AYURVEDIC

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GARUDAKODI

(Aristolochia indica. Linn)

THE PSYCHOSOMATIC Vs SPIRITUAL INTEGRATION
THE AYURVEDIC VERDICT IN JÎVANMUKTI

A STUDY ON THE EFFECT OF CERTAIN HERBAL DRUGS ON SWITRA (VITILIGO) IN CHILDREN

AYURVEDA: A SMART CHOICE FOR OBESITY

TVAK PAREEKSHA (EXAMINATION OF SKIN)-IV



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"Diseases stand in relation to *doshas* as shadows do to the birds in flight ".

-Charaka Samhita

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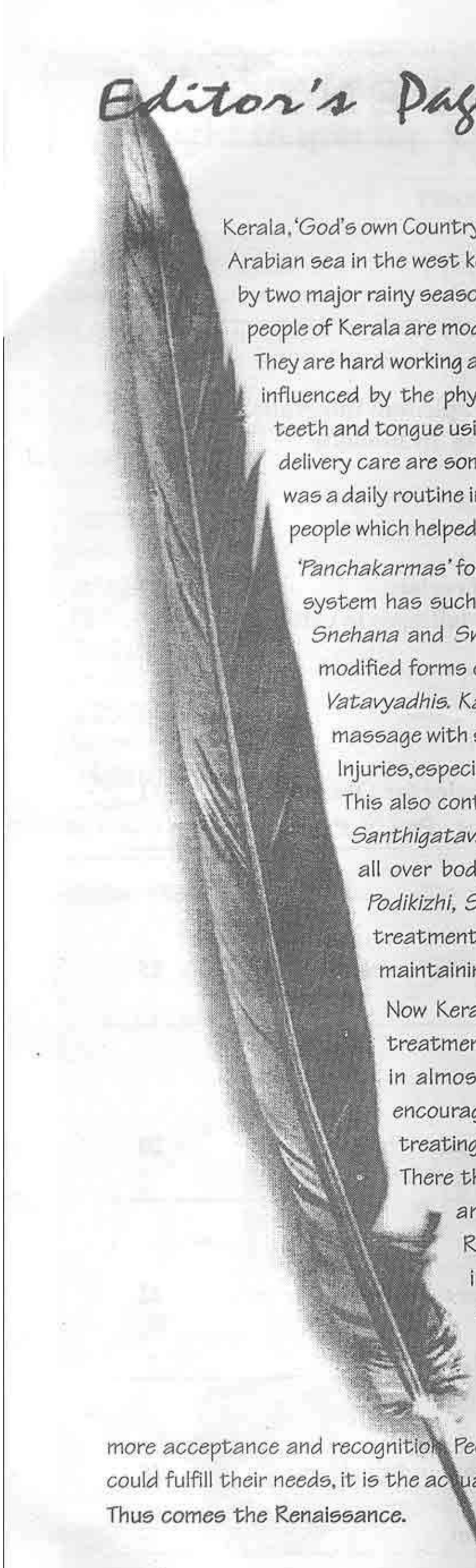
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Editor's Page



Kerala, 'God's own Country' is a special place to live. *Sahya* mountains belt in the eastern part and Arabian sea in the west keep this place green and beautiful. The climate of Kerala is well-balanced by two major rainy seasons. Winter and summer are moderate-never go to extremes. Similarly the people of Kerala are moderate-they seldom go extremes. They inherit a rich tradition and culture. They are hard working and civilized. Traditionally they have adopted Ayurvedic life style-probably influenced by the physicians. Application of medicated oil on head before bath, cleaning of teeth and tongue using astringent leaves and sticks, application of *Anjanas* in eyes and post-delivery care are some of the examples. Application of oil all over body and a gentle massage was a daily routine in high class society. Seasonal regimens were strictly observed by several people which helped them in maintenance of good health. They looked younger than their age.

'Panchakarmas' for purification of body is a speciality of Ayurveda. None of other medical system has such a method of treatment. Body has to be prepared before purification. *Snehana* and *Swedana* are done in the preparatory phase. It has been observed that modified forms of these treatment modalities gave relief in several diseases especially *Vatavyadhis*. *Kalaripayattu*-martial art of Kerala-needs swift movements of body. Oil massage with special techniques are followed by them to increase the flexibility of body. Injuries, especially in the vital points of body are also cured with this kind of treatments. This also contributed in developing a therapy for *vatavyadhis* such as *Pakshaghata*, *Santhigatavata*, *Amavata*, *Katee graha*, *Greevagraha* etc. *Theppu* (Application of oil all over body), *Uzhichil* (Massage), *Pizhichil* (Snehadhara), *Elakizhi*, *Njavarakizhi*, *Podikizhi*, *Sirovasthi*, *Sirodhara* and other types of *dharas* emerged as special treatment procedures of Kerala. These treatments have time tested efficacy in maintaining health and curing diseases.

Now Kerala special treatments have global acceptance. Clinics providing these treatments can be found in America, London, Germany, Italy, Belgium, Russia and in almost all Arab countries. The performance reports uptill are not much encouraging. The doctors working in these places can not take-up the risk of treating major diseases due to the restrictions of law prevailing in those countries. There they work in health care units. Time will prove the efficacy of treatments and they will be able to take up the cases like Rheumatic Arthritis, Rheumatoid Arthritis, Hemiplegia, IVDP etc. At the same time the hospitals in Kerala handling the cases of foreigners should be more careful in diagnosis the cases and making them fully aware about the prognosis. Long claims should be avoided and utmost care should be taken in providing maximum relief. This in turn will propagate Ayurveda in other countries and spontaneously the clinics in those countries will enjoy more acceptance and recognition. People of those countries will come forward to study Ayurveda, and if we could fulfill their needs, it is the actual propagation of Ayurveda.

Thus comes the Renaissance.

Dr. K. Unnikrishna Pillai

THE PSYCHOSOMATIC Vs SPIRITUAL INTEGRATION THE AYURVEDIC VERDICT IN JÎVANMUKTI

Dr. N. USHA DEVI *

AYURVEDA: The constitution of man is closely entwined with the laws of Nature in their most systematic form since it is designed in a very complicated one-to-one relational aspect. Yet, it is clear that the basic principle inherent in all beings is but veritably one. Evolving principles out is to generate a sense of understanding about the essential oneness inherent in the whole universe and thereby to unravel the hidden potentialities in man so as to help him rise to a higher state of existence- a complete balance of one's inner and outer realms of environment, that if not headed properly will lead to sorrows and sufferings related to the body-mind complex. A sound body with a sound mind is the yearning of all but not experienced by the most. The central theme of this article is to highlight the consistency of balance to be achieved in the body-mind complex, the experience of which is reflected in the notion of *'Jîvanmukti'* emphasized in the later explications of *Advaita Vedânta*. Three main problems attended here are:

i) Does there exist any integral relation between Psychosomatism (Ayurveda) and spirituality?

