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RENAISSANCE

THE COMPLETE MAGAZINE ON NATURAL HEALTHCARE

- ORTHOCHROMATIC LEUKODYSTROPHIES
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Editor's Page



Untouchability prevails in the examination of patients; not the untouchability of yesterdays, but a new trend of not touching the patients while examining them. Ayurveda insists that examination of patients should be done using '*Darsana*', *Sparsana*' and '*Prasna*'. *Darsana* is to see the patient; observe the patient. There are so many things to understand through seeing the patients which will lead to the very primary diagnosis and even to finding the fatal symptoms. *Sparsa*-touching the patient is followed by seeing the patient. First touch is to feel the pulse of the patient. Though the physician is not an expert in '*Nadeepareeksha*' mental and physical status of the patient can be assessed through the careful reading of pulse. Count, Volume and rhythm are the conventional readings. We are touching the heart while feeling the pulse, the physiological heart which facilitate the blood circulation and bear with the mental activities like happiness, sorrow, anxiety, depression, love and hatred etc. Easy conversation with the patient, even without touching the matter of disease, is appreciable during pulse reading so that patient's attention can be diverted and physician can read a natural pulse. Similarly touching the site of pain or discomfort is always advisable. Conventional palpation is to feel the internal organs especially in abdomen to know their size, abnormality and tenderness if any. But, a touch on the painful ankle or knee will give the information regarding local rise of temperature, fluid collections, tenderness, site of pain, depth of site, tissues involved in the inflammation and so on. While examining a lump, touch has significant importance. Information regarding mobility, firmness, attachments, affected tissues, matter filled in the lump etc. can be collected through touching the part. These information are vital in management as well as in foretelling the prognosis. While examining the patients of upper and lower back ache touch is very important. Usually degenerated disc-space will give local tenderness. This can be identified through deeply pressing the area of pain and lifting the legs in supine position. Muscular and arthritic pain can be deferentially diagnosed through touching the painful parts and moving the joints involved. Crepitation in the joints which can not be heard can easily be felt through touching the joints. Swelling and pain in the posterior part of the neck (C7 area) is due to the fluid stagnation in majority of cases and this is easily palpable condition. Through this a physician can give a word of relief to the patient that this pain is not related to the spine and it is easily curable. A soft touch on the forehead of a fevering patient, or a pat of the back telling 'you will be alright soon' to a patient in agony will always be great relief to the sufferer. Along with careful use of touch in diagnosis, consolation aspect of touch should also be used by a compassionate physician.

As the physician's are more and more depending on the results of machines these aspects of examinations are loosing their importance. But those who uses the art of touching either for examination or for consolation gain reputation as a good physician.

Thus comes the Renaissance.

Dr. K. Unnikrishna Pillai

ORTHOCHROMATIC LEUKODYSTROPHIES -A CASE STUDY

Dr. B. CHANDRA SEKHARA RAO*

INTRODUCTION

The leukodystrophies are a group of rare genetic disorders that affect the central nervous system by disrupting the growth or maintenance of the myelin sheath that insulates nerve cells. These disorders are progressive, meaning that they tend to get worse throughout the life of the patient.

What is the nervous system?

In order to understand the leukodystrophies, we need to discuss some basic facts about the nervous system. The nervous system is made up of two main components: the central nervous system (CNS) and the peripheral nervous system (PNS). Together, these two systems interact to carry and receive signals that are responsible for nearly everything we do, including involuntary functions such as our heartbeat, and voluntary functions such as walking.

The CNS consists of the brain and the spinal cord, and contains billions of specialized cells known as neurons. Neurons have specialized projections called dendrites and axons that contribute to their unique function of transmitting signals throughout the body. Dendrites carry electrical signals to the neuron, while axons carry them away from the neuron.

The PNS consists of the rest of the neurons in the body. These include the sensory neurons, which detect any sensory stimuli and alert the CNS of their presence, and motor neurons, which connect the CNS to the muscles and carry out instructions from the CNS for movement.

What is Myelin?

Myelin, sometimes referred to as "white matter" because of its white, fatty appearance, protects and insulates the axons. It consists of a protective sheath of many different molecules that include both lipids (fatty molecules) and proteins. This protective sheath acts in a manner very similar to that of the protective insulation that surrounds an electric wire; that is, it is necessary for the rapid transmission of electrical signals between neurons. It does this primarily by containing the electrical molecules within the axon so that they are all properly transmitted to the next neuron. With the protective myelin coat, neurons can transmit signals at speeds up to 60 meters per second. When the coat is damaged, the maximum speed can decrease by ten-fold or more, since some of the signal is lost during transmission. This decrease in speed of signal transmission leads to significant disruption in the proper functioning of the nervous system.

What is a leukodystrophy?

The word leukodystrophy comes from the Greek words leuko (meaning white), trophy (meaning growth), and dys (meaning ill). If you put these words together, the word leukodystrophy describes a set of diseases that affect the growth or maintenance of the white matter (myelin).

How are the leukodystrophies different from one another?

All leukodystrophies are a result of problems with the growth or maintenance of the myelin sheath.

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However, there are many genes that are important in this process. For example, some genes are involved with the synthesis of the proteins needed for the myelin, while others are required for the proper transport of these proteins to their final location in the myelin sheath that covers the axons. Defects in any of the genes (called a mutation) may lead to a leukodystrophy.

However, the symptoms of the individual leukodystrophies may vary because of the differences in their genetic cause.

How do you get leukodystrophy?

Leukodystrophies are mostly inherited disorders, meaning that it is passed on from parent to child. They may be inherited in a recessive, dominant, or Xlinked manner, depending on the type of leukodystrophy. The individual pages on each leukodystrophy will describe the particular pattern of inheritance for that disease. There are some leukodystrophies that do not appear to be inherited, but rather arise spontaneously. They are still caused by a mutation in a particular gene, but it just means that the mutation was not inherited. In this case, the birth of one child with the disease does not necessarily increase the likelihood of a second child having the disease.

Are the leukodystrophies related to multiple sclerosis?

The leukodystrophies do share some common features with multiple sclerosis (MS). Like the leukodystrophies, MS is caused by the loss of myelin from the axons. However, the cause is different; whereas leukodystrophies are generally caused by a defect in one of the genes involved with the growth or maintenance of the myelin, MS is thought to be caused by an attack on the myelin by the body's own immune system.

How many different leukodystrophies are there?

New leukodystrophies are always being identified. But, till June 2005 34 leukodystrophies have been identified and listed here to comprise the defined leukodystrophies. Not all of these meet the strict criteria for the definition of a leukodystrophy. These have been marked with an asterisk. They are included here because they have features that resemble the leukodystrophies.

- 18q Syndrome with deficiency of myelin basic protein
- Acute disseminated encephalomyeolitis (ADEM)*
- Acute Disseminated Leukoencephalitis*
- Acute Hemorrhagic Leukoencephalopathy*
- Adrenoleukodystrophy (ALD)
- Adrenomyeloneuropathy (AMN)
- Aicardi-Goutieres Syndrome*
- Alexander Disease
- Autosomal Dominant Diffure

Leukoencephalopathy with neuroaxonal spheroids

- Autosomal Dominant late-onset leukoencephalopathy
- Canavan Disease
- Cerebral Autosomal Dominant Arteropathy with Subcortical Infarcts and Leukoencephalopathy (CADASIL)*
- Cerebrotendinous Xanthomatosis (CTX)
- Craniometaphysical dysplasia with leukoencephalopathy
- Extensive Cerebral White Matter abnormality without clinical symptoms*
- Familial adult-onset leukodystrophy manifesting as cerebellar ataxia and dementia
- Familial leukodystrophy with adult onset dementia and abnormal glycolipid storage

To P. No. 28

BEHCET'S DISEASE

*DR. S. GOPAKUMAR MD (AY)

Immunity is considered as a double edged sword by the pathologists of current medical generation. There are so many examples for this consideration and one among them is Behcet's disease. **Behcet's disease** (Behçet's syndrome) is a chronic condition due to disturbances in the body's immune system. Immune system, which normally protects the body against infections through controlled inflammation, becomes overactive and produces unpredictable outbreaks of exaggerated inflammation. This extra inflammation affects blood vessels, usually the small ones. As a result, symptoms occur wherever there is a patch of inflammation, and can be anywhere where there is a blood supply.

The features

There are three levels of certainty for diagnosis:

1 International Study Group diagnostic guidelines (very strict for research purposes)

2. Practical clinical diagnosis (generally agreed pattern but not as strict)

3. 'Suspected' or 'Possible' diagnosis (incomplete pattern of symptoms)

There is no specific pathological test for Behcet's disease at present. It is diagnosed clinically by specific patterns of symptoms and repeated outbreaks. Other causes for these symptoms have to be ruled out before making the diagnosis. The symptoms do not have to occur together, but can have happened at any time.

1. International Study Group diagnostic guidelines

Patients should have -

- oral (aphthous) ulcers (any shape, size or number at least 3 times in any 12 months), along with 2 out of the following 4 "hallmark" symptoms:
- genital ulcers (including anal ulcers and spots in the genital region and swollen testicles or epididymitis in men),
- skin lesions (papulo-pustules, folliculitis, erythema nodosum, acne in post-adolescents not on corticosteroids),
- eye inflammation (iritis, uveitis, retinal vasculitis, cells in the vitreous),
- pathergy reaction (papule >2 mm dia. 24-48 hrs or more after needle-prick).

2. Practical clinical diagnosis

Patients must have -

- ❑ mouth ulcers,

along with 1 of the 4 hallmark symptoms above and with 2 of the symptoms below:

- ❑ arthritis/arthralgia,
- ❑ nervous system symptoms,
- ❑ stomach and/or bowel inflammation,
- ❑ deep vein thrombosis,
- ❑ superficial thrombophlebitis,
- ❑ cardio-vascular problems of inflammatory origin,
- ❑ inflammatory problems in chest and lungs,

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- problems with hearing and/or balance,
- extreme exhaustion,
- changes of personality, psychoses,
- any other members of the family with a diagnosis of Behcet's disease.

3. 'Suspected' or 'Possible' diagnosis

Usually given when someone does not have mouth ulcers or has mouth ulcers but does not have 1 of the 4 hallmark symptoms but has other symptoms and signs of inflammation and other causes for these have been ruled out.

Treatment: Current treatment is aimed at easing the symptoms, reducing inflammation, and controlling the immune system.

A Case of Behchet's disease: The author got a chance to treat a patient with Behchet's disease recently. The patient was an Italian priest of the age 50 with moderate obesity. The disease was diagnosed quite earlier and he had undergone modern medical treatment for a good period. He presented with the complaints of multiple oral ulcers. There were significant skin lesions as maculo – papular rashes especially in the lower limbs and back. Arthritis of the joints of the lower limbs was also associated.The past history revealed folliculitis and genital ulceres. Apart from the Behchet's disease,the patient was a known diabetic for the last 10 years.

