human Anatomy by B D Chaurasiya ,Edition 2016,Charak Sanhita by Brahmanand Tripathi ,Edition 2016



Efficacy of Herbal Drugs in Urolithiasis

Dr. Jyoti Ram Wagh

Dr. Prof Sunildatta Mulje

P.G.Scholar (Rachana Sharir)

Guide ,HOD (Rachana Sharir)

Abstract

Recent years have seen dramatic advances in phytotherapy for urolithiasis. An unavoidable interest in this, results in an expense of more than \$1.5 billion annually in the United States. Although phytotherapeutic extracts are popular in folk culture, review of literature suggests that very few studies have been done on the exact clinical role, efficacy and side effects of these herbs after long-term consumption. Correspondingly potential acceptance of this herbal therapy as an alternative or an adjunct to classic medical therapy remains to be determined. An increased excretion of urinary citrate, decreased execretion of urinary calcium and oxalate, and diuretic and antiseptic features are only some of the known mechanisms of these extracts.

Keywords: Folk culture, clinical role, efficacy, side effects, classical medical therapy, innovative study.

Introduction:

Mutrashmari² is one such disease in Ayurveda which can be correlated with urolithiasis or urinary stone. There are many types treatment available, yet the sufferers are not very satisfied as there are certain limitations like treatment cost, hospital stay, adverse effects, recurrence, the list goes on. In Ayurveda many drugs have been mentioned to treat this condition. One such formulation is "Veerataru Kvatha" mentioned in Priya Nighantu. Veerataru is said to be an Ashmarighna and Mutrala. The Tikta and Katu Rasa, Ushna Virya, Laghu and Ruksha Guna helps in the Samprapti Vighatana. Considering all these points it is observed that there is a need for safe, economic, effective line of treatment for renal calculus.

Herbal remedies have been employed during the ages to treat urinary stones. *Hyoscyamus niger* is a plant that grows in Europe and has relaxing, antispasmodic, anaesthetic features that share the pharmacological effect of drugs prescribed for renal colic treatment even today.

Review of Literature:

- Review of literature includes through screening of Ayurvedic classics such as Charaksamhita,
- Sushrutasamhita.
- Yogaratnakar,
- Chakradatta Priyanighantu,
- Modern texts, periodicals, e- journals etc, to collect the data for the present study.

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Aims And Objective of The Study:

- 1. To study the concept of Mutrashamari and nephrolithiasis in detail.
- 2. To study extent of herbal medicine in urolithiasis.

Materialals And Methods:

Source of data:

- 1) Literary Source: Literary data will be collected from Ayurveda classics, Periodicals & e- journals etc.
- 2) Sample Source: The patients fulfilling the diagnostic criteria will be selected from OPD and IPD of Late B. V. Kale Manjara Ayurvedic College, Latur.
- 3) Experimental source: It is the human clinical trial. No animal experimental study.

Method of Data Collection:

- 1) Study design: It is a single blind clinical study.
- 2) Sample design: A minimum of 30 patients fulfilling the diagnostic and inclusion criteria of either sex will be selected.
- 3) Inclusion criteria:
 - Age between 21 to 50 years.
 - Sex: either sex.
 - Stone in between 5mm to 8mm will be taken for the study.
- 4) Exclusive criteria:
 - Age: below 21 and above 50 years
 - Stone Size >8 mm
 - Severe Hydronephrosis airjournal.com
 - Pyelonephritis
 - Any other systemic disorders like DM, HTN, HIV, Cardiac pathology, HbsAg etc.

Herbal Based Commercial Formulations For Urolithiasis:

The marketed composite herbal formulations, Cystone (Himalaya Drug Company, India), Calcuri (Charak Pharmaceuticals, Bombay, India), Uriflush (Inti Sumatera Global, Indonesia), Uriflow (Discovery Herbs, USA) and *Chandraprabha bati* (Baidyanath, India) have been widely used clinically to dissolve urinary calculi in the kidney and urinary

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bladder. There are various studies which showed its ability to inhibit calcium phosphate and calcium oxalate mineralization. The main components of Cystone are given in Table 1.2.

Table 1. The components in one Cystone tablet.

Herb Amount	
Didymocarpus pedicellata	65 mg
Saxifraga ligulata	49 mg
Rubia cordifolia	16 mg
Cyperus scariosus	16 mg
Achyranthes aspera	16 mg
Onosma bracteatum	16 mg
Vernonia cinerea	16 mg
Shilajeet	13 mg
Hajrul yahood bhasma*	16 mg



formulation for treatment of kidney stones.