(ii) How is transcendental human existence *(Jîvanmukti)* related to psychosomatism?

(iii) How can the human existence be brought in conjunction with the universal forces for the sustainable growth?

These three significant questions speak of the three levels of human evolution- physical, intellectual and spiritual- without which there cannot be any justice in the human birth. As the 21st century dawned, man as an integral constituent of the universe, started to reflect on the internal coherence and consistency of the laws of Nature and its consequences on human nature that gives resilience to the branch of medical science termed 'Ayurveda'. The fundamental principle underlying such a re-orientation is the fact that man, born as a gross form of the universe possesses a considerably enigmatic relationship with the universe constituted out of the same elements in the subtle form. In this sense, each environmental change has profound effect on the manner of functioning of human body.

Part I

AYURVEDA and *JÎVANMUKTI* -

Meaning and Implications: Ayurveda is the sacred science founded fairly in the *Vedic* tradition of India. It implies the science of healing related to the body and the mind (psychosomatic). In a greater perspective, it integrates our physical life (the outer environment) with the domain of the higher spiritual life (inner environment). The concept of *Jîvanmukti* expresses a state of metaphysical existence wherein the inner environment is made to be compatible with the external one- a complete subjugation of the body-mind complex, in other words, its universalization. Both Ayurveda and *Jîvanmukti* are aimed at self-realization which is the sole source of a blissful life. The difference is that a *jîvanmukta* cannot indulge in the worldly affairs derived from the ego element. But in the case of the scientific methodology of Ayurveda, self-subjugation is necessary even without total renunciation of the world in the sense that the

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functions of the mind are tranquilized here to a certain extent without creating harm to the body. Both these scientific precepts are chiefly concerned with the understanding of the language and ultimate meaning of life and thereby universalizing our existence as well as bringing benefit to all creatures.

Jîvanmukti-liberation in one's lifetime itself- is a very significant concept prescribed in the philosophy of *Advaita Vedânta* as a part of its later interpretations. According to this theory a *Jîvanmukta* is one who has achieved self-realization, that is, who has integrated himself with the cosmos. He senses no sorrows and enjoys the bliss supreme. The mental functions of such a person are subjugated to the 'non-dual supreme knowledge' and his actions are always directed towards the welfare of all beings. *Jîvanmukta* has achieved a perfect balance between the mental and material aspects through the identified discriminative knowledge regarding the true nature of the mind and the universe. A *jîvanmukta* attains efficacy to transcend all sorrows that are resulting out of communion with the body, the ego-connectedness, For him, existential consistency has already been anticipated with a definite determination to disregard the worldly adherents whereby the steadiness of the mind is permanently achieved. However, the science of Ayurveda does not aim at such a strenuous exercise. It prescribes dissociation from worldly deterrents to a certain extent in accordance with the demands of some possible situations to overcome the malfunctioning of the body-mind complex. The steadiness of the mind accrued may be transitional. It takes into consideration one's existence of 'to-be-in the world' which owes profound influence in the consistency of the tranquility of the mind. The true intention in the context of Ayurveda is to stretch the life of the whole compartment of people within a short span of life in this universe. In this way, Ayurveda acquires a prominent place in moulding a desirable model of lifestyle through which a spiritual movement can also be accounted for.

Human body - The Cosmic Nature: 'According to the Vedic dispositions, the human body is constituted out of the 24 cosmic principles *(tattvas)*. These are also responsible for the whole structure of the universe at all levels of organization. These 24 principles come into existence from the Supreme Being. The *Vedas* discern that man alone possesses the efficacy to identify these principles through valid means of knowledge. Man is able to understand the functions of the Nature through his sense organs and the functioning of the Nature in its subtlety with the help of inner perception. When man realizes the subtle functions of the Nature, he becomes able to know the influence of different principles and this state is distinctively referred as *'Jîvanmukti'*. In this way, it is very essential to understand the subtle level of functioning of the 24 principles which implies the control of their functions also. The 24 principles are:-

1. *Prakrti*
2. *Mahat* / cosmic Intellect
3. *Ahamkâra* / Ego
4. *Manas*

5-9 The five *Tanmâtras:*

- Sabda (*Tanmâtra* of Sound) Ether.
- Sparsa (*Tanmâtra* of Touch) Air
- Rûpa (*Tanmâtra* of Light) Fire
- *Rasa* (*Tanmâtra* of Taste) Water
- *Gandha* (*Tanmâtra* of Smell) Earth

10-14 The five sense organs

Ear (Sound)	Ether.
Skin (Touch)	Air
Eye (Sight)	Fire
Tongue (Taste)	Water
Nose (Smell)	Earth

15-19 The five organs of Action:

Mouth - expression

Hand	-	Grasping
Feet	-	Motion
Urine-genital	-	Emission
Anus	-	Elimination

20-24. The *Mahâbhûtas:*

Earth (solidity) (Resistance to action)

Water (fluidity) (life)

Fire (light and Movement) (Perception)

Air (Subtle Movement, direction, velocity and change) (thoughts)

Ether - Communication and self-expression.

These 24 principles determine the nature and constitution of a human body. *Prakrti* is responsible for the difference in nature of the bodies and associated mental states that is endowed with the three characters of *Sattva*-quality of being pure, simple and lustrous, *Tamas* - quality of inertia, and *rajas*-quality of activation and impediment. A *sâttvic* nature corresponds to a very peaceful, gracious and blissful life. There is no fear, anger or anxiety in such a person. His life is more harmonious with the elements of Nature. It is meaningful and spiritual. All thoughts on sense-enjoyment are resolved into the subtle elements. It is a life which is lived in accordance with the 24 principles of the world. *Tâmasic* character denotes miseries, sorrows and pains. The ego element is responsible for this kind of character. All thoughts are directed towards sense-enjoyment solely. Anger, fear and anxiety are the resultant-effects of such a character. It is more psycho-physical life.