After analyzing the medical reports the following tretment strategy was adopted. Since the basic nature of the disease was over activity of immune system, the concept of *Athyagni* at *Dhathu* level was explored further. Since the major clinical features were of a *Pitha- Raktha* origin at different *dhathu* levels, the over activity of the *Dhathwagni* was suspected. The skin lesions,oral ulcers and inflammed joints were considerd as the clinical reflections of *dhathwagni*.An initial *sodhana* with *Avipathi choorna* was done targeting the *pitha samana,Rakthaprasadana* and *Vathanulomana*. *Snehapana* as *vicharana* was given with *Mahathikthaka ghrutha* after creating good *agnideepthi* in *koshta*.But the patient was doubtful against the effects of ghee,as he was moderately obese. Hence after three days the *ghrutha* was stopped and switched over to *Mahathikthakam Kashaya*. *Thriphala choorna* was administered along with same *ghrutha* at bed time. *Mahathikthakam kashaya* was selected because of its good effects on *pitha* spectrum of inflammatory conditions. *Thriphala choorna* was selected due to its action in skin,ulcers and eye. Moreover being a drug with *Rasayana* property *Thriphala,* can check the immune related pathological events. *Seka* with *Ksheerivriksha twak kwadha* was also administerd in the local ulcers. For *kabala,Thriphala kashaya* was the option. *Chandraprabha gulika* was also given as he was diabetic. The patient was asked to continue his usual modern medicines for diabetes.

After three weeks of treatment,the patient reported that he is not developing any fresh skin papules as it was not the case earlier. Oral ulcers started healing and the patient reported good digestive functions. The arthritic complaints didn't get much relief as the main focus was given to the over active *pitha dosha*.In the second phase, external application with *Nalpamaradi kera* was suggested. The target was the minor arteries and reccurent skin inflammations. Since the patient was ready to take *ghrutha* by this time *Mahathikthaka ghrutha* was started internally as *vicharana*. Patient was asked to consume fruits like *dadima, amalaki* and avoid spicy fast foods and alcohol. After this course of treatment, one more *virechana* was administered. The benefits were significant and now he is receiving the treatments for arthritis complaints.

The concept of *Dhathugatha Athyagni* is to be further explored in treating such conditions. *Rasayanas* with *Pithasamana* will have more role to play in such clinical states. *Sathavari, Gudoochi* etc may be better choices in such over active immune responses.

BALA RASAYANA

*Dr. Shailaja U., **Dr. Srinidhi Acharya, ***Dr. C. M. Jain

Today's Children are tomorrows Citizens. To build up the healthy nation, health of children is very much important. In childhood, the chances of health upset is very common as they are very tender with less immunity. During the childhood period, especially infancy, the rate of growth and development is very high. So, to tone up the growth and development, to enhance the intelligence and to improve the immunity, they require Rasayana. These Rasayanas can be considered as *Bala Rasayana.*

Indication of *rasayana*

Many *acharya's* told that *rasayana* is indicated during *purva vayas & madhyam vayas* of human life & before giving *rasayana* one should under go *shodhana.*

Purva vayas

According to *Charaka,* life-span is divided into three parts.

- *Balya avastha*
- *Madhya avastha*
- *Jeerna avastha*

Balya avastha is again divided into birth to 16 years & 16 - 30 years. This 16 -30 years age group is called as *purva vayas.*

Madhya avastha is from 30-60 years of age.

Baala (up to 16 years) is one who is having *aparipakva dhatu, ajata vyangana* can't tolerate *klesha*, delicate, less strength, dominance of *shleshma dhatu.* By this we can conclude that *rasayana* is contraindicated in children. But we have another reference which states:

The *vrudha & baala* are not so *bala hina &* able to tolerate the *shodhana* are indicated for *rasayana.*

Need of *rasayana* in Children

As per definition of *Charaka Baala* is with *aparipakva dhatu, ajata vyangana* can not tolerate *klesha*, delicate, less strength, dominance of *shleshma dhatu.*

The aim of *rasayana* is

- Maintain the *sapta dhatu samyatva.*
- Increase longevity.
- Prolonge the old age.
- Cures all the diseases

As baalak is *aparipakva dhatu, ajata vyangana, rasayana* gives boost for developing *dhatus*. By the *rasayana* we can increase the physical & mental strength of child so that he will become able to tolerate any *klesha*. For these reasons *rasayana* is essential in children.

Suvarna prashana as rasayana

Just after the birth, *suvarna* with equal quantity of *madhu & ghrutha* is given to baby which acts as *rasayana.*

- *Suvarna* is antibacterial in nature & prevents infection.
- *Madhu* contains pollens & as *madhu ghruta* in equal quantity is *virudha ahara*, it increases the resistance against allergic substances. It

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also contains harmine, which act against respiratory infection.

- *Ghruta* is high calorie food which produces heat & energy after metabolism so that temperature maintenance is done.

Benefits of *suvarna prashana*

- *Medha vardhaka*
- *Agni vardhaka*
- *Bala vardhaka*
- *Ayu vardhaka*
- *Varnya*
- *Graha badhahara*

Medhya rasayana in lehanadhyaya

Kasyapa mentioned the preparations, which acts as *medhya rasayana* in children.

- ✧ *Brahmi, mandukparni, triphala, chitraka, vacha, satapushpa, danti* (anyone) with *Madhu & ghruta.*
- ✧ *Panchagavya ghruta, kalyanaka ghruta, brahmi ghruta*
- ✧ *Triphala, brahmi, bala, atibala, chitraka with madhu & ghruta.*
- ✧ *Samvardhana Ghruta*

All the *ghruta* preparation are used in children along with *medhavardhaka* drugs acts as *balavardhaka*, cures all diseases & gives boost in the prcess of growth & development in early childhood.

Sthanya as rasayana

While explaining the greatness of *sthanya Kasyapa* told that breast milk is

- ✧ *Balavardhak* - increases strength in child
- ✧ *Ayu vardhak* - Gives long life to child
- ✧ It helps in development of all body parts that is all the essential components for growth & development of child

Immunology of breast milk

- ✧ Presence of immunoglobulins like Iga, IgG, IgM
- ✧ Cellular elements - lymphoid tissue, polymorphs, macrophages, plasma cells.
- ✧ Presents of growth factor

Also contain anti material factor - Para amino benzoic acid which is anti parasitic in nature. Breast milk is baby specific that it is formed as per requirement of baby.

Cow's milk as *rasayana*

Both *acharya's* told that as cow's milk is *madhura & snigdha*, it is beneficial for *Ojas & dhatu vardhan.* Also as per modern science cow's milk contain more or less same components as that in breast milk, so it is best alternative for mother's milk & acts *as rasayana.*

Nitya Rasayana

- ✧ *Goghruta - Ojas, Teja, Bala, Varna, Ayu, Medha, Dhruti, Smruti vardhaka.*
- ✧ *Ksheera* - body becomes strong, free from fat, able to over come tiredness

As it can be used daily for *rasayana* effect they are called as *nitya rasayanas*. Therefore, we should encourage the intake of *ghruta* and *ksheera* in children to enhance their growth and development.

Nagabala & Mandukparni rasayana

Power of dried roots of *nagabala* are used daily in one *karsha maatra* with milk & milk is taken as food is known as *nagabala rasayana.*

Benefits

If this *rasayana* is taken for one month

- ○ Cures *rajayakshma*
- ○ *Ayu, Bala, Medha vardhaka*

If taken for six months

- ○ *Sarva roga hara*
- ○ *Shruta dhara*
- ○ *Medha vardhaka*

The use of *mandhukparni, brahmi, sunthi, yashtimadhu* in same way as that of *nagabala rasayana* as *mandhukaparni rasayana* & gives same benefits.

To P. No. 30

ALLERGY
– *A DHATVAGNIMANDHYA VIKARA*

*Dr. BHARVI B. TRIVEDI

INTRODUCTION

Immunity is a state of body resistance, which protects it against the harmful organisms and foreign substances, on the other hand Allergy is a state of body characterized by an accelerated and damaging reaction so it is clear that immunity is protective phenomenon whereas allergy is a damaging reaction for the host. The word allergy is derived from *alos* and *ergon* means that, other work or unnecessary work. There are so many food items, pollens, etc. are found to make an allergic reaction in the human body. Allergy by itself is not mentioned in Ayurveda. But there are several references available from the texts to explain several allergic disorders as well as its' pathogenesis.

CAUSES : An allergent will not make symptoms in all subjects. So allergic response is subject oriented not substance oriented. Here is the relevance of *Satmya* and *Asatmya* which is mentioned in classics. The causes of this subjective defect are enlisted below.

- ✧ Hereditary
- ✧ Constitution
- ✧ Infection and intoxication
- ✧ Endocrine factors
- ✧ Factors interfering with the chemical and physical resistance of the skin or mucous membranes
- ✧ *Trauma*
- ✧ Meteriological and seasonal conditions
- ✧ Psychological

MECHANISM OF ALLERGY

Allergy is an activity of lymphocytes, their progenitors in the bone marrow and their derivatives in blood and lymphatics and other tissues. These act in association with macrophages and commonly with polymorphonuclear leucocytes and blood and tissue enzymes including the complement enzyme system. The reaction is set off by a foreign substance when enter in the body. A first intrusion by a specific foreign substance, an allergen, can set off a non-specific attack on the intruder substance and a specific information storage memory. Macrophages take up the foreign material. Process is in ways unknown and hand the processed material or to certain lymphocytes with which they come in contact. Thus specifically sensitized these lymphocytes and their progeny henceforth react to reject subsequent intrusions by the specific allergen.

Whenever an allergen get enter into the body either through skin or any one of the *Bahirmukha srota,* it makes *Khavaigunya* at the site of attachment in susceptible person and makes *Tridosha kopa.* This produces the first attack of hypersensitivity. Later the *doshas* subsides producing further *dosha-dusti, Agnimandhya* at *dhatu* level and *Ama* production in such a way that the person is a patient of allergy. This long standing *dosha dusti* will makes conditions worst and best, according to the *nimitta karanas.* This is almost similar to the pathogenesis of *Dooshivisha.*

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The aforesaid *samprapti* makes its manifestation mainly confining to the *Rasa dhatu* metabolism e.g. *Asthma,* food allergy, urticaria etc. From this it can be assessed that *Agnimandhya* is mainly at the level of *Rasadhatu* and defective *rasadhatu (Saama)* is circulating throughout the body.