*Harjul yahood bhasma is prepared with Ocimum basilicum, Tribulus terrestris, Mimosa pudica, Dolichos biflorus, Pavonia odorata, Equisetum arvense and Tectona grandis.

In addition, its efficacy to reduce urolithiasis was also reported in male Wister rats. In various reports, the anticalcifying properties of Cystone are used as a reference for evaluating the antilithiatic properties of other plants.

Sl.	Ingred-	Botanical	Rasa	Guna	Virya	Vipaka	Doshakarma
no.	-ients	Name					
1	Pasana-	Bergenia	Kasaya	Laghu	Sita	Katu	Tridosahara
	-bheda	ciliate Royle	Tikta	Snigdha			Mutravirecaniya
2	Goksura	Tribulus	Madhura	Guru	Sita	Madhura	Vata-Pitta
		terrestris		Snigdha			hara,Vrsya,
		Linn					Mutrala,Rasayana

Result & Discussion:

On the basis of details study of the mentioned subject and aims and objectives with references, previous work done, various material and methods it is evident that the title of this article is enriched.

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Conclusion:

As mentioned considering abstract, literature review, methodology, investigations, it is quite clear that "EFFICIENCY OF HERBAL DRUGS IN UROLITHIALISIS" is extremely helpful particularly with no side effects of allopathic medicine and best option to maintain the health and prevention of Urolithiasis.

Bibliography

- Charaksamhita.
- Sushrutasamhita.
- Yogaratnakar,
- Chakradatta Priyanighantu,
- Modern texts, periodicals, e-journals etc, to collect the data for the present study.

References

- R.C.G. Russell, Norman S. Williams, Christopher J. K. Bulstrode, Bailey and Love's, Short practice of Surgery, chapter 75, Edition 24. Year 2004. Edward Arnold ltd, Page No. 1316.
- Kaviraj Dr. Ambikadutta Shatri, Sushruta Samhita, Nidana Stana, Ashmaryadhaya Chaukhambha orientalia, Varanasi, reprint edition 2005, Page No. 240.
- 3. Prof. Priyavat Sharma, Priyanighantu along with the author's Hindi commentary entitled Padma, Chaukhamba Surbarati Prakashan, Varanasi, Page no 135 sholka 83-84, drug no 65.
- 4. Dr. S. Das, A text book of surgery, published by Dr. S. Das, 13 old mayor's court, Calcutta 70005, India, fifth edition 2008, page no 1193.
- 5. Dr. J. L. N. Shastry, published by chaukhambha orientalia, vol.2nd, Varanasi, 220001, reprint edition 2010, page no.717.



Conceptual Review of Knee Joint & Janumarma With Reference to Osteoarthritis

Dr.Dinesh Karwa

Dr. D.N. Bandapalle

M.D. (RachanaSharir) Sch. Late B.V.Kale Medical College & Hospital, Latur Asso. Professor, Dept. of Rachana Sharir, Late B.V.Kale Medical College & Hospital, Latur.

Abstract:

The knee joint is one of the strongest and most important joints in the human body. It allows the lower leg to move relative to the thigh while supporting the body's weight. This joint is formed between three bones: the femur, tibia, and patella. Oteoarthritis (OA) is the most common form of arthritis. It is strongly associated with ageing and is a major cause of pain and disability in older people. Janu Sandhi is included amongst the 107 Marmas in the body. The structure that binds the Jangha (forelegs) and the Ooru (thigh) is the JanuMarma. Injury oriented deformity at knee joint can be avoided by certain preventive measures.

Keywords: Janu, Jangha, Marma, Osteoarthritis, Asthi.

Introduction:

The term Ayurveda is formed by the combination of two words - "Ayu" meaning life, and "Veda" meaning knowledge. Life according to Ayurveda is a combination of senses, mind, body and soul. The perfect balance of mind, body and soul is considered as complete health in Ayurveda. Most of part of Anatomy described in Sharishthan in all bruhtrayees.

Marma Theory in Ayurveda:

The theory of Marmas variety is a vital part of Shareerarachana. Marma is very critical element in human body.

मारयन्तिइतिमर्माणि | डल्हण.