According to the Vedic perspective, an imbalance in the three *gunas-sattva, rajas* and *tamas*- leads to the creation of the mind *(sattva)*, life-force *(rajas)* and physical body *(tamas)*. A *sâttvic* state of mind is characteristic of a *Jîvanmukta*. A *Tâmasic* mind expresses its bent towards the foes of a peaceful life such as *kâma* (desire) *krodha* (anger), *moha* (delusion) etc. traceable to the ego-deterrent. These are responsible for incompatible actions. A man with *tâmasic* mind is totally entrenched in the functions of ego. The outcome of this state is in the form of aggressive nature as well as violent acts of distinctive tendency. Desire, anger, anxiety, fear and the like are also common to such a person. He shows no sympathy to others and enjoys his life by immersing in heinous acts. This is because of the non-harmonious functioning of the subtle elements within and outside. The *Râjasic* character causes disturbed tenures of psychic experience. These three characters are correlated with the distinct nature of light, energy and matter respectively for *sattva, rajas* and *tamas.*

The *Mahat* principle is denoted by *Buddhi* in human beings. It is embodied with the power through which man can differentiate well from bad as well as right from wrong. *Buddhi* has to be directed towards attaining a balance of the functions of the mind which makes self-realization possible. The influence of ego element results in the malfunctioning of *Buddhi* that creates miseries and even lead to mental disorders. The most important feature of the *Buddhi* is that it performs all the functions of the somatic cells of the body and hence a proper balance is necessary for its smooth functioning.

The ego is the principle of division regarding our thought processes. It is also responsible for activation of the modes of potential energy hidden within the *Prakrti* and makes different forms. It is a deterrent in the spiritual path. The disturbances caused within the *Prakrti* impinge on the different constituents of the body and that leads to serve diseases and disturbances for different bodies and minds. The mind possesses *râjasic* character and is a derivative of the ego principle. Since the rajas can have both *sattva* and *tamas* ingredients, it can turn either towards *sattva* (spiritual well being) or *tamas* (material world) when it is directed towards the later, it gets afflicted with sense-enjoyment that paves the way for sorrows, pains or diseases. The

tâmasic mind acts through the five sense organs and the five motor organs.

It is significant that when there is compatibility among *Prakrti, Buddhi,* ego and the mind, there is spiritual enlightenment and that implies a perfect order for the body-mind complex - a happy life situation. This is the true destination of *Jîvanmukta.*

Now turning to the physical body, the five motor organs and the five gross elements constitute the body along with the five sense organs and the three cosmic forces-energy (life force) light (the mind) and matter (body) - *Kriyâ, Prakâúa* and *Sthiti.* When inertia *(Sthiti)* is predominant, it is a purely objective or physical body. When *Kriyâ* (action) predominates over others it is animate being - a living organism endowed with sensitivity *(indriyâtmaka)* while if *Prakâúa* dominates, such an entity is called a self-conscious being. The whole of the objective world is an integration of these three categories of energy. Harmonization of this three fold energy of nature creates an innate balance of their natural interactions. When these three types of energy work differently with the balance filling towards anyone, there will occur contradictory experiences such as tension, diseases, fear and anxiety within the body and the mind that is detrimental to the whole life.

Every being in this universe is subject to the influence of the three kinds of energy (motion) *âgati* (like energy) *gati* (the light) and *sthiti* (the matter). Motion is experienced in the form of vibrations the inner (the process of breathing) and the outer (the visible movements of body) in this sense, *'Prânah'* denots the life principle and the principle of motion. The other principles of motion are *apah* (fluidity), *vâk* (action and speech) annam. The plant like (the food for other beings) developed in complete tune with the universe, and the *annâda* the living being thriving on food. Each and every form of vibration-inner and outer- has a universal aspect and hence it is significant in achieve the universalization of these principles within the body.

The Biological existence of a human being is dependent on the interactions of the three variants of energy or motion principle-the life force, the mind and the body. Each somatic cell in the body is subject to the influence of these three interactions. There are around 27,000 billion such somatic cells in a human body that are endowed with automatic intelligence by which the functions of the body are carried on. Any apparent insurrection of bodily or the somatic cells towards a mind endowed with 'ego' element will be expressed as disorder.

Functional Aspects of the Three kinds of Energy- An Analysis: The three sorts of energy life, light, and matter have subtle counterparts called vital essence in each of them- the *Prâna* (subtle energy of air) is the guiding principles of mental functions, light -the subtle energy of fire is the force of vitality; matter has the subtle energy of water (fluidity). It is the basis of physical and psychical endurance. These three have different functions in the different systems of the body.

i) **Reproductive system:** The energy is nourished by the reproductive fluid within the physical body. The fluidity principle stimulates all bodily tissues. It is the latent reproductive power. The heat principle (light) is the excited state of the previous one (reproductive fluid). It gets transformed into heat as passion and willpower. The life energy stimulates the flow of life through different veins thus activating the mind.

ii) **Endocrine system:** The life energy helps to attain equilibrium adaptability and growth. Hence all problems related to the connected disorders are traceable to the life energy (wind). The light energy governs metabolism and digestion while the principle of fire dominates the reproductive and energy reserves. Problems related to testis, ovaries and adrenaline are related to this fluidity principle. Adrenaline is related to the function of stress also.

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A STUDY ON THE EFFECT OF CERTAIN HERBAL DRUGS ON SWITRA (VITILIGO) IN CHILDREN

*Dr. DURGA PRASAD DAS

(Key wards-Vitiligo; *Switra;Chitraka moola; Sweta-aparajita moola*; Ewe's milk)

Switra is considered to be a great social stigma and persons suffering from it could not command respectable position in the society. Though this disease does not cause physical pain, it creates an inferiority feelings among the persons affected. Many ignorant orthodox people in India consider it with similes to leprosy. Based on the symptoms, *switra* can be correlated with vitiligo. The disease may start at any age but usually seen in childhood at 10 years of age or in second decade of life. Based on some dermatological out patient records it is roughly estimated to be in between 3-4% in India.

Switra is considered as one of the varieties of *kusta* in the Ayurvedic classics, caused due to vitiation of *tridoshas* and *dhatus* like *rasa, rakta, mamsa* and *meda*. *Switra* is one among the *rakta pradoshaja vikara.* Depending upon the duration of the disease and the involvement of *dhatus,* the disease prognosis is very bad.

Vitiligo is characterised by milky white macules on skin. Researchers has developed drugs from plant origin in different systems like Chinese medicine named *Pu-Kuc,* Egyptian from *Ammimajus* fruit extract, Indian medicine *Bakuchi* etc. but many times those fails to bring back the pigmentation. A large group of diseased fails to get the expected results and is refractory to treatment. Inspite of advanced modern technology and medicine the treatment of vitiligo is under trail.

Albinism is another condition due to defects in the biosynthesis and distribution of melanin. Melanin is synthesized by melanocytes from tyrosine in a membrane-bound intracellular organelle called the melanosome. Tyrosine is formed in the skin from phenylalanine by the action of phenylalanine hydroxylase and its cofactor. In this condition total body color became whitish pink.

A number of *yogas* are mentioned for the purpose of external application after *shodhana* by many classics for *switra*. In *Rajamartanda,* use of *Sweta-parajita* root has been described for its local application. Local application of *Sweta Aparajita* moola, *Chitraka moola* along with Ewe's milk on vitiligo patches has shown successful results in pilot study. In *Charaka Samhita*, the use of *Khadirodakapana* is advocated during *Switra* treatment. This was also included in present study.