Portal of entry of allergen	*Srotas* affected	Disease
Nasa (Ghrana)	*Pranavaha srotas*	Rhinitis, asthma
Nayana	*Pranavaha srotas*	Conjunctivitis
Shravana	*Pranavaha srotas*	Pruritus oti
Vadana	*Udakvaha srotas, Annavaha srotas, Rasavaha srotas*	Food allergy
Guda	*Purishavaha srotas*	Pruritus ani
Genital	*Sukravaha and Artavavaha srotas*	Pruritus genitalis
Skin *(Twak)*	*Rasavaha srotas and Raktavaha srotas*	Urticaria & other skin lesions

The whole above diseases should be think with the reference that *Rasadhatu* is having three dimensions for its circulations viz. *Jala santanvat, Archi santanavat, Shabda santanvat.* If the disease is properly not treated, the *samprapti* can progress beyond *Rasadhatu.*

CONCLUSION

Allergy, an immunological hypersensitivity mechanism with pronounced manifestations of different symptomatology is a problem of great consideration now a days. On Ayurvedic perspectives allergy at first produce as an *Agantuja vyadhi,* later it is being converted into chronic *Nija vikara* as *Dooshivisha.* The changing life habits, uncontrolled pollution rate, population explosion are current issues to enhance the incidence of allergy. Treatment is to be directed by considering level of *Agni,* degree of *Ama* production, site of affliction of allergent, status of the patient etc.

Anti psychotic medications and Diabetes

According to American journal of Psychiatry, the rate of diabetic amoung persons taking certain newer antipsychotic medications is higher than that found with general population. This information is from a study by Researchers of Yale University on patients with schizophrenia, having no history of diabetes , who used new atypical medications such as dozatoine, risperidone, olangapine and quetiapine. Of the 56,849 patients in the sample, 7.3 percent of patients were diagnosed with diabetes mellitus during the 1-2 year follow up period, corresponding to an annual incidence rate of 4.4 percent. The rate was higher for patients taking dosapine and olanzapine. However it is not known what causes diabetes in this instance, but one possibility is weight gain associated with taking the medications.

DUSHTA VRANA – AN AYURVEDIC APPROACH

*Dr. KEERTHANA C. J.

Since time began, the human body has had to deal with open wounds due to injuries or diseases. When an individual develops an open wound nature attempts to cover the wound to prevent infection by the growth and migration of epithelial cells. Wound management by physicians assist nature by the cleansing and removal of dead tissue from the wound, and by the application of appropriate local dressings onto the wound to create a moist environment. Even though natural healing is often gratefully accepted, the skin cover is fragile and thin and liable to break down and form another ulcer. Unfortunately, there is also a limit as to how far cells can migrate, some wounds are not able to heal naturally .Wounds are common place from childhood to old age and are necessary to surgical entry.

Dustha vrana is one such long standing ulcer with profuse discharge and slough, where removing the debris and enabling drug to reach the healthy tissue is more important.

For the *shodhana* and *ropana* of *vrana* both local and oral treatment are explained by *Sushrutha*.The treatment modalities such as *triphala kwatha parisheka* and *Jatyadi taila* application; as local treatment and *Triphala Guggulu* and *Gandhaka Rasayana* for internal administration are strongly recommended for its management..

Nirukthi of vrana:

"The destruction / break / rupture / discontinuity of body tissue / part of body, is called as *Vrana.*[*1]"

Definition of vrana:

"As the scar of a wound never disappears even after complete healing and its imprint persisting life long, it is called the *Vrana* by the wise.[*2]"

Classification:

The classification done according to various concepts such as :

- according to *Kaarana - Nija, Aganthu*
- according to *Avastha - Dushta, Shuddha, Ruhyamaana, Roodha.*
- according to *Aakruthi - Aayatha, Chathurasra, Vrutha, Triputaka.*
- according to *Saadhyasaadhyatha Sukhasaadhya, Kruchrasaadhya, Yaapya, Asaadhya.*

Nidana:

Food and activities provoking *Tridhoshas.*

Lakshanas:

Vaataja Vrana Lakshanas: *Vrana* caused due to *Vaata* is *Stabdha, Katina* has *Shyaava* or *Aruna Varna, Alpa Sraava* and *Vedana Baahulyata.*

Pittaja Vrana Lakshanas : *Vrana* caused due to *Pitta* will be associated with *Daaha, Paaka, Raaga, Jwara, Trishna, Moha* etc. has *Kshipra Utpatti* with *Neela, Peeta Varna* and *Pootisraava.*

Kaphaja Vrana Lakshanas: *Vrana* caused due to *Kapha* will have *Paandu* or *Shwetha Varna* associated with *Ugra Kandu, Mandha Vedana, Shukla, sheeta, Pichila* and *Ghana Sraava.*

Raktaja Vrana Lakshanas: In general this *Vrana* will have features similar to that of *Pittaja Vrana,* has *Pravaala (Rakta) Varna, Raktasraava* covered with network of *Krishna Sphota,* smells like *Turanga* or *Vaajisthaana.*

Dvidoshaja Vrana Lakshanas: *Sushruta* has explained the *Lakshanas* depending upon combination of *Doshas.*

*Lecturer, Deptt. of Shalyatantra, Sri Sri College of Ayurvedic Sciences and Research, Bangalore

Etymology of Ulcer - derived from old French "ulcere" and from Latin "ulcus".

Definition of Ulcer: An ulcer is a discontinuity of an epithelial surface (skin or mucous membrane). It may follow molecular death of surface epithelium or its traumatic removal; there is usually progressive destruction of surface tissue cell by cell, as distinct from death of macroscopic portions (e.g. Gangrene/ necrosis)

Definition of Wound:

An injury especially one in which skin or another external surface is torn , pierced, cut or otherwise broken. It is the discontinuity or break of the surface.

Though both ulcer and wound has some similar and dissimilar features, they mean the same –disruption in epithelial surface.

Causes of Ulcer: According to the causes, they are classified as,

1. Traumatic ulcer
2. Arterial ulcer
3. Venous ulcer
4. Neurogenic ulcer
5. Infective ulcer
6. Tropical ulcer
7. Cryopathic ulcer
8. Martorells ulcer
9. Bazins ulcer
10. Diabetic ulcer, etc

Causes of wound

1 Trauma-either accidental or surgical

2 Physical, chemical and microbial agents

3 Ischaemia, which leads to infarction.

Classification of Ulcers

Two types of classification of ulcers are possible

1) Clinically
2) Pathologically.

Clinical examination of an ulcer

This should be conducted in systemic manner.

Local examination: The following points should be noted:- Site, size, shape, number, edge, floor, discharge, surrounding area etc.

Microbiology of wounds

All chronic wounds are contaminated by bacteria. It is not the presence of organisms but their interaction with the patient that determines their influence on wound healing.

Wound Infection:

The presence of replicating microorganisms within a wound that cause host injury. Primarily pathogens are of concern here. Examples include; *Staphylococcus aureus,* Beta-hemolytic *Streptococcus (S. pyogenes, S. agalactiae), E. coli, Proteus, Klebsiella,* anaerobes, *Pseudomonas,* The microbial flora in wounds appears to change over time in early acute wound; Normal skin flora predominates.*S. aureus*, and Beta-hemolytic *Streptococcus* soon follow. *Streptococcus* and *S. aureus* are common organisms found in diabetic foot ulcers. After about 4 weeks

Clinically		
SPREADING ULCER	HEALING ULCER	CALLOUS ULCER
Surrounding skin of ulcer is inflamed, Floor-covered with slough without any granulation tissue.	Floor-gr. tissue is present, Edge- bluish outline of growing Epithelium & slight serous discharge.	Floor- pale gr. tissue indurations - present at base, edge, surrounding Skin. Ulcer shows no Tendency towards healing.
Pathologically		
NON SPECIFIC ULCER	SPECIFIC ULCER	MALIGNANT ULCER
Traumaticulcer Arterialulcer Venousulcer Neurogeniculcer Diabetic ulcer	Tuberculousulcer Soft chancre Actinomycosis etc	Rodent ulcer Epithelioma Marjolin's ulcer etc

To P. No. 31

EFFICACY OF *TRIVRUT* AND *LASUNA* OIL IN THE MANAGEMENT OF DYSMENORRHEA

DR. SHABNAM JAHAN*, DR. NEELAM**

ABSTRACT

Dysmenorrhea is one of the most common clinical entities encountered in regular clinical practice of gynaecology. Dysmenorrhea means painful menstruation.[1] It is of two types Primary dysmenorrhea and Secondary dysmenorrhea. Primary dysmenorrhea[2] means painful menstruation without pelvic pathology and secondary dysmenorrhea[3] with pelvic pathology[4,5] The aim of study was to evaluate the efficacy of Trivrit and Rasona Oil in Primary dysmenorrhea. 31 cases had been selected for study and were followed up regularly at monthly interval for 4 month and symptomatic relief in pain and decrease in intensity of pain with improvement were observed and recorded.

Keywords: Primary dysmenorrhea, Rasona, Trivrit.

INTRODUCTION

Dysmenorrhea is a common gynaecologic disorder affecting upto 50% of menstruating women[6]. Primary dysmenorrhea refers to menstrual pain without pelvic pathology, where as secondary dymenorrhea is defined as painful menses associated with underlying pathology.

Though Modern Medicine has many unbelievable progress in understanding 'Dysmenorrhea' no new progress has been discovered in management. Moreover, the principal drugs[7,8,9,10] i.e. NSAIDS used have many side effects in sensitive individuals, which restrict their use. An attempt has been made here to treat this condition with Ayurvedic drugs mentioned in Ayurvedic classics.

MATERIAL AND METHODS

The aim of study was to evaluate the efficacy of *Trivrut* and *Rasona Oil* in "Dysmenorrhea".

Married patients of different age groups and parity with chief complaint of painful menstruation were selected from the *Prasuti Tantra* O.P. D. of S. S. Hospital.

Patient was placed in lithotomy position under full aseptic measure 3 ml. autoclaved *Trivrit & Rasona* Oil loaded with 5ml. disposable syringe, was introduced in the uterus within 25-30 min.

Criteria for inclusion: Only married women of different age group and parity with painful menstruation without pelvic pathology.

Criteria for exclusion

- Unmarried women
- Women suffering from systemic diseases, with organic lesion bengin or malignant growth of reproductive tract any degree of prolapsed and hypoplstic uterus, PCOD, any congenital abnormality of genital tract.

Total 31 cases were followed up regularly at monthly intervals and symptomatic relief in pain, decrease in intensity of pain and duration of pain with improvement in associated symptoms were observed and recorded. Results were assessed on the following basis:

1. Symptomatic relief in pain (lower abdomen, thigh, back)
2. Decrease in intensity of pain.
3. Decrease in duration of pain.
4. Relief in associated symptoms

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Cured: All the above four parameters were fulfilled

Improved: Out of above three parameters were fulfilled

Partially improved : Only one parameter was fulfilled

Unchanged : No change was observed

Results: Scoring of pain was done purely on the basis of patients statement (VRS) and Visual Analogue Scale (VAS).

Showing scoring of intensity of pain and duration of pain during menstrual period:

	Mild (+)	Moderate(++)	Severe(+++)
Intensity of pain	No need to take any drug.	When pain interfere in the physical activity of individual need for rest or analgesics for some times.	Always need of rest and analgesics.
Duration	Pain begins few hours (2-4 hrs) before menses.	Pain persists for 12 hours with menses.	Pain persist for 24 hours with menses.