म्रियते अस्मिनअङ्गेउपहते इतिमर्म | अ.ह. शा.४

Marma is the part of body, if injury happens to Marma it results into death or fetal complications hence called as Marma. Its an anatomical site where five structures i.eMamsa, (Muscles), Sira (Vessels), Snayu (Ligaments), Asthi (Bones) and Sandhi (Joints) fusion at one point. Janu Sandhi is included amongst the 107 Marmas in the body. Marmas are the vital points. When traumatised they can result in mortality, morbidity, pain or some dysfunction. They are congregations of important vessels or nerves. ¹

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Aims & Objectives:

- 1. To study the Janu Sandhi Sharir and its related structure according Ayurveda as well as Modern Anatomy.
- 2. To review the anatomical changes in Janu Sandhi (knee joint) with reference to Osteoarthritis

Materials and Methods

Conceptual study (Literary Review)

All literary Review were done regarding of sandhi and specifically Janu Sandhi mentioned in Ayurvedic classics. Description of Janusandhi and Marma mentioned in bruhatrayees, laghutrayees& the authentic treatises.

Janu Marma:^{2,3}

Sthan : At fusion point of femur and tibia fibula

Number : Two Parimaan : 3 Anguli

Types : Sandhi marma(as per structure)

: Vaikalykar(as per effect after marmaghat)



Fig.1 Showing the Janu Sandhi Marma in lower limbs.

Janumarma is one of the Vaikalkaramarma. If it gets diseases or injured it produces deformity or disability of the person. After reviewing Sushruta's description on Janumarma- its position, measurement and its prognosis after injury, it can be compared with the knee joint.

The knee joint is largest synovial joint in the body it consist of three distinct and partially separated section that collectively form a complex hinge joint.

जङ्घोर्वोःसन्धानेजानु, तत्रखञ्जता | सु.शा.६/२४

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These arrangements offer a fulcrum for the powerful extensor and flexor muscles that act on the joint during movement. Injury oriented deformity at knee joint can be avoided by certain preventive measures.⁴

Knee Joint:

The patella lies in front of the femur on the anterior surface of the knee with its smooth joint-forming processes on its posterior surface facing the femur. The knee joint is one of the strongest and most important joints in the human body. It allows the lower leg to move relative to the thigh while supporting the body's weight. This joint is formed between three bones: the femur, tibia, and patella. The patella lies in front of the femur on the anterior surface of the knee with its smooth joint-forming processes on its posterior surface facing the femur.⁵

Knee Joint Structure:

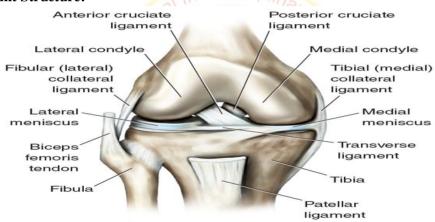


Fig.2 Showing Anatomical structure of Knee joint

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Description of Janu Sandhi Sharir:

Janumeans the Knee.Jan means to be produced (walking, motion). Sandhi word is derived from the root Sam + Dha+ Ki which meansSandhanamiti - Holding together, joining, and binding.

Characteristics of Janu Sandhi:6

Sandhis are the junctions of Bones and are seat of Kapha; they help to keep the Body parts Together.

Samkhya: ⁷ Janu Sandhi's are 2 in number present in lower extremities.

Dimensions:8

Circumference of the middle portion of knee is 14 Angulas. Length of janu is 4 Angula and its circumference is 16 AngulasTwo or more Asthis are not sufficient to form a

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Sandhi. It requiresother structures which connect the Asthis to one another, maintain, stabilize, bear weight and facilitate the gati in them.

The common diseases that affect the knee joint are:

- 1. Sandhigatavata (Osteoarthritis) This is mainly due to wear and tear of the cartilage due to age, obesity, etc.
- 2. Aamavata (Rheumatoid Arthritis) It is an autoimmune condition which can affect any joint of the body.
- 3. Vatarakta (Gouty arthritis) this type of arthritis occurs when the uric acid crystals build up in a joint. Mostly affects the big toe but can also affect the knee joint.

Trauma to knee joint may result in:

- a. Ligament injury
- b. Meniscus injury
- c. Tendon injury.
- d. Fracture

Probability Area of Janu Marma:

The following area in anatomical structure of knee joint for being considered as the manipulative point of Janumarma-

- Medial collateral ligaments
- Popliteal fossa
- Lateral collateral ligaments
- Quadrecepsfemoris tendon

ViddhaLakshane of Sandhi Marma:9

वस्तुशूकैरिवाकीर्णरुढेचकुनिखन्जता

बलचेष्टाक्षय : शोष: पर्वशोफ़श्र्चसन्धिजे || अ. ह .शा. ४/५१

- 1. Limping of the affected joints
- 2. BalaCheshtakshay
- 3. Shosh
- 4. Parvashoph

The knee joint being a marmasthana, it is the seat of Pranavayu. Any injury to this vital point causes the vitiaition of Vatadosha. Also being a joint, it is a kaphasthana (Shleshakakapha), which lubricates and strengthens the joint. Due to vitiation of these two doshas there is pain, swelling, stiffness etc. when the joint is affected.