Objectives: To study the efficacy of *Sweta Aparajita moola, Chitraka moolas* with Ewe's milk in vitiligo.

Methods: Total 24 numbers of patients attended in the O.P.D. of Kaumarabhritya, SDM College of Ayurveda & Hospital, Hassan were selected for the study in a simple random technique from both sex i.e. 14 female & 10 male child, race all Hindus and Lower-middle & upper-middle socio-economic

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groups of pediatrics age group (between 5 to 12). All the patients are divided into two groups i.e. Group A & Group B.

Treatment Principles: All the patients were given classical *Virechana* therapy i.e. *dipana-pachana* with *trikatu churna, Arohana snehapana* with *Moorchita ghrita, Abhyanga* with *Moorchita taila* and *Virechana* with *Aragvadha phalamajja.* Group- A patients were treated with local application of Sweta-aparajita moola and Chitraka moola along with Ewe's milk, while Group-B patients were treated with Arial roots of Vata *(Neghrodha)* along with Ewe's milk. Both the Groups are advised to expose the affected part to sunlight for 15 minutes. The same treatment was advised for a period of two months. Both groups of patients were advised to take *Khadirodaka* instead of water for drinking, throughout the course of treatment.

Criteria for assessment: Patients of both the groups were examined initially, at the end of two months for changes in the patches.

1. Alteration in the color of the vitiligo patches or any black dots appearing in the patches were recorded periodically.
2. Number of dots was counted and joining of two or any was noted and recorded.
3. Change in the size of observed patch was also recorded.

Observation and Result

Table No. 1 Shows incidence of number of *mandalas* (patches)

Sl. No	No. of patches (mandalas)	Group-A	%	Group-B	%	Total	%
1	1-5	7	53.84	9	81.81	16	66.67
2	6-10	3	23.08	1	9.09	4	16.67
3	11-20	1	7.69	0	0	1	4.17
4	Above-20	2	15.38	1	9.09	3	12.50

In group A7 (53.84%) patients had patches less than 5 & 2 in group (15.38%) pateints had patches more than 20 in numbers. in group-B, 9 (81.81%?) patients had patches less than 5 where as only 1 (9.09%) patient had patches more than 20 in numbers.

Table No. 2. Shows incidence of distribution of size of *mandalas* (patches)

Sl. No	Size in square cm	Group-A	%	Group-B	%
1	<10	8	62.53	6	54.54
2	11-20	3	23.07	2	18.18
3	21-30	2	15.38	1	9.09
4	31-40	0	0	1	9.09
5	Above 40	0	0	1	9.09

In the present study maximum number of patients has the sizes of *mandalas* (patches) below 10 sq. cm. i.e. 61.53% in Group A and 54.54% in group B. 3 patients in Gr-A & 2 patients in Gr-B have sizes of *mandalas* were in between 11 to 20 cm.

Table No. 3. Showing clinical improvement of signs after two months of treatment in Group A patients. n=13.

Signs	Mean (G. S.)		Mean difference	% improvement	S.D.	S. E.	t- value	p- value
	BT	AT						
No. of black spots	2	1.38	0.62	31%	0.51	0.14	4.43	<0.001
Color of observed spot	3	1.85	1.15	38.33%	0.80	0.22	5.23	<0.001
Size of observed spot	2	1.61	0.38	19%	0.51	0.14	2.71	<0.02

The effect of the trail drug provides highly significant result in changing the colour and in increasing number of black spots i.e. 31% with p value of <0.001 at the end of second month, however 38.33% improvement seen in the colour of observed spot with p value of <0.001. There was 19% reduction in size of the patches.

Table No. 4 showing clinical improvement of signs after two months of treatment in Group B pateints. n=11.

Signs	Mean (G. S.)		Mean difference	% improvement	S.D.	S. E.	t- value	p- value
	BT	AT						
No. of black spots	1.90	2	(0.09)	4.74	-	-	-	-
Color of observed spot	2.63	2.63	0	0%	-	-	-	-
Size of observed spot	2	2	0	0%	-	-	-	-

No improvements were observed in reducing the size of the observed spot and in increasing the number of black spots. There is also increase in the signs observed in some of the patients of this group.

Discussion: In the present study it was observed that more female Childs are vulnerable to vitiligo. There was no such particular reason found for this but the ratio may be equal but as importance is given to female child for their body complexes so hospital attendance of them is more. It is rare among very rich and poor people because multi vitamin diets taken by those rich individuals help them to escape from the disease generation to generation. Poor people due to poverty might not attend to this hospital due to lack of affording capacity.

At the end of first month of treatment the effect of the trial drug compound provides markable effects in Group-A patients in compared to the effect of placebo drugs used for Group-B patients.

At the end of second month after treatment the effect of the treatment given to Group-A patients shows highly significant result with 31% improvement (p value<0.001) in improvement of number of black spots, as the change in color of observed spot is concerned there was 38.33% improvement observed with p value<0.001. However, only 19% improvement seen in size of observed spots with p value <0.02 is statistically significant.

In Group-B patients there was no such markable improvement observed in any of these criteria's i.e. number of black spots, color of spots and size of spots.

Overall the drug is found to be more effective in altering the colour of the patch. Further continuity of drug and follow up may show more changes which are very slowly effective.

Interpretation: As tubefacient, local application of *Chitraka* moola, increase local blood circulation. *Sweta-aparajita* may stimulate the formation of melanin and ewe's milk might help for its coagulation.

Conclusion:

The following conclusions are derived from the present study.

1. Early improvement is seen if *visphota* is developed on application of *lepa.*
2. Improvement is earlier if re-pigmentation starts with pigmented spots which later configured to normal skin color.
3. The pigmentation process is earlier in small patches when compared to bigger one.
4. Patches having white hairs responded late to treatment.
5. The patches over the outer border of palm and sole respond quickly to treatment.
6. Local treatment is found to be more effective after *shodhana chikitsa* in the present study.

It is possible that local application even without *shodhana* may help in treating the *switra.* The same drug compound if continued for longer time may give much better results.

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AYURVEDA: A SMART CHOICE FOR OBESITY

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ABSTRACT

Obesity is recognised as a disorder of Medo dhatu in Ayurveda .It is a metabolic disorder where anabolism dominates catabolism. Agni i.e. dhatwagni plays a key role in the aetio pathogenesis of sthaulya (obesity). Considering the limitations of Western medicine in the management, there is an obvious upheaval of interest in developing alternative systems of medicine like Ayurveda, Yoga, Naturopathy etc. for effective management. The concept of medo dhatu metabolism in Ayurveda and preventing and managing sthaulya and its complications are discussed in detail in the following paper.

Key Words: *Obesity, Sthaulya, Medo dhatu, Agni, Anabolism and catabolism.*

INTRODUCTION

Obesity *(Sthaulya)* is now recognised as a major threat to public health and is infact a worldwide epidemic. Obesity is now increasing at an alarming rate among the children and youth in Asia for the past three decades due to rapid mechanisation of the society and the influence of western culture. Data from two *NHANES* surveys reveal that prevalence obesity has tripled in the last three decades as compared to the mid seventies. This increasing rate raises concern because of its implications on general health.

Obesity is a complex, multifactorial, chronic disorder of nutrition and metabolism. It is graded under the one of the top prior risk factors in the pathogenesis of Diabetes, Hypertension, CVA, CAD, CRF, etc. and *poses* a great challenge to the physicians in general practice. It has been the experience of many physicians that its management for a long term, steady control is not satisfactory. The available modern drugs only delay the onset of the complications rather than arrest them. In view of of the above limitations, there has been obvious upheaval of interest in the development of Alternative Systems of medicine like Ayurveda, Homeopathy, Naturopathy etc. for effective management. The boomerang created by "Baba Ramdev Misson of Yoga and Ayurveda" in the last three years has opened new vistas before the world and widened the scope of life sciences like Yoga and Ayurveda in the better understanding of the disease management. Moreover it is latest coming trend of Medicine to include Yoga and *Satwavajaya* like therapies of Ayurveda in management of chronic and incurable conditions.

A short glance on the concept and management of obesity *(sthaulya)* in Ayurveda reveals the keen insight of our ancient scholars regarding the understanding of the health and disease.

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Aetio pathogenesis: *Sthaulya* is a complex ,and chronic anabolic disorder of *medo dhatu* metabolism. It has been recognised as a *Kaphaja nanatmaja vikara* (C.Su.20/17), *Santarpana nimittaja vyadhi* (C.Su.23/6), Brimhanajanya *vyadhi*(C.Su.22), *Rasapradosha janya vikara* (S.Su.15/37), and as a vitiated *Medo dhatu janya vyadhi* (S.Su24/13) by all the classics.

Medas is one of the seven important tissue elements that support life. The food consumed is first subjected to *Jatharagni paka* which breaks into finer and uniform particles. The final product is acted upon by *Bhutagni* which convert the heterologous particles into homologous substances and the whole is released into the general circulation. The circulating blood carrying the nutrients are taken up by respective *dhatus* and undergo *Dhatwagni paka* to nourish the *sthayi dhatus*. The waste products *(malas)* generated are eliminated finally. Any disturbance viz hyper or hypofunctioning at the level of *Dhatwagni* results in the overnourishment (anabolism) or undernourishment (catabolism) of the tissues respectively. The process of anabolism and catabolism go uninterruptedly in the body maintaining a perfect equilibrium in the physiological state*[1] The process of anabolism dominates in the growing age (*Kapha* predominates) i.e. child and adulthood while catabolism in the elderly (*Vata* predominates).*[2] When the anabolism at *Medo dhatu* exceeds the physiological limits abnormal accumulation occurs which may either be generalised or localised as appreciated in *Staulya.*

There is a great relevance of the etiological factors described in *Sthaulya* with that of Western Medicine.*[3]

- **Food Habits:** *guru, snigdha,madhura* and *sleshmalahara dravyas* (high calorie and Junk foods, Colas and other soft drinks, alcohol etc.)
- **Life style:** lack of physical activity, sedentary lifestyle, overeating *(adhyasana),* day sleep
- **Psychological factors:** elated and joyful moodsi.e indulging in parties, disco etc.

All the above factors are similar with the qualities of *Kapha* and *Medo dhatu* viz *dravya, guna* and *karma samanya* according to the principle *"Sarvadasarva bhavanam Samanyam Vriddhi Karanam and Samayam Ekatwakaram"* (C.Su 1/ 44) and hence promote the excess formation and accumulation of *medodhatu.* This is inaccordance with the aetiology of modern science .

Clinical Features: (C.Su.!9/4; S.Su.15/37)

- Sagging of abdomen, breasts, heavy thighs and hips
- *Kshudra swasa* : dyspnea on effort
- *Pipasa* : excess thirst
- *Kshut* : voracious appetite
- *Swapna* : excess sleep
- *Sweda* and *gatradaurgandya* : excess sweating and bad odour
- *Gatrasada* : easy fatigue
- *Sarvakriyasu asamartha* on : incapable to carry any activity

All the above features are very much appreciable in an obese individual.

Complications: (C.Su.!9/4; S.Su.15/37)

- *Alpaprana* : decreased life span
- *Prameha pidika* : diabetic boils/ carbuncle
- *Jwara* : fever/sepsis due to easy invasion of pathogens
- *Bhagandara* : fistula-in- ano
- *Vidradhi* : recurrent abscess formation
- *Vata vikaras* deficits : neurological (C.V.A.,C.A.D, AM.I, etc.)

Obesity that is secondary to some underlying pathology like Hypothyroidism, ACTH insufficiency , etc. can be reversed by correcting the underlying pathology. Obesity that runs in families is incurable as there is a defect is at gene level which is inherited. It is said in Ayurveda that the ***beeja swabhava*** determines the physique and the mental abilities of an individual.*[4] Chakrapani in his commentary further substantiates it that if parents are obese ,the offspring has a tendency to be obese.

Textual Management : Many formulations are described in Ayurveda and few of them regularly used in clinical and daily practice are:(C.Su22/4, Chakradatta,)

- *Triphala kwatha* with *madhu*
- *Takrabhaya prayoga*
- *Shilajatu* with *Agnimatha*
- *Amritadya* guggulu
- *Navak* guggulu etc.

Extensive research has been carried on the *lekhaniya mahakashaya* group of drugs (C.Su 4/) to evaluate their efficacy in obesity and dyslipedimia. List of the drugs approved by CCIM. As hypolipedimic agents.

- *Guggulu* : Commiphora mukul
- *Lasuna* : Allium sativum
- *Vacha* : Acorus calamus
- *Haritaki* : Terminalia chebula
- *Amalaki* : Phyllanthus emblica
- *Pushkarmoola* : Inula racemosa

The role of *pathya* and *apathya* cannot be overlooked as dietary and life style modifications play a primary role in the management and prevention of obesity.

A clinical trial conducted on 20 patients in *Kayachikitsa* O.P.D of S.S. Hospital of I.M.S.,B.H.U. *Varanasi.* Patient was educated about the drug and the trial and his /her consent obtained and then registered for the above trial.

Aim : To evaluate the effect of *Triphala Kwatha* and *Yogaasanas* like *Suryanamaskara, Paschimottanasana, Salabhasana* etc. in obesity.

Inclusion criteria

- Age between 20-50 years
- Body Weight >60kgs
- B.M.I : 25-30kg/m2
- Presenting with the clinical features of obesity.

Exclusion criteria

- Below 20 and above 50 years
- BMI >30 kg/ m2
- Obesity associated with cardiac complications, moderate / severe HTN etc.
- Obesity secondary to hormonal deficiencies

Selection of drug and dose: *Triphala Kwath* with *madhu* was selected a/c to reference in C.Su.22/4 in the dose of 40ml /day per oral. Kwatha prepared by boiling 20gm of powder in 160 ml of water and reduced to 40ml.

Duration of Trial: 4 months with monthly follow-ups.

Results and Observations:N=20

Variable	BTMean	ATMean	% of improvement
Body Weight	65.52	60.34	40%
Blood Glucose (random)	223.65	168.62	60
S.B.P	156.24	126.42	50
D.B.P	96.4	88.2	62
Low back ache	2(pain score)	1(pain score)	50
Osteo arthritis of knees	2(pain score)	1(pain score)	50

Low back ache scoring: O- No pain

1 Mild pain with on and off aggravation

2 Moderate and constant pain

3 Severe with restriction of all movements

Osteo arthritis of Knees: ***O- No pain***

1 Mild pain with on and off aggravations at nights.

2 Moderate pain and constant pain

3 Severe with restriction of all movements

Discussion and Conclusion: *Staulya* is a metabolic disorder and the hyperfunctioning of the medo dathwagni is responsible in the pathogenesis. It can effectively controlled and the onset and the intensity of complications can be considerably delayed and reduced aswell by Ayurveda and Yoga. The results in the above clinical trial show that *Triphala kwath* and *Yogic asanas* increased the peripheral utilisation of glucose as evidenced by 60% reduction in the random blood glucose level. The therapy was more effective in reducing the (62%) DBP in comparison to SBP (50%) .The physical capacity to work also increased as the 40% weight loss was evidenced. The reduction in the severity of pain also enhanced the calibre of the patient

Based on the above results we can conclude that a simple remedy along with physical exercise in the form of *yogic asanas* is relatively smart choice of therapy in combating the silent but dangerous disease.

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Holistic health

Holism as a health concept has existed for ages outside of academic circles, but only relatively recently has the modern medical establishment begun to integrate it into the mainstream health care system. In the United States, the first National Conference on Holistic Health was held with the University of California, San Diego School of Medicine in June 1975.

Holism refers to the idea that an entity is greater than the sum of its parts. In the case of health, the entity in question is the human body. Holistic concepts of health and fitness view achieving and maintaining good health as involving more than just taking care of all the various components that make up the physical body— attention must be paid to aspects such as emotional and spiritual well-being as well. The goal is a wellness that encompasses the entire person, rather than just the lack of physical pain or disease.

Holistic health is not itself a method of treatment, but instead an approach to how treatment should be applied. The focus is no longer on just the disease, but the whole person. The role of the patient also changes in learning how choices, actions and attitudes affect the present condition, and how one can be an active participant in the healing process.

TVAK PAREEKSHA (EXAMINATION OF SKIN)-IV

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Syaavavarnah = Bluish colour. It is commended as "*Syaavam iti suklaanuviddha krishnavarnah*" (Vij.MN.55.40) "*Syaavah neelavarnah*" *(Vij.MN.8.22)* and "*Syaavah Kapisah*" (Hem.Ah.Su.12.51).

Ref: *Vaatakopah, Raktavahasrotoviddha, Kashaayarasaatyupayoga, Svedaatiyoga, Stambhanaatiyoga, Raktaatipravritti, Sasalya Vrana, Doosheevisha Keetadashta, Krikalaasa dashta, Makshikaa dashta, Vrischika visha, Vaatika Keetavisha, Lootha visha, Vaatika Lootha visha, Doosheevisha Lootha visha, Haalaahala visha, Vishadigdhaviddha, Vaatika Apasmaara, Vaatika Arsa, Dushta vrana, Vaatika Gulma, Pakva Gulma, Haleemaka, Sannipaata Jvara, Vaatika Kahalati, Kitibha Kushtha, Vaatika Kushtha, Vaatika Masoorikaa, Moorchaa, Nyaccha, Paamaa Kushtha, Revatee Graha, Rishyajihvaa Kushtha, Saraavikaa, Sataaru, Atipakva Sopha, Vaatika Udararoga, Vaatika Vaatarakta, Uttaana Vaatarakta, Gambheera Vaatarakta, Vicharchikaa, Vaatika Vidradhi, Paittika Vidradhi, Raktaja Vidradhi, Kshata Vidradhi, Vaatika Visarpa, Kshata Visarpa, Vaatika Visphota, Suddha Vrana, Vaatika Vrana, Paittika Vrana, Raktaja Vrana, Vyanga and Vaatika Vyanga.*

Udumbaraphalaabhaasah = Colour of ripened fig fruit. It is commended as

"*Pakvodumbarasannibhah iti lohitah*" (Vij.MN.59.14

Ref: *Kaphaadhika Keetavisha, Udumbara Kushtha and Paittika Vidradhi.*

Varnahaanih (Varnakshayah, Varnanaasah, Varnapranaasah, Varnasankaasah,

Varnavinaasah, Varnopaghaatah, Varno pataapah, Heenaroopah, Durvarnah, Ducchaayah, Nishprabhah, Chaayaavighaatah, Prabhaahaanih, Nashtacchaayaa, Suptacchavih,

Sushkacchavih= Light complexion. It is commended as "*Hataprabhah nashtakaantih* (Arun.Ah.N.2.77), *Prabhaahaanih kaanti naasah*(Hem.Ah.Su.11.16), "*Durvarnah nashtacchaaya*h (Chandra.Ah.U.3.34) and "*Nashtacchaayaa nashtakaantih*" (Arun.Ah. N.4.13).

Ref: *Vaatakopa, Pittakshaya, Ojakshaya, Kaphaavrita Udaanavaayukopa, Udaanaavrita Praanavaayukopa, Heenamaatraahaara, Raktapittastambhana, Rookshavastivyaapat, Kateekataruna Marmaviddha, Abhinyaasa Jvara, Andhapootanaa Graha, Arsopadrava, Chinnasvaasa, Himsaatmaka Graha, Jvara poorvaroopa, Asaadhya Jvara, Kshaya Kaasa, Paandu, Mrit Paandu, Rooksha, Jaraasotha, Udararoga, Aagantukonmaada poorvaroopa, Vishonmaada, Duhkhonmaada, Asaadhya Unmaada and Urahkshata.*

Vaivarnyam (Vivarnataa, Varnavikriti, Varnabhramsah, Anekavarnah, Naanaavarnah) = Discolouration. It is commended as "*Vaivarnyam prakritavarnaat anyavarnah*" (Dal.S.Su.12.16) and "*Mlaanagaatratvam*" (Vij.MN.2.4).

Ref: *Pittaprakopa, Tvaggata vaatakopa, Raktagata vaatakopa, Kaphaavrita Praanavaayukopa, Kaphaavrita*

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National workshop on Panchakarma

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PANCHAKARMA & KERALA SPECIAL TREATMENTS...

The role of *Panchakarma* Treatments in Preventive as well as curative aspects is getting realized all over the globe. The expertise of ancient Kerala physicians in developing effective modifications for the practical applications of *Panchakarma* has extensively accepted. The evolved treatment modalities are well known as KERALA SPECIAL TREATMENTS – most effective in eliminating the vitiated *doshas* and metabolic wastes.

The changing life style of modern man lacking physical activities and it leads to the accumulation of metabolic wastes in the body. Ayurveda having comprehensive modalities to eliminate metabolic wastes and vitiated *doshas* re-emerged as the unique treatment of modern time.

Nagarjuna Ayurvedic Institute, the education division of Nagarjuna Ayurvedic Group, leading manufacturers of quality Ayurvedic medicines is organising a national workshop on PANCHAKARMA & KERALA SPECIAL TREATMENTS for ayurvedic doctors in November 2008.

Highlights

1. A to Z on Panchakarma & Kerala Special Treatments.
2. Live demonstration of treatment procedures.
3. Opportunity for practical.
4. Interaction with eminent scholars & Physicians.
5. Follow up support to establish treatment centers, on the job updating and guidance.

Design

1. Interactive sessions in class room mode with multimedia presentations.
2. Practical in small groups to benefit maximum training on pre-treatment, treatment & post treatment procedures.
3. Daily review & updating.
4. Prize winning paper presentation for delegates (Ten papers of 15 minutes each).

Duration

★ Six days including a post work shop sight seeing programme covering visit to spots of interest.

Accommodation & Food

Accommodation shall be arranged in Kalady, the town near by and food in the workshop venue.

Venue

Nagarjuna Ayurvedic Retreat Ltd. (Purnagram), Mulankuzhy, Ernakulam (Dist); Kerala (State).

"Admission will be restricted to 60 candidates in first come first basis"

Contact Us

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4. St Thomas Church - the International Pilgrim Centre, Malayatoor Temple of *Dhanwanthari* temple, Thottuva, Kalady Elephant Training Centre - Kodanadu, Kalady, *etc.*

REGISTRATION FORM

1. Name :

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3. Date of Birth :

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6. Experience :
   Whether, Govt. Service or
   Service in autonomous organization-
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7. Any scientific paper read before the :
   National / International gathering, if yes
   Mention the event and the topic of subject:

9. Are you interested to present a paper in the prize winning section?
   If yes Attach the abstract with soft copy in MS word / Page Maker

Signature
(Applicant)

The Psychomatic.... from P. No. 06

iii) **The immune system:** The fluidity principle provides inner immune capabilities against diseases. The light principle burns and destroys toxins within the body. The life energy activates the adaptability of the immune system to long-term diseases.

iv) **Nervous System:** The life energy is responsible for discharge and co-ordination of the impulse of the nerves, the light energy governs the act of perception and feeling, while the fluidity principle is responsible for the lubrication of the nerve channels. When deranged these effectuate the breakdown of the total nervous system.

v) **The mind and the sense organs:** These constitute the significant coordinating systems within the body. The puzzling question regarding the essentiality of the restraint of sensual and mental categories of operation can be resolved if one clearly understand the functions of these. The three divisions of vital energy play a significant role in bringing out the proper functioning of the senses and their subtle counterparts. The sense organs are always directed outwards. During sensual activities, energy is lost, when excess energy is lost as a result of intense indulgence in sensual activities, the internal orientation towards the growth of intellect or the functioning of cells is affected. Likewise, the over usage of motor organs can lead to the loss of material energy of the body. This dries up the water content in the body. It also causes evolution of waste gas from the body. The light energy brings in the excess production of adrenaline, the resultants of which is anger, fear, worry or paranoia. High flow of life - energy leads to excessive usage of energy from within like immune systems. This also generates deeper vitality imbalances within the body that involves deeper bodily systems-the nervous, reproductive, the senses and the subtle mind. The main diseases brought to limelight in such contexts are abnormal growth / disorders in children, premature ageing, metabolic problems, hormone, imbalances, nerve systems related problems, allergies, degenerative diseases like cancer, AIDS etc. When the subtler life -energy is deranged, physical functions at deeper levels of the body (tissues / cells) are disturbed affecting all organs and internal systems. Psychological imbalances are thus resulted whereby or other psychological problems may arise.

The *Prâna* (The principle of life energy) and its manifestation: The material body of living beings depends on the life energy termed *'Prâna'* in the ancient literature of India. It is the primary energy of the body. Any conceivable change that can be brought to the material body can be possible only through the understanding of the working of life energy. There are five main divisions of *Prâna, Apâna, Vyâna, Udâna, Samâna.* Five sub-divisions are also there- *Nâga, Kûrma, Krkala, Devadatta* and *Dhananjaya.* According to *Prasnopanisad*[1] there are 72,72,00000 veins and arteries *(nâdi)* in the human body and all these *prânas* travel through them. *Prâna* is the inwardly moving air. It is the basic energy of life and is the vital energy in the brain. The main function of *Apâna* is to eliminate water from the body. It is the chief architect of developing immune within the bod. *Udâna* is the upward moving air. It governs growth of the body speech, effort etc. *Samâna* is the balancing air, moving from periphery to the center. It aids the process of digestion and absorbs the experiences in the mind. *Vyâna* is the outward moving air-center to the periphery. It controls the air circulation.

Motion and is responsible for controlling emotion and thoughts. If any imbalance in these vital forces occurs, the corresponding diseases may occur.

The proper functioning of these *prânas* is very essential for a sound body and mental tranquility. These energies bring in the homogenization of

various experiences - sensory, emotional or mental and a concentration of different energies in their respective places is very important. In the order of functioning, the link between these five flows of energy is as follows

Prâna (Intake of food)

↓

Samâna (digestion)

↓

Vyâna (circulation)

↓

Udâna (release of energy)

↓

Apâna (elimination of wastes)

It is an input - processing and output methodology. In universalizing the aspect of functioning of different prânas, it can be said that the function of Udâna is transformation of earth (food) into water → fire → air → ether while that of *Apâna* is Ether → air → fire → water → earth.

While *Prâna* is the universal governing force, Udâna is responsible for positive mental energy, will and strength. It is the source of development of consciousness. Therefore it is said 'The mind moves with *Udâna Vâyu'* It is essential to localize the positive energy of *Udâna* and the negative energy of *Apâna.* The later eliminates the negative thoughts and emotions. So, each of these aspects of energy has its own peculiar role to play within the body. Similarly, the principles of *Prakrti* also have these give ingredients. In this way it can be clearly asserted that space, energy and mind are closely connected to a considerable extent.

Next Issue

Music Therapy

Since time immemorial, music has been used in connection with medicine and healing. Many cultures recognize the importance of music and sound as a healing power. In the ancient civilizations of India, the Orient, Africa, Europe and among the Aboriginal and American Indians, the practice of using sound to heal and achieve balance from within has existed for many years.

In the Indian context, the most important aspect of sound is the word *OM.* It is said to hold a powerful influence over the human mind and believed to create vibrations within the body. Many *ragas* have the potential to calm, energize or heal the body as so desired.

Research shows that the right side of the brain responds to music as it does to most creative arts. According to experts, our response to music is far more than an auditory response. Listening to music and appreciating music is a complex process that involves memory, learning and emotions. They are vibrations that affect our heartbeat, blood flow, brain waves the release of endorphins and the entire body chemistry.

What seems clear, in most studies, is that the ability to experience and react to music is deeply embedded in the biology of the nervous system. Different networks of neurons are activated, depending on whether a person is listening to music or playing an instrument, and whether or not the music involves lyrics.

Research has shown that music can benefit ailments like dementia, Parkinson's and Alzheimer's disease, dyslexia, heart conditions, blood pressure and respiratory problems. Singing can help people with speech impediment improve their articulation, rhythm and breath control.

CRITICAL ANALYSIS OF EXERCISES IN AYURVEDA

* Dr. ASHOK PATIL ** Dr. RAMANA. G.V. *** Dr. SAJITHA. K.

INTRODUCTION

Ayurveda, the health science gives prior importance to positive health and preventive health. Objectives of the science stress these points. To overcome and as well as to prevent the aliments vivid measures have been explained in this science. It is mentioned that if person follows the measures explained in the contexts of daily regimens and seasonal regimens, such person will not suffer with any sort of aliments. In daily regimen contest, exercise is explained with its multidimensional (preventive, promotive and restorative aspect) beneficiary effects.

The reference includes general idea about the practice, definition, benefits and also highlights the contraindications and the ill effects of excessive practice. It specifies the duration and time of practicing *vyayama* for individual. It also mentions assessment of the exact duration of practice.

ANALYSIS ON DEFINITION

The activity which produces tiredness to body can be considered as *Vyayama*. Here only *sharira* is mentioned rather including *Mana*. So the activity which brings physical tiredness predominantly is considered as *vyayama*. Stretching of different parts of the body can be considered. The exercises must induce *ayasa* but not *shrama*. Where as if these exercises exceed then it will induce *shrama*. Where as such *ayasa* should be *mano anukoola ayasa*. (*Shareera chesta* done according to ones liking)*[1]. (*Chamkramanameva vyayamah*).

AYASA AND *SHRAMA*

Isotonic exercises are those exercises in which there is continuous vasoconstriction followed by vasorelaxation and thus decrease peripheral vascular resistance and decreases Diastolic Blood Pressure and decreases Systolic Blood Pressure. For example, jogging, swimming, brisk walking, cycling etc.

Isometric exercises are those exercises in which sustained muscle compression followed by sustained vaso constriction which leads to increase in peripheral vascular resistance hence it increases Diastolic blood pressure and simultaneously increases Systolic blood pressure. For example, body building, weight lifting and heavy exercises.

Hence the effect of isotonic exercises can be considered as *ayasa* whereas the effect of isomeric exercises can be considered as *shrama*. To get the beneficiary effect of *vyayama* one must undergo isotonic type of exercises and one must avoid isometric exercises.

WHO grading of muscular exercises

Grade	HR
Light	<100
Moderate	100-125
Heavy	125-150
Severe	>150

Analysis on beneficiary effects

Laghavam can be understood as lightness due to *deha laghuta.(Indu). Sanchita medha kshaya*

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brings *shareera laghuta.* Both *shareera and mana* are free from *jada bhava.* Not doing enough exercises and following sedentary habits leads to the *sanchaya* of *meda* and leads to *medoja vikara.* exercise doesn't alter the *Dhatu saamyavasta* instead it nullifies excessively accumulated *medo dhatu (ksharana).* Due to *kshaya* of *Sanchita medha,* all parts of body become distinct and firm. Moments of body parts lead to proper blood supply to muscular tissue hence becomes stiff and healthy. Blood circulation to skeletal muscles improves from 3 – 4Ml/100gm of muscle/min to 60-80ml in moderate exercises and 90-120ml in severe exercises.

Analysis on Indications and Contraindications

Exercises are mainly indicated in *kaphaja vikaras.* It is contraindicated in *baalyavasta* due to *aparipoornata of Dhatus* and *baalas* will not having enough strength to tolerate the *ayasa* produced after doing exercises. It is also contraindicated in elder aged as vata *dosha* dominance in this *vaya* and chances of *vata prakopa* are likely to happen if one does exercises in this age. *Dhatus* are in *kshayavasta* and *sharira bala* is *alpa* and hence cannot tolerate the *ayasa.* And also one who is having *pitta pradhana prakruti* and one who is suffering with digestive disorders are also contraindicated for doing exercises.

Analysis on fixation of duration

One must do exercise up to his a*rdhashakti* level. Assessment of this *ardhashakti* is also mentioned in *sushruta.* Here by observing subjective matters such as appearance of sweat on forehead and armpits, dryness in the mouth and tiredness, Respiration becomes quick and forced to breath by opening the mouth. Once the person shows these features then person should asked to stop doing exercises. So it is clear that *ardha shakti pramana* differs from person to person. It once again depends on so many factors such as type of exercise, strength of person, season and other factors *ardha shakti pramana* can also be fixed by considering the objective parameters such as heart rate, blood pressure etc. and thus the exact limitation and duration can be fixed.

For example: by taking consideration of heart rate, one can fix the *ardha shakti pramana* by using this simple formula i.e. *Heart rate = (220 – age of person) X 0.6 to 0.7.* It means if 20 years aged person does the exercise, he must stop doing exercise once the heart rate reaches 120 or else he must maintain the heart rate between 120 and 140. But here only age factor is considered. Other factors (Age, Strength, Physical condition, Time, Season, Diet) also to be considered along with it.

Ritu anusara vyayama pramana

Strong persons and who consumes *snigdha bhojana* regularly should do exercise upto their *ardha