Table Showing incidence of Age, Gravidity and Parity

Variables	Mean	± SD
Age	28.61	5.00
Gravidity	1.58	2.13
Parity	1.19	1.47

Table Showing Frequency of sexual intercourse in total cases:

Frequency of Sexual Intercourse	No. of cases (n=31)	Percentage (%)
Daily	11	35.48
Thrice in a week	7	22.58
Twice in a week	5	16.12
Once in a week	5	16.12
Twice in a month	3	9.67

Showing incidence of occupation and socio-economic status in total cases

Variables	No. of Cases (31)	Percentage (%)
Occupation		
House wife	28	90.32
Service	3	9.67
Socio-economic status		
Upper	1	3.22
Middle	17	54.83
Lower	14	41.93

DISCUSSION

Primary dysmenorrhea in one of the commonest problem which creates lot a trouble in females in their day to day life during menes.

During observation mean age was 28.61 yrs. and nulligravidity and nulliparity were found in maximum cases (48.39%). These findings show that dysmenorrhea is more common in early reproductive age of nulliparous women. As this age group faces the maxium change and responsibilities. All these will produce fear. Fear leads to anxiety and depression which may manifested as pain. Nulliparous women were less likely to suffer from dysmenorrhea, because pregnancy and child birth improve the vascularity and growth of uterine muscles and causes destruction of nerve endings in uterine muscle and cervix after vaginal delivery.

Maximum frequency of sexual intercourse was observed to be daily (35.48%). This observation show that increased frequency of coitus produces active or passive congestion and inflammation of the reproductive organs resulting in painful menstruation.

Most of the women suffering from painful menstruation were housewives (90.32%) and hailed from middle class families (54.83%). Housewives are always busy in house hold work, they had always anxiety and tension of over work. This anxiety and tension results in hormonal imbalance in women, which is the one of the causative factor of painful menstruation, as progesterone stimulate myometrial

contractions of the smooth muscles of the cervix and causes narrowing of the cervical canal progesterone further stimulates the production of prostaglandin F2 alpha which inturn accentuates pain. Middle and lower class people usually take the advantages of the government teaching institute and hospitals and usually follow the research protocol.

On statistically comparison in between initially and different follow-ups highly significant results were seen from 1st follow-up in intensity and duration of pain.

On statistically comparison in between initially and different follow-ups highly significant results were seen from 2nd follow-up in all the symptoms except diarrhoea, backache and pain in vagina.

Due to anti-inflammatory action of *Trivrut* and *Rasona* by decreasing the prostaglandins they reduce the spasm of uterine muscles.[11,12,13] Which is main factor for producing the pain. When spasm of uterine muscles subsides pain is relieved. *Rasona* also has emmenogogue property [11], by which it normalizes the menstrual blood flow.

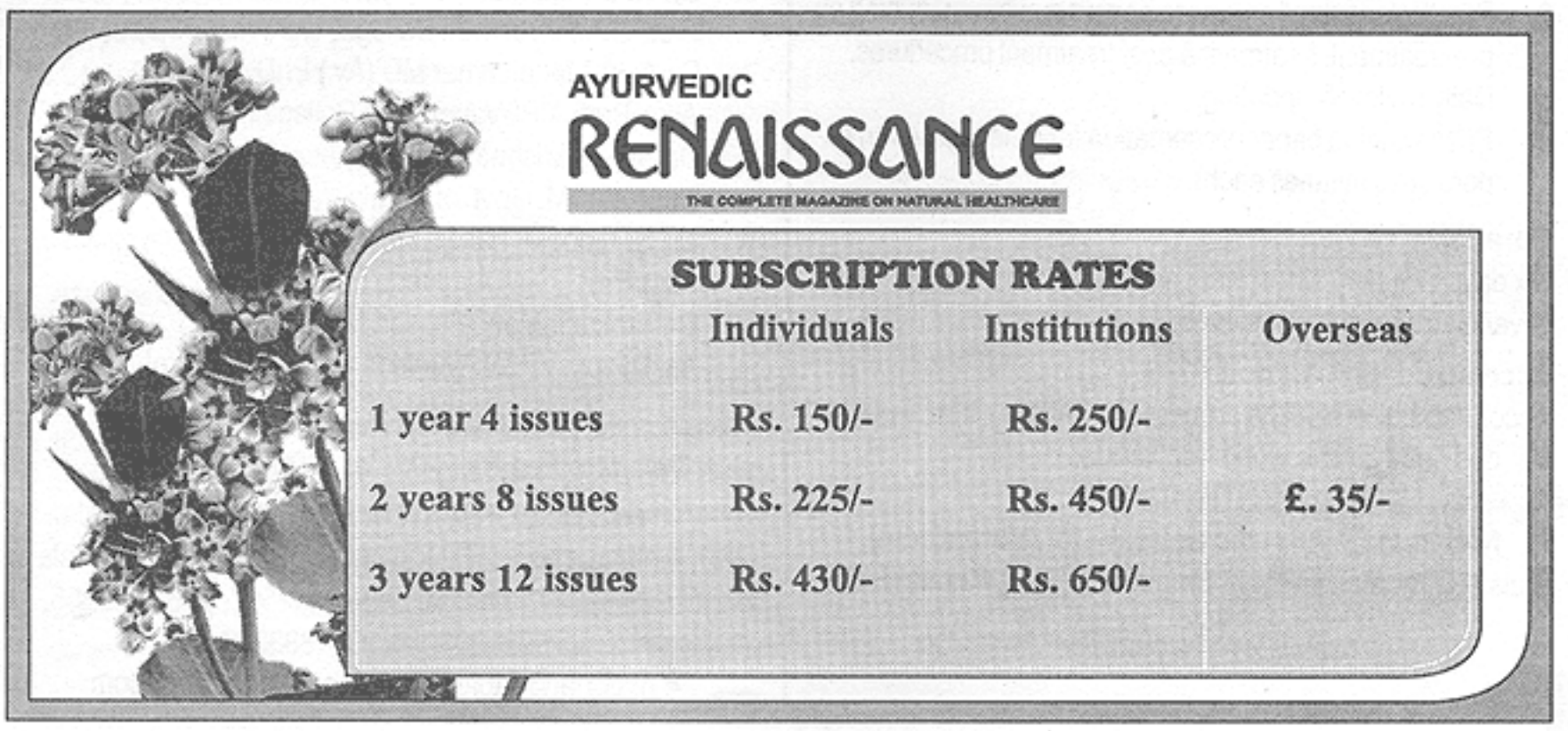
On the basis of above facts, it may be concluded that the drugs *Rasona* and *Trivrut oil* reduce the pain and associated symptoms in cases of dymenorrhea.

CONCLUSION

1. *Trivrut* and *rasona* oil give good result in dysmenorrhea.
2. The good result are seen due to anti inflammatory action of *Trivrut* and *Rasona* by decreasing the prostaglandins they reduce the spasm of uterine muscles.

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   Rtd. Joint Director, Dept. ISM, Kerala.
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We got informative study materials compiled from the classics and Kerala texts covering introduction to contributions of ancient Kerala Physicians to the practical applications of Panchakarma - Practical hand book on 20 types of treatments.

Theory classes in tutorial system and practical sessions under the supervision of institute faculty were highly informative and interesting. All the treatment procedures were doing in more scientific and effective way than what we are practising in North India. We learnt the seven positions for *Abhyanga*, scientific procedures for *Pizhichil (dhara), shashtika Pinda Sweda, Patra Potala Sweda, Dhanyamla Dhara, Talam* etc. In addition to the classes from in house faculty, the institute arranged interactions with senior reputed faculty from the Ayurveda College.

The opportunities we got to attend the out patient and in patient departments with the senior Physicians also added knowledge and confidence to our career. The Institute atmosphere was conducive for study, training and comfortable stay.

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7. Experience — Duration
   - ☐ Govt. Service .....
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   - ☐ Private sector. .....
8. Any scientific paper presented before the gatherings
   - ☐ National
   - ☐ International

   The event and
   the topic of subject. :
9. Interest to present a paper
   in the prize winning section : Yes No

(ATTACH the abstract with soft copy in MS word / Page Maker - Arial / Times New Roman Font)

I accept the conditions over leaf.*

Signature (Applicant)

Please Tick the relevant

* Conditions

Delegate fee : Rs. 8000.00 inclusive of up & down travel from arrival points (Cochin international airport, Railway stations – ALUVA & ANGAMALY), accommodation, food and post workshop sight seeing.

Prize winning paper presentation - topic: Panchakarma

- Delegates are requested to send the abstract along with filled up registration form.
- Presentation of full paper for 8 minutes duration & 2 minutes interaction should be done with Microsoft Power Point in Times New Roman / Arial font in the concerned session before a judging committee.
- First three prize winning papers will be awarded cash prize of Rs. 3000/-, 2000/- and 1000/- respectively.
- Decision of the judging committee will be final.
- Nagarjuna Ayurvedic Group has the right to publish all the presenting papers in their journal and other publications.
- Organizing committee could take appropriate decisions regarding any changes in the programme.
- Full paper should be submitted on or before 31.01.09 with filled up registration form & delegate fee.
- 10 Papers will be selected after screening.

Payments: All payments as DD in favour of NAGARJUNA AYURVEDIC INSTITUTE payable at Kalady.

Protoplast Fusion & Somatic cell hybridization

Resmi Robin, J. J. College of Arts & Science, Puthukkottai

Fusion between the protoplast of the cells is called protoplast fusion. Protoplast fusion can be done in both plant and animal cells. Protoplast of a cell constitutes cytoplasm and nucleus. In this process, cytoplasmic fusion takes place first followed by nuclear fusion. The resulting cell is known as hybrid cell and the process is otherwise known as somatic cell hybridization. Here the fusion between the cells is due to the merging of the two plasma membranes. Polyethylene glyool (PEG) is used as the fusing agent. PEG breaks the lipid -protein bilayer of the cell membranes and allows the protoplasts to fuse.

Protoplasmic fusion in plant cells

The cell which is formed after the merging of plasma membranes is a peterokaryor (with distinct nuclei) unthin which the nuclei will stand apart. After sometime nuclei will fuse and the hybrid cell is now called a synkaryon.

Plant protoplasts may be fused to generate interspecific or intergeneric cell hybrids. The hybrid protoplast regenerates a cell wall within 24-48 hours. Somatic cell fusion is one way of introducing bulk DNA into a recipients cell.

Steps involved in protoplasmic fusion

Protoplast fusion can be done in animal cells also. It is used in monoclonal antibody production. 100% results cannot be obtained by this fusion. The fusion medium contains based and unbased cells. The unbased cells are discarded by treating in a HAT medium. Only hybrid cells will survive in this medium. The hybrids are selected and cultured later and stored for future use.

Applications

1. *Production of interspecific and intergeneric hybrids.*
2. *In Monoclonal antibody production*
3. *It is a method of genic transfer in plants by introducing exogenous DNA into a plant cell.*

SHOULDER PAIN – AN AYURVEDIC PERSPECTIVE

Dr.B. HARINATHA CHARY, MD (Ay)*

Shoulder pain is a common complaint, which we come across in our general practice. This agony perturbs one's peaceful life and leads to disturbed sleep. It is necessary for a physician to come to a proper diagnosis and help the patient to get relief from it. Ayurveda has its unique techniques in evaluating diseases based on the *doshic* predominance and offering long lasting cure.

The shoulder joint is a ball and socket variety of synovial joint, which is extremely mobile. It provides wide range of movements like flexion, extension, abduction, adduction, medial rotation, lateral rotation and circumduction. It is unstable and more prone to injuries because of its high mobility.

Manifestation of pain (*ruja*) is possible only due to vitiation of *vata* - *'vataatdrute naasti ruja*. The etiological factors, which cause the vitiation of *vata* in the body, will adversely affect *asthi dhatu* due to their *asraya-asrayee bhava sambanda*. At the same time there will be decrease in *sleshaka sleshma* vis-à-vis *vata vriddhi*. Hence, presence of pain in the shoulder joint indicates the accumulation on vitiated *vata*, associated with *asthi dhatu kshaya* (decreased bone density) and *sleshaka sleshma kshaya* (decreased in synovial fluid).

'Shoulder pain' is commonly met with middle aged and elderly people. An injury to shoulder joint causes the disruption of the surrounding soft tissues leading to acute and severe pain. The rotator cuff muscles that surround the shoulder joint can be injured playing sports with a lot of throwing or after repetitive use over a long time.

Osteoarthritis, also known as "wear-and-tear arthritis" is typically seen as a primary disease in older people but can manifest as a secondary condition in younger people. Injury, occupation, excess weight, and genetics are among the factors, which cause the cartilage of a joint to wear away.

When tendons become trapped under the acromion, the rigid bony arch of the shoulder blade, it can cause shoulder pain called impingement syndrome. The tendons become compressed, damaged, and inflamed leading to rotator cuff tendonitis. This can occur from general wear and tear as one get older, or from an activity that requires constant use of the shoulder like baseball pitching, or from an injury.

Frozen shoulder, often referred to as adhesive capsulitis, is a disorder in which the shoulder capsule, the connective tissue surrounding the glenohumeral joint of the shoulder, becomes inflamed and stiff, and grows together with abnormal bands of tissue, called adhesions, greatly restricting motion and causing chronic pain. Adhesive capsulitis is a painful and disabling condition where movement of the shoulder is severely restricted. Pain is usually constant, worse at night, and along with the restricted movement can make even small tasks impossible. Diabetes, shoulder trauma (including surgery), a history of open-heart surgery, hyperthyroidism, and a history of cervical disk disease are all associated with an increased risk for this problem. Often, there is no known cause.

Painful syndrome manifests with pain only during mid range of abduction; Arthritis presents with pain all over the joint. Usually in chronic disorders, pain is dull.

Ayurvedic acharyas had enlisted certain diseases related to the shoulder joint as *Amsa sosha, Apabahuka, and Sandhi vata.* Shoulder pain is only a symptom of many diseases and these can be differentiated based on other symptomatology. Here, the emphasis is given on shoulder pain and its treatment.

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Amsa soha and *Apabhahuka* almost co-exist in a patient as decreased shoulder movement. On reference to modern medicine, frozen shoulder or adhesive capsulitis also presents with the same symptomatology i.e. painful restriction of both active and passive shoulder movements the later stages of which has no pain.

In *Sandhi vata* (*Amsasandhi*) there is pain and swelling of the shoulder joint. The same symptoms being observed in impingement syndrome or painful arc syndrome; due to which the patient suffers from pain, swelling, tenderness, limitation of the shoulder movements and the like.

The treatment of shoulder pain depends entirely on the cause of the problem. Therefore, the etiology here is of utmost importance. The main aim of treatment should be at relieving the pain and restoration of the normal movement of the shoulder. In Ayurveda, *'Nidana parivarjana'* is the first line of treatment. Giving rest to the joint allow the acute inflammation to subside. However, it is important to be cautious while resting the joint as prolonged immobilization leads to a frozen shoulder. Stretching the muscles and tendons of the joint may aggravate the cause of the shoulder pain. So one should avoid excess strain over the joint while being conscious about the diet and regimen that shouldn't increase *vata* in the body.

Shoulder pain condition can be presented in many ways in our day-to-day practice. The patient with shoulder pain, which is acute, associated with swelling, tenderness and restrictive movements of joints (Painful arc syndrome) are proved beneficial with: *Prasarinyadi kashayam* with luke warm milk twice daily on empty stomach and *Kaishora guggulu* – one gram twice a day after food.

Prasarainyadi kashayam with *ksheeram* aptly satisfies the need of the treatment as it pacifies *vata* and *pitta*; the main ingredients of which being *raasna, lasuna* and etc., which are all powerful *vatahara dravyas* having analgesic and anti-inflammatory properties. Administration of milk increases *sleshaka sleshma,* which reduces the wear and tear of joints. Being an abundant source of calcium, milk increases the density of the bone. *Kaishora guggulu* containing *vatapitta hara* drugs acts as potent analgesic and anti-inflammatory agent.

Patients with decreased shoulder movement with or without pain are proved to be beneficial with *Sahacharadi kashyayam* with 10 drops of *Mahamasha taila* twice daily on empty stomach. As it is indicated in *vata* disorders mostly related to movements (*pavana peedita dehagati*). *Maha masha taila* is a direct indication in *Apabahuka*. Moreover the *anupana* of *Sahacharadi kashayam* is *taila*. *Maha masha taila* is used as *anupana* because it nourishes the joint and maintains its lubrication.

If cases of trauma caused joint pain, *Lakshadi Guggulu* internally and externally *Vishagarbha taila* is prescribed over the region where the joint pain is felt.

Osteoarthritis (*sandhi vata*), a type of arthritic joint pain is observed in people above fifty years of age. For this condition, *Vidaryadi kashayam*, which acts a *brimhanam* and *Rasnadi guggulu* as anti-inflammatory, is prescribed.

Karpasastyadi tailam and *Maha raja prasarinyadi tailam* will be given as *nasya* in all shoulder joint disorders. Also the *Raasnaadi choornam* with ginger juice external application relieves the pain and stiffness of the joint.

Certain special exercises help relieve shoulder pain and increase mobility. The first step of rehabilitation therapy is simple range-of-motion exercises. By bending over and moving (rotating) the shoulder in large circles will help to avoid the serious complication of rotator cuff injury. These range-of-motion exercises are followed by resistance exercises using rubber tubing or light dumbbells. The final step is resistance training with weight machines or free weights. Externally ice pack treatment is most commonly used for acute injuries (within the last 48 hours) help minimize swelling around the injury and control pain. Heat treatments should be used for chronic conditions to help relax and loosen tissues, and to stimulate blood flow to the area. In order to do all this, the advice of physiotherapist is needed.

Hence, shoulder pain, though sounds to be a trivial ailment needs proper attention and has to be treated with care. If not it may lead to permanent functional and structural derangement.

ROLE OF *KSHEERA BASTI* IN AYURVEDA

Dr. JAYAKRISHNAN. G. NAIR *, Dr. NOBLE. T. M. **

Ksheera basti is one among the *prasrta yogika basti* described by *Charakacharya* in the *sidhisthana*.It is an interesting thing to notice that no much explanations is given to this topic, even though prominent importance it has while treating *asthiksaya*.It is considered as a *mridu* form of *kashaya basti*.It is indicated in persons who are weak, especially for *sukumara* persons and to those whom *vamanadi karmas* are contraindicated.By looking this point in view, we can say that it is mainly opted for old age persons and to *baala* and in persons whose immunity gets deranged.

Formation of *asthi dhatu*

According to ayurveda *asthi* is formed from fat [*medas*]. It is formed by the transformation of *medas* in the compact form by virtue of the action of the metabolic heat or fire [*ooshma*] present in the fat along with the *mahabhutas prithvi, agni, vayu* etc.The tissue elements of fat obtain compactness [*sanghata*] and attain qualities like stability [*stharya*] and solidity [*kharatva*]and thus *asthi dhatu* is formed*1. Why I have specified the formation of *asthi dhatu* because the main content of *kheera basthi* is *ksheera*. According to *Vagbhatacharya, kheera* is *ojasyam* and *dhatuvardhanam*. Being *rasayana* in nature it helps in bringing *sresta rasadi dhatus*2.

Another opinion according to me is when we come across the inter relation between *asthi* and *vayu*, seat of *vata* is *Asthi* and they are inversely related, i.e. when the *vata* increases *asthi dhatu* gets decreased*3. Here why *ksheera* is indicated because it possess *vata shamana, Brimhana* and *rasayana* properties.

Time of administration of *ksheera basti*

It is noticed that *ksheera bastis* particularly indicated in *vata pitta* condition. It is said by the *acharyas* that, *ksheera* is particularly indicated in *vata pitta* condition*4. It act as *brimhana, vata shamana, rasayana* etc. Also in the *Ashtanga hridaya* it is mentioned the use of *ksheera* in *vata pitta* predominant condition*5. Like wise *ksheera basti* can be given in persons who are weak in *bala* ie particularly for old age people. Here also it acts as *brimhanna, balya, rasayana, indriyaprasadana* etc.

So *acharya* mentioned that *ksheera* can be given in persons who are weak and in persons who possess *dhatu ksaya*6. Here also *ksheera* acts as *brimhanna, balya, rasayana, indriyaprasadana* etc.

In order to tell the probable mode of action of *ksheera basti,* we have to follow some theories. They are

1] **The theory of sequestrial transformation. [*ksheera dadhi nyaya*]**

2] **The theory of selective nutrition. [*khale kapota nyaya*]**

3] **The theory of sequestrial transmission. [*kedara kulya nyaya*].**

The theory of sequestrial transformation [*ksheera dadhi nyaya*]: This theory uses the analogy of milk products in sequence. From milk curd is made. From curd butter is obtained. Melting the butter ghee made. So in the sequence of transformation of tissues this theory can be applied.

Here the action of *ksheera basti* can be explained by the above *nyaya*.ie in *ksheera basti* we are using *tiktha pradhana ksheera*.The etiology behind the *asthi dhatu ksaya* is *medo dhatwagni mandya* .Due to *medodhatwagni mandya, medo dhatu* gets increased. *Acharya* told that, *tikthadaya kapha*|so

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by administering *tiktha pradhana ksheera basti* *medo dhatwagni* gets stabilized also, *tikte pitta visheshena*|so it will corrects the *pachaka pitta* and corrects the formation of *uttarothara dhatus*.Also *ksheera* is *mridu virechanam* and *dhatu vardhaka*.This *mridu virechanam* helps in correcting the *medo dhatwagni mandya* since *virechana* can increase *Agni* which is the root cause of all the diseases. Hyper activity and hypoactivity of *asthi dhatwagni* will also cause *asthi dhatu kshaya*.Here due to hyper activity more and more *asthidhatu* causes, depletion of bone tissue is formed.In such cases *ksheera basti* due to *mridu virechana karma* it can correct the *dhatwagn*i so the *uttarothara dhatus* are properly formed.In hypo activity of a*sthi dhatwagni, asthi dhatu* will not formed properly.When there is *asthi dhatwagni mandya, medo dhatwagni mandya* also will be there.So there is abnormal increase of *medas*. By giving the *tiktha pradhana ksheera basti* which inturn stabilizes the *medo dhatwagni* so that *asthi dhatu* is formed properly. [According to *ksheera dadhi nyaya* when *medo dhatu* gets increased, *asthi dhatu* gets decreased. According to this *nyaya,* the *dhatus* will uniformly gets transformed.so we have to follow *kedarakulya nyaya.*

The theory of selective nutrition

[khale kapota nyaya].

This theory is analogues to the doves collecting grains from the yard.From the general pool of nutrients, those are specifically nutritional to the bone tissue are utilized. According to my opinion, *ksheera* contains plenty of calcium which are directly utilized by the bone tissues direct *poshana* of bone tissue will takesplace.

Theory of sequestrial transmission

[*kedara kulya nyaya*].

According to this *nyaya,* an increase in the *medas* due to *medo dhatwagni mandya,* need not necessary increases the *asthi dhatu,* because *asthi dhatu* will not gets nutrient from the *medas* directly, ie: it gets nutrient from *rasa dhatu.* Here also the role of *ksheera basti* can be given.

Since *paya* is *ojasyam, dhatu vardhanam* etc, we can infer that it has the ability to form the *sresta rasa dhatu* and finally the *ojas.*

Acharya Charaka and Ashtamgahrudaya advised *ksheera basthi* in *asthikshaya*[*7,8].

So by means of above *nyayas,* we can explain the probable mode of action of *ksheera basti* here.

Ingredients of *ksheera basti*:

Makshika	100 ML
Sneha [ghruta]	100 ML
Taila Ksheera kashaya	200 ML
Total amount	500 ML

Arunadatta says that *lavanam* and s*amanya kalka* can be added to this *ksheera basti*.But according to *Chakrapani* no need of adding *lavanam* and *samanya kalka.* According to *vagbhata acharya ,lavana rasa* is *Sneha swedana teekshna rochana cheda bhedakrit*||

So *lavana rasa* if used in little quantity it will cause *snigdha guna,* and also *mala rechaka* and *bhedaka*.If used in excess it causes, *trit kusta visha visarpan janayet kshapayet balam*| Particularly, we are using *ksheera basti* in old age people. Since due to *dhatu ksaya* they can't tolerate the *theekshna rasa* of *lavana.* That may be the reason why *Chakrapani* told not to use *lavana* in *ksheera basti.*

Another interesting thing is that *ksheera* is directly used in the *yogas.* Now a days I also supposed to use *ksheera* only. But if at all we use *ksheera kashaya,* the action most probably, get increased.

How to prepare *ksheera kashaya: Dravya* [medicated *kalka*] usually we are taking *dasamoola kalka.* The *kalka* 1part, *ksheera* 8 times and *jala* 32 times should be reduced to the quantity of *ksheera*. Normally we are using 2 *palas* or 96ml. But according to *koshta* it is changed.

Another interesting thing is that it is very useful in the disease such as *vataraktha*[*9],

Here *vata* is the *avruta* [inside] *dosha* and *raktha* is the *avaraka dosha* [outside].Here line of treatment is, first we have to treat the *avaraka dosha* ie *raktha*

To P. No. 32

CONCEPT OF *VATALA YONI VYAPAT* AS ENDOMETRIOSIS

Dr. M. R. Kavitha

Endometriosis is a dreaful disease which occurs in a women's life. It may be asymtomatic till the investigation for infertility. It is said that, "If only 10% of women have endometriosis, that makes it one of the most common disease on the earth, more common than AIDS and cancer". Endometriosis is a progressive ongoing and long-term disorder. Unlike most deseases it can rob a woman of her ability to have children. It is undoubtedly a most puzzling condition that affects woman. Common assumption about endometriosis is that, it is not a serious disease, but the havoc it renders on a woman's well-being and her life style, makes it a known chronic, disabling disease.

Endometriosis is defined as the abnormal growth of endomertial cells, which make up the lining of uterus and are shed monthly in menstrual process. These wayward cells can position themselves in the lower abdomen in areas such as the cul-de-sac, the rectovaginal spectum, the stomach, the fallopain tubes, the bladder, the bowel, utero-sacral ligaments, peritoneum and mainly the ovaries. In rare cases it can be found in sites such as lungs, LSCS scar, tubectomy scar, etc.

Scientists have failed to find out an exact cause for occurrence of this disease, but have put forth many theories such as-

- **Retrograde bleeding theory**-which explains chronic and recurring nature of endometriosis.
- **Embryonic tissue theory**- the endometrial tissue which was impalnted abnormally when the women were in embryo, which becames active later in reproductive life.
- **Lymphatic distribution theory.**
- **Immune system dysfunction.**
- **Hormone problems.**

  Most widely held theory states that endometriosis occurs when endometrial fragments attach themselves to nearby pelvic structures and grow.

The predisposing factors for this agonizing disease are-

- Women whose mothers were treated with diethylstilbestrol hormone during pregnancy.
- Women with menstrual abnormalities.
- Early puberty with heavy or frequent or less bleeding.
- High doses of environmental toxin Dixon - harbored by pesticides in their diet.
- Airborne Dixon released by certain types of waste incinerators.

During menstruation, the normal uterine lining is sloughed and expelled through vagina, but transplanted tissue has no means of exiting the body. So they stay where they are and continue their cycle. The result is internal bleeding, inflammation and scarring. Study of these endometrial tissues seems to indicate that it is exacerbated by excess estrogen.

PROCESS OF DEVELOPMENT

These lesions are first seen as clear vesicles, and then become red and over 7-10 yrs progess to black lesions. This progression with age confirms the progressive nature of disease, if left untreated. In 47-64% of the women, it will progress without therapy.

STAGES

Endometriosis is categorized and diagnozed in four stages based on locations affected.

Stage 1 - *Minimal disease* - superficial and filmy adhesions.

Stage 2 - *Mild disease* - superficial and deep filmy adhesions.

Stage 3 - *Moderate disease* - superficial and deep filmy and dense adhesions.

Stage 4 - *Severe disease* - superficial and deep, dense adhesions.

Though the stages look similar, the sizes and number of area diseased indicate diagnosis.

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The nearest clinical entity to **endometriosis in ayurveda is *Vatala yoni vyapath,*** whose features are as follows:

VATALA YONI VYAPATH	**ENDOMETRIOSIS**
Vedana- ✹ *Rutavapi, anrutavapi.* ✹ *Yoni vedana.* ✹ *Prushta vedana.* ✹ *Vankshana parshwadou shoola.*	Pain- ✹ With periods and during ovulation. ✹ During and after coitus. ✹ Low back ache. ✹ In bowel during menstruation
Vibantha, shakruth graha.	Diarrhoea or costipation.
Anaha.	abdominal blotting
Ayasa, Bala bhramsha	Chronic fatigue
Rooksha, phena, tanu arthava - Rutavapi anrutavapi.	Menstrual abnormalities like menorrhagia, epimenorrhoea etc.
Krishna varna arthava.	Dark colored menstrual blood
Ruthe vataja shoola.	Secondary dymonorrhoea
Pralapa *Deenatha*	Increasing premenstrual tension.
Gulma.	P/A shows tender cystic mass occasionally.
Stambha.	P/V shows tender, fixed uterus.
Karkashata.	Roughness in uterine surface.
Vandyatwa.	Infertility.

But it must always be kept in mind that some women with endometriosis are symptomatic even at stage 4.

DIAGNOSIS

- History and clinical findings help for accurate diagnosis only 20% pelvic endometriosis.
- Sonography.
- Double puncture laproscopy.
- Laparotomy followed by histology of the removed tissue of lesion confirms.
- A deficiency of protein beta-3, a subunit of the vitronetin receptor, integrin may be a valid method of diagonosing minimal and mild cases of endometriosis.
- CA-125 is a cell protein found in pelvic organs that appears to be elevated in cases of moderate or severe endometriosis.

COMPLICATIONS

- Worsening secondary dysmenorrhoea.
- Adhesions.
- Infertility.
- Ayurvedic texts say that *Vandhyatwa* as the main complication of *vatala yoni vyapath.*

TREATMENT

If diagnosed early, it can be treated effectively, but may re-occur.

Based on the stages of endometriosis, it can be treated medically or surgically or a combination of both. But age, reproductive wishes, severity of symptoms, site and extent of disease is given prior consideration.

MEDICAL: It aims at controlling pain, and shrinking endometrial tissue wherever it is implanted. Drugs used for this condition are mostly hormones. The hormonal therapy spans over several months and does not really cure the disease, but causes retrogression for given period.

ORAL CONTRACEPTIVES are often prescribed to reduce menstrual flow and lessen backflow of blood into fallopian tubes. eg.

- **PROVERA,** which fools the body into thinking it is pregnant, relieves symptoms but causes bloating, breast tenderness and depression.
- **DANAZOL,** a male hormone, suppresses ovulation but causes facial and chest hair, acne, depression, fluid retention, decreased breast size and weight gain.

ERIKKU

(Calotropis gigantea. Linn)

- Useful weed

* BABY JOSEPH AND SOPHY PAUL

Malayalam	:	*Erikku*
Sanskrit	:	*Arka*
English	:	*Gigantic swallow wort*
Hindi	:	*Aak*
Family	:	*Asclepiadaceae*

Distribution & Habitat: Calotropis is a much branched, hardy, erect, woody shrub grown well near roads and plain land.

Habit and General features: Erect, pale greyish laticiferous shrub with white cottony pubescence, leaves simple, opposite, subsessile, slightly cordate, pale green above, white tawny beneath, flowers dull white or lilac umbellate cymes. Calyx lobes 5 ovate, corolla lobes 5 spreading compressed. Seeds with a silky white coma. Two types of plants according to the colour of flowers. One with purple flowers that are common and white flowers is rare. The white variety is smaller in size than purplish variety.

Part used: Whole plant

Actions and Uses : According to Ayurveda, dried whole plant is a good tonic, expectorant, depurative and anthelminthic. The powdered root used in asthma, bronchitis and dyspepsia. The leaves are useful in the treatment of paralysis, swellings and intermittent fevers. The flowers are bitter, digestive, astringent, stomachic, anthelminthic and tonic. Calotropis is also a reputed homeopathic drug. Fungicidal and insecticidal properties of Calotropis have been reported. In small doses root bark is diaphoretic and expectorant. It acts as a mild stimulant and is given with carminatives in dyspepsia, used in leprosy, eczema, as emetic in the form of a paste applied in elephantiasis. Powdered root bark gives relief in diarrhoea and dysentery. It also used in cough, asthma and as a febrifuge. Root bark is valuable remedy in skin diseases, enlargement of abdominal viscera, intestinal worm and ascites. Flowers are possessing digestive and tonic properties useful in cough, cold, catarrh, cholera and asthma. The latex of the flowers used for treating eczema. Fresh terminal leaf buds given internally for 3 days on empty stomach before sunrise to cure migraine. The tender fresh leaves are often used to cure fits and convulsions in children. The extract of the leaves that have been smeared with oil and rock salt and warmed is poured into the ear for earache. The fresh or warm leaves bandaged on painful rheumatic joints, swellings, sores and wounds. Powder of the leaves is dusted on wounds and ulcers to inhibit excessive granulation. The young shoots and fresh roots are used in toothache. The ash of whole plants mixed with ghee or honey is given in asthma. Latex mixed with Euphorbia nerifolia is used as purgative. In large doses, the drug causes nausea, vomiting and diarrhoea.

Ayurvedic Properties:

Rasa	-	*Katu, Tiktha*
Guna	-	*Sara, Laghu, Tikshna, Ruksha*
Virya	-	*Ati Ushna*
Vipaka	-	*Katu*

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Important Formulations: *Dineseladi keram, Dinesavallyadi keram, Manasamithra vadakam, Prabhanjanavimardanam kuzhambu etc.*

Chemical constituents: á and ß calotropeols, ß - amyrin, giganteol, a colourless wax, small amount of tetracyclic terpenes and traces of sterols. Calotropagenin, calotropin, benzoyllineolone, evanidin, calactin.

Pharmacological studies:

Hepatoprotective: Ethanolic extract of the flowers in a dose of 800 mg/kg showed significant hepatoprotective effect against carbon tetra chloride induced hepato toxicity in albino mice (Patel 1988)

Antifertility: Fresh latex (0.0027 c.c) showed oxytocic activity in guinea pig uterus of the same magnitude as 0.003 iU of oxytocin. Small amounts of latex produced severe contractions of guinea pig uterus and isolated rat or rabbit uterus (Saha and Kasinathan 1963). 50% ethanolic extract of leaves showed 20% anti implantation activity in rats (Prakash 1978)

Cardiovascular: An amorphous substance from the leaves and a crystalline substance from the milk juice being more potent. The active principle of the leaves and milk produced a sustained rise in blood pressure when given intravenously to anaesthetized drugs and the hypertensive action seems to be due to direct action on musculature of the heart and blood vessels. The crystalline active principle of milk was found to revive failing hearts. (Rasnasahapathy 1949).

Gigantin the active principle from the juice given intravenously in doses ranging from 0.01-0.01 mg/kg showed persistent rise of blood pressure in animals by direct action on the musculature of heart and the vessels. The efficacy of the heart was increased in physiological doses.

Anticoagulant: The latex extract when tested for invitro fibrinolyc and anticoagulant activities was found in effective (Srivastava 1962)

Antidiarrhoeal: The hydro alcoholic extract (50:50) of aerial parts at 100, 200 and 400 mg/kg intraperitonealy exhibited Antidiarrhoeal effect in castor oil induced diarrhoea in rats (chitme:2004)

Diuretic: Alkalies of the plant exhibited a good diuretic activity in rats, which was attributed to its high potassium content. (Bhide 1958)

Haemagglutination: Latex extract showed haemagglutinating activity (Inamdar 1983)

The leaf extract showed antifungal and antibacterial activity. The flowers, aqueous extract of leaves shows anthelminthic property. Green leaves, mulched and applied at the rate of 5 kg/m2 15 days before planting Kaempferia galanga rhizome caused more than 60 % reduction in the population of root knot nematode (Nisha and Sheela 2002). The kerosene extract of leaves and flowers showed insectcidal property (Rao 1957)

Cultivation : It is a hardy shrub growing on different types of soils in different climate occurs as weed in cultivated field. It does not require specific cultivation practices or irrigation. It has been observed to grow mainly on coarse sandy and alkaline soils. The growth is luxuriant on rubbish heaps, waste and fallow lands, roadsides, on the ruins of building, seashores, riverbanks etc. It easily grows from seeds, even root and shoot cuttings are recommended. It is a good soil blinder and are recommended for deserts.

PHARMACOGNOSY

Materials & Methods: Plant materials were collected from different parts of Kerala and Nagarjuna Herbal Garden. For Macroscopical characters Stereomicroscope is used and for microscopical studies, the compound microscope. For physical constants rotary shaker, muffle furnace, UV – cabinet, moisture balance were used

PHYSICAL CONSTANTS: Total ash, acid insoluble ash, water soluble extractive, alcohol soluble extractive and thin layer chromatography tests were done to asses physical constants.

RESULTS AND DISCUSSIONS

Macroscopic features:

Stem bark: Drug occurs in channelled , quilled and fibrous pieces, external surface yellowish brown having longitudinal cracks, internal surface greenish, smooth, with an occasional wood tissue attached, fracture fibrous, odour and taste not distinct.

Microscopic features: Stem bark: Drug occurs in channelled , quilled and fibrous pieces, external surface yellowish brown having longitudinal cracks, internal surface greenish, smooth, with an occasional wood tissue attached, fracture fibrous, odour and taste not distinct.

PHYSICAL CONSTANT VALUES

No	PARAMETERS	VALUES
1	Foreign matter	Max 2%
2	Total ash	Max 12%
3	Acid insoluble ash	Max 1.5%
4	Alcohol soluble extractive	MIN 7%
5	Water soluble extractive	MIN 15%

THIN LAYER CHROMATOGRAPHY

Powder - 5 gm
Extract .- Ethyl alcohol
Solvent System - Chloroform: Methanol –1:1

Rf Values	Colour in UV rays
0.63	Blue
0.71	Blue
0.81	Blue
0.87	Blue

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CONVOCATION



Dr. Swetha. M. Shah, Rajkot receiving certificate from
Dr. C. S. Krishna Kumar, Director, Nagarjuna Ayurvedic Institute, Kalady
after completing her re -orientation programe on Panchakarma & Kerala special treatment in the institute.

ORTHOCHROMATIC.... - From P. No. 04

- Globoid Cell Leukodystrophy (Krabbe Disease)
- Hereditary adult onset leukodystrophy simulating chronic progressive multiple sclerosis
- Lipomembranous osteodysplasia with leukodystrophy (Nasu Disease)
- Metachromatic Leukodystrophy (MLD)
- Neonatal Adrenoleukodystrophy (NALD)
- Neuroaxonal leukoencephalopathy with axonal spheroids
- Oculodeltatoldigital Dysplasia with cerebral white matter abnormalities
- Orthochormatic leukodystrophy with pigmented glia
- Ovarioleukodystrophy Syndrome
- Pelizaeus Merzbacher Disease (X-linked spastic paraplegia)
- Refsum Disease* (affects peripheral nerve myelin)
- Sjogren-Larssen Syndrome
- Sudanophilic Leukodystrophy
- Vacuolating megalencephaly with subcortical cysts
- Van der Knaap Syndrome (Vacuolating Leukodystrophy with Subcortical Cysts)
- Vanishing White Matter Disease (Childhood ataxia with diffuse central nervous system hypomyelination, or CACH)
- Zellweger Syndrome (ZS)*

CASE REPORT

A 43 years old man suffering with "Orthochromatic Leukodystrophy", referred from the department of neurology, NIMHANS, Bangalore was admitted at our Advanced Centre for Ayurveda on 10th June 2005. During the time of admission his complaints are Difficulty in swallowing, Difficulty in talking and weakness in right side of the body – since last 3 to 5 years.

His difficulty in speaking and weakness in right upper & lower limbs were progressing and at the time of admission speech has progressed to almost incomprehensive and weakness of the limbs progressed to failure to walk or stand. Patient become wheel chair bound and feeding is made through nasogastric tube.

Provisionally he was diagnosed as under the broad classification of *Vatavyadhi* and he has been managed with following Ayurvedic treatment:

1. *Brahmidrakshadi kashaya* -10ml bid plus 40 ml of boiled and cooled water 6a.m & 6 p.m.
2. *Dhanwantara (101) drops* -10 drops bid along with *brahmidrakshadikashaya*
3. *Saraswataristam* – 25ml once daily after lunch.
4. *Suvarnamuktadi gutika* – 1 tab./day after lunch with *Saraswataristam*
5. *Sarvanga abhyanga* with *Dhanwantara taila* followed by *Dhara* with *Dhanwantara taila (7)* for 14 days.
6. *Matravasti* with *Valiya Sahacharadi taila* of 80 ml. After lunch for 10 days.

After the above management patient was relieved from his complaints like dysphagia, weakness of the right-sided limbs. Nasogatric tube was removed and oral feeding restored for both solids & liquids. He is able to stand and walk for a considerable episode. Though patient found some improvement in his complaint of aphasia it was not up to the satisfactory level. He was discharged on 12th July 2005 and advised following conservative management.

1. *Brahmidrakshadi kashaya* -10ml bid plus 40 ml of boiled and cooled water 6a.m & 6 p.m.
2. *Dhanwantara (101) drops* -10 drops with kashaya twice daily.
3. *Saraswataristam* – 25ml once daily after lunch.

4. *Suvarnamuktadi gutika* – 1 tab./day after lunch with *saraswataristam*
5. *Sarvanga abhyanga* with *Dhanwantara taila.*

He was advised to undertake *taila dhara* treatment in regular intervals of every six months and *matravasti* in frequent intervals.

DISCUSSION

Orthochromatic leucodystrophy is a rare heterogeneous group of primary leucodystrophy, in which most cases are sporadic. The primary metabolic defect is not known, although the defect in one family has been linked to chromosome 5. Adult onset dominant families have rarely been described; they may have cerebellar signs and dementia, or cerebellar, pyramidal, and autonomic abnormalities, and symptoms can mimic chronic multiple sclerosis. However, for dementia, the least common aetiology is primary leucodystrophy.

According to Ayurveda *Vata,* one of the bio-entities represent psychomotor activities and in its normal state is said to govern enthusiasm, respiration (inspiration and expiration) and motor activities of the body and the regulation of spino cerebral reflexes and regulation of proper circulation and functions of the 7 fold *dhatus* 'Tissue elements', and also the functions of the sensory organs (*Astanga Hridaya* of *Vagbhata*). Ultimately *Vata* could be equated with life force, as it is responsible to conduct, regulate, and coordinate physiological, physical, psychological and all other vital functions of body with *Pitta* and *Kapha.*

The equilibrium of the above three vital elements are affected due different reasons like improper diet, irregular habits, and various other factors including *beeja dosha.* It is in this context the Ayurvedic treatment might have been helped by bringing the elevated *vata dosha* to a normal state. Similarly, the drugs prescribed in the present patient might have been helped in restoring the myelin sheet up to some extent and at the same time, these drugs may perhaps slowing down the further progress of the disease. His condition was maintained static till the end of 2005. However, the long-term outcome in the present patient is not known, as he is not under our follow-up since last 2 year. Nevertheless, this case study is helped to find out and document the role of Ayurvedic therapeutic measures to treat orthochromatic leukodystrophy, which has presently no known treatment in any system of medicine.

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8. *Astanga Hridaya of Vagbhata*

BALA RASAYANA - From P. No. 08

Aja rasayana

- *Udvartana* with stool of sheep
- *Parisechana* with urine of sheep
- Use of milk of sheep for drink
- Always live with sheep

Lasuna as rasayana

It was told that *lasuna* is formed from *Amrut* in *swarga*. Its seed is *katu rasa yukta*, *pushpa nala* is *lavan rasa yukta* leaves are *kashaya rasa yukta & vipaka* is *madhur* due to which *lasuna* increases muscles bulk in body

- Increases metabolic & digestive power in body
- Gives long life
- Increase *smruthi, medha, bala, varna*
- Very beneficial for children.

While using *lasuna* as *rasayana* in children it should be treated with *ghruta* or *taila* & during the period of whole treatment hot water should be used for drinking.

Proper diet as *rasayana*

If one follows all the rules regarding *bhojana* and also take the food as per *rutu, agni, age* etc, then in such persons *bhojana* acts as *rasayana* and Increases *Kaanti, Bala, Smruti, Medha, Ayu*

Maintain healthy mental condition

Growth and development of body

Maintain healthy condition of *indriya*

Chyavanaprasha rasayana

While explaining the use of *chyavanaprasha rasayana, Vagbhata* told that it can be used in *baala, vrudha, kshataksheena & krusha* for the purpose of the increasing body build and acts as

- *Medhya, smruti, kanti - vardhak*
- Cures all diseases
- Does *vatanulomana*

Medhya rasayana

The *medhaya rasayana* should be used by considering digestive power.

- *Mandukparni swarasa*
- *Yashtimadhu churna*
- *Guduchi swarasa*
- *Shankhapushpi kalka*

These *rasayana* can be used in growing children in order to increase the intellect. It also increase *ayu, agni and Varna* & cures all diseases.

Rasayana Jatakarma samskara

It includes

- Licking of *Madhu & ghruta*
- Initiation of Breast feeding
- Keeping pots filled with water near the head & legs of baby

Licking of *Madhu & ghruta* and breast-feeding benefits are already explained. The keeping of water filled pots only to maintain the temperature of *Kumaragara*. These are the measure done after the *nabhinala chedhana* of baby so that is protected from external environment & becomes healthy & disease free.

Rasayana in Phala & Annaprashan Samskar

Kasyapa told *phala prashana* in sixth month & *annaprashana* in tenth month. The first food of baby after birth is breast milk & it is not logical to start solid food immediately. So, *Kasyapa* suggested the use of fruit juice which is rich source of vitamins & minerals essential for baby.

Conclusion

1. *Rasayana* helpful for providing anti - oxidant properties which prevents diseases in childhood.
2. *Rasayana* therapy nourishes, balance *dhatus*. So that child's growth and development will be enhanced.
3. *Rasayana* is helping in preventing and curative aspects of childhood.

DUSHTA VRANA - From P. No. 12

facultative anaerobic gram negative rods will colonize the wound. Most common ones are *Proteus, E. coli, and Klebsiella.* As the wound deteriorates deeper structures are affected. Anaerobes become more common. Oftentimes infections are polymicrobial (4-5).Long-term chronic wounds oftentimes contain more anaerobes than aerobes. Aerobic gram-negative rods also infect wounds late in the course of chronic wound degeneration. Usually acquired from exogenous sources; bath and foot water Ex. *Pseudomonas,*

In summary: early chronic wounds contain mostly gram-positive organisms. Wounds of several months duration with deep structure involvement will have on average 4-5 microbial pathogens, including anaerobes (see more gram-negative organisms).Many factors affect the progress of microorganisms in a wound from colonization to infection: The number of organisms, The virulence factors they produce, The resistance of the host to infection.

Wound healing

The wound healing process begins anytime there is an insult to the body that causes a break in the skin or tissue. Wound healing is a complex and overlapping process.

Phases of wound healing

Four basic process in wound healing are

1 Inflammation
2 Wound contractions
3 Epithelialization
4 Granulation tissue formation

DISCUSSION

Dushta Vrana is one of the *Vranas* which needs treatment for its healing, which is associated with profuse discharge, foul smell and having irregular floor and unhealthy granulation tissue

Even though healing is a natural process, it is inhibited by various factors. Alleviating these inhibitory factors is the goal of *Sodhana Cikitsa.* At the end of *Sodhana Cikitsa, Vrana* becomes *Suddha Vrana* and *Ropana Cikitsa* has to be followed further.

Ropana chiktsa is formation of granulation tissue and healing of *vrana* there by.

For a *vrana* to heal, both *anthah parimarjana* and *bahihi parimarjana* is necessary as told by *Sushruta.*

Conclusion:

DushtaVrana means where there are no signs of healing, so, various treatments were mentioned like *Shodhana Ropana* etc. For *Shodhana* different surgical methods were explained like *Chedana, Bhedana, Lekhana* etc. In the current surgical practice also debridement is one of the important therapies to remove the slough and enabling for proper healing. In our classics along with surgical means various non surgical treatments were also explained like *Kashaaya, Varti, Kalka, Rasakriyaa, Avachoornana* etc.

In current medical practice, a wide variety of chemical substances have been evaluated for their efficacy as wound healing agents, with limited success. Surgical debridement can result in injury to the healthy tissue. When there is injury to healthy granulation tissue there will be delay in the healing.

To achieve the main goal of healing, it is necessary to remove the maximum local *Dushti*. By the virtue of *Shodhana, Sraava Hara, Daaha Hara, Kandughna* and *Vrana Ropana* properties of *Triphala,* the local *Dhaatu Dushti* is ceased.

To conclude: The synergistic effect of certain drugs like *triphala kwatha* for *parisheka* and *jatyadi taila* for local application are effective in treating the *dusta vrana* and also the *triphala kwatha* antibacterial property is proven in various clinical studies.

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*1 "*Vrana Gaatra Vicoornane, Vranayati iti Vranaha*" (S/chi).

*2 "*Vrunoti Yasmaat Roodhe api Vranavastu na Nashyati*

Aadeha Dhaaranaat Tasmaat Vrana ityuccyate budhaihi" (s/su)

KSHEERA BASTI - From P. No.22

and then the *avrutha dosha* ie *vata dosha.*Here *ksheera basti* will work as *virechana* since for *pitta dosha virechana* is the specific treatment. Also *ksheera* used here is *brimhana, dhatu vardhanam* and *rasayana.*

Generally we can infer that *ksheera basti* can be used in auto immune disorders where the immunity is deranged. In *amavata* and *vataraktha* there will be destruction of articular cartilage due to the circulation of immune complexes. According to modern view, the interleukins and tissue necrosing factors formed can destruct the articular cartilage by increasing the activity of osteoclasts which finally leads to *asthi kshaya.*Here *ksheera* due to *brimhana, dhatu vardhaka, balya* and *rasayana* property can improve the immunity power and can reduce *asthi kshaya.* In my little clinical experience for *vataraktha,* I have used *guduchi kashaya, satavari chinnaruhadi kashaya,kokilaksham kashaya* etc and administered by *ksheera paka vidhi* and got best results.

Conclusion and discussion

1] *Basti* is a procedure, does not have a direct effect on *agni,* since it is a *kriya* performed in the *vata sthana.* We are giving medicated enema through anal route. Thus, any claim regarding the direct effect of *ksheera basthi* on *asthi dhatu,* as far as my opinion is concerned, is thoroughly refuted.

2] The above mentioned *nyayas* are some what acceptable to my opinion, stating that *basthi,* since it is done in the *vatasthana* ie *pakwasaya* it causes the *anulomana* of *vata* particularly *apana vata.* So when the *apana vata* is corrected, proper functioning of *agni* will be there, thereby helping the conversion of *rasadi dhatus.*

3] *Ksheera basthi* is mainly indicated in *pittavrutha vata. Ksheera* with its *sheeta virya,* have a direct effect on *pitta,* helps to produce a *mridu rechana* of *malas*, thereby alleviate the *pittavrutha vata.*

4] Finally according to my opinion, *ksheera basthi* will not give much effect in *asthi dhatu kshaya.*But definitely by maintaining the *apana vata, agni* will be get corrected which inturn results in the formation of *sresta rasadi dhatus* which gives nutrition to the *uttarothara dhatus.*

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*[1] *Pridhvi Agni aniladinamam sanchato swoshmanakrita,*
Kharatvam prakarotsya jayate asthi tato nrinam [su sha]

*[2] *Svadupakarasam snigdham ojasyam dhatuvardhanam.*
Vatapittaharam vrishyam sleshmalam guru sheetalam
payo atra gavyam to jeevaniyam rasayanam| [Ast Hridaya su 25-26].

*[3] *Tatra astinistito vayu | asrak svedadayo pittam|*
Slesheshu sleshma | tasmat ekavrudhi ksayakaranatvam |
Na to evam asthi vayo|————————tasmat langhana brimhanabhyam vridhiksayajan vikaran upacharet pavane to
Brimhana langhanabhyam| [ast sangraha].

*[4] *Jirne jwaranam sarvesham paya prasamanam param|*

*[5] *Ksheerochitasya praksheena sleshmano daha tritvath|*
Ksheeram pittanila tasya pathyamapyatisarinam| [ast hridaya chi1]

*[6] *Jwara ksheenasya na hitam vamanam va virechanam|*
Kamam tu payasya tasya niruhai va haret malan| [ast hridaya chi1]

*[7] *Tatra asthi ksayajan vikare tikthopahitai ksheera basthi.*

*[8] *Asthi samkshyal jatan ksheera ghritai tikta samyukthai Bastibhi tata|* [ast *hridaya sutra* 11 chapter].

*[9] *Nirharet malam tasya sa ghritai ksheera bastibhi, na hi basthi samam vata raktha chikitsitam|*Ast hridaya 22nd chapter].

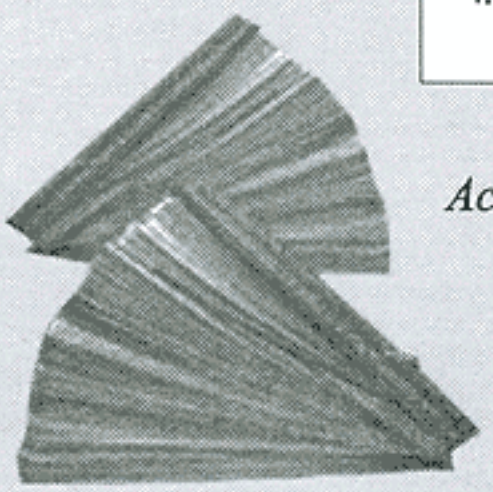
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