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Osteoarthritis:

Osteoarthritis (OA) is a type of joint disease that results from breakdown of joint cartilage and underlying bone. The most common symptoms are joint pain and stiffness. Initially, symptoms may occur only following exercise, but over time may turn into stable. Other symptoms may include joint swelling, decreased range of motion, and when the back is affected weakness or numbness of the arms and legs. ¹⁰

Sandhivata is a most common pathological condition in current clinical practice especially in jaravastha (old age) and is enumerated under the heading of Vatavyadhi. The term Sandhigatavata has its origin from a combination of three words, Sandhi, Gata and Vata.

Osteoarthritis is a slowly progressive degenerative disorder otherwise known Ayurvedic as Sandhigatavata or vatic disorder. Vata is mostly dominant in Vridhaavastha. The person affected by this disease needs nutritive or Rasayana therapy. Due to excessive overweight on a particular joint, generally Knee joint cause osteoarthritis. Sometime due to more exercise of a particular joint or mithyaaharavihara cause the vitiation of vata which create pain in Sandhi.

Anatomical co relation of Janu Marma:

Muscles	Ligaments	Nerves	
Biceps femori	Medial collateral	Tibial nerve	
Semi membranous	Lateral collateral	Sural nerve	
Semi tendinosus	Criciate	Common peroneal nerve Sural communicating branch	
Head of gastrocnemius	Iliotibial tract		

Conclusion:

The Knee Joint (Janu sandhi as described by Ayurved) is one of the largest and most complex joints in the body. The knee joint, also known as the tibio-femoral joint, is a synovial hinge joint formed between three bones: the femur, tibia, and patella. The structure that binds the Jangha (forelegs) and the Ooru (thigh) is the JanuMarma. When Janumarma injured causes Khanjta(limping). Osteoarthritis is a very common condition. People who suffer from this disease are usually sufferers for their life.

References:

- 1. Tripathi B, editor, (1st ed.). Ashtangahridaya of Vagbhata, SharirSthana; Chapter 4, Verse 2. Varanasi: Chowkhambha Sanskrit Series, 2009; 144.
- 2. Prof.K.R.Srikantha Murthy editor. 1st ed, Sushruta Samhita, Sharirstan, Chapter 6, Verse 8-14. Vol-II. Varanasi: ChaukhambaOrientalia, Sharirsthana, 2001; 285.
- 3. Shashtri AD, editor,(1sted.).Sushrut Samhita of Sushrut, Sharirstan; Chapter 6, Verse24 Varanasi: Chowkhambha Sanskrit Series, 2009.

-		
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- 4. Tripathi B, editor, (1st ed.). Ashtangahridaya of Vagbhata, SharirSthana; Chapter 4, Verse 2. Varanasi: Chowkhambha Sanskrit Series, 2009; 144.
- 5. Anatomy and Physiology of Eye. Dr. A.K.Khurana, 2nd edition, 2008, CBS Publication, New Delhi.
- 6. Shashtri A.D. editor, (1sted.). Sushrut Samhita of Sushrut, sharirstan: Chapter5, Verse 27. Varanasi: Chowkhambha Sanskrit Series, 2009;175
- 7. Prof.K.R. Srikantha Murthy editor. 1st ed, Susruta Samhita, Sharirstan, Chapter 5, Verse 12. Vol-II. Varanasi: ChaukhambaOrientalia, Sharirsthana, 2001; 280.
- 8. Aathavale PG, editor, (2nd ed.). Sushrut Samhita of Sushruta; sutra sthana Chapter 35, Verse21, Nagpur: Godavari Publishers and book promoters,2008;324
- 9. Tripathi B, editor, (1st ed.). Ashtangahridaya of Vagbhata, SharirSthana; Chapter 4, Verse 51. Varanasi: Chowkhambha Sanskrit Series, 2009.
- 10. Harrison's Principles Of Internal Medicines.- Mc Graw Hill Book. 16th edition, Co Singapore, 2005. Pp-2607. Page no- 2036.



Anatomical Study of Guda And Structural Changes in Guda Shareer in Haemorhoid

Dr. Shaikh Abdul Rahim Shaikh Ajam

Dr. D. N. Bandapalle

BAMS MD scholar,Rachana shareer dept. Late B V Kale ayurved college & Hospital., Latur. Asso-prof.,Rachana shareer Dept. Late B V Kale Ayurved college & Hospital, Latur

Abstract-

Haemorhoid have been known to mankind for a long time and are one of the commonest disease to affect the human being prime etiological factor is mithya ahaar vihaar and is unavoidable due to busy life style if arsha vyadhi is not treated in early stages it varies anatomically in grades [anatomically 4grades of arsha]in our area was observed that percentage of patient having arsha vyadhi was high hence this problem was selected for study to give diagnostic tool and anatomical structure is the major tool for vaidyas to treat the disease.

Key words- Haemorhoids, Guda shareer, Arsha.

Introduction-

Ayurveda is science of life and rachna shareer is the major tool for vaidyas to treat the disease one of the prime important disease from ashtaumahagada is arsha ayurveda the and description of arsha, it is an entity in which muscular projection troubles the patient like enemy and guda is sadyo pranhar marma arsha if not properly diagnosed and treated it may cause sadyo pranhani this disorder commonly occurs percentage of patients having haemorhoid are increased in our area, so we thought to give update on arsha vyadhi and its anatomical changes in to the correct method treatment for the proper diagnosis and treatment purposes.

Aim's & Objectives:

1.To study shareera of guda.

2. To provide guideline to treat arsha vyadhi by studying sharir of gud[anus].

Riview of Literature:

In ancient literature structure of anus is described as ,last part of large intestine with muscular ridges, pravahani-visarjani-sanvahani...(SUSHRUT SAMHITA, nidaansthaan 2/5)

Charak commentators Chakrapani datta also gives functional classification of anus as, uttar gud & adhar gud there is storage of faeces in uttar gud & elimination of waste products takesplace at adhar gud. (CHARAK shareersthaan 7)

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Methodology:

- 1.It is observational type of study.
- 2. Patients of anorectal diseases selected for study.
- 3. Seaperate case papers and quistionares prepared and various examination like inspection, proctoscopy carried out and records presented.

Discussion

On the basis of observation & According to ayurveda &modern text discussed ,this disease is well within the purview of gastroenterology and the treatment of haemorhoids and other anorectal disorder should be encorperated in to the typical GI practice ,the review of literature showed that about 75% of people may have haemorhoids at some stages in their lives ,haemorhoids are most common among adults age 45 to 65 and also common in pregnant women.

Conclusion

Literary study of anus &structural changes in various diseases according to ayurveda text &modern science has been done, And study on patient it is observed that ,symptomatic haemorhoidal disease is age old problem commonly encountered in our society and patients often present to gastroenterologist for evaluation and care incidence of sentinel piles is more in young age than old age ,more chances of piles at anterior site in female and posterior site in male .and it is observed that for management of pile anatomical study of anal canal is major tool.

References:

- 1. DR Ambikadatta shastri, Sushrut samhita choukhamba prakashan, reprint 2014, su.sha. 6/9
- 2. Dr ambikadatta shastri Sushrut samhita Choukhamba prakashan reprint 2014, Su.sha5/20,
- 3. Dr ambikadatta shastri Sushrut samhita Choukhamba prakashan, reprint 2014,Su. Sha.2/5.
- 4. Pro. Ravidatta Tripathi *Charak samhita*, Choukhamba prakashan, reprint 2013, Ch. sha. 7/9
- 5. Pro. Ravidatta Tripathi *Charak samhita* choukhamba, Sanskrit pratishthan, reprint 2014.
- 6. Pro. Brahmanand Tripathi *Ashtang hridayam*, choukhamba surbharti prakashan ,reprint,2014 Ashtang hr.7/5., .
- 7. P J Mehta practical medicine 20th edition, 2017...
- 8. Standring Grays anatomy 41st edition 2015,
- 9. B D Chaurasia human anatomy 6th edition 2017.
- 10.manual on clinical surgery, somen das edition 2000
- 11.Golwalas medicine for student 24th edition.
- 12. Moore's Clinical oriented anatomy 7th edition South Asian edition 2013.
- 13.www. Journagls.elsevier.com..
- 14.www.doctors.com/disease/haemorhoid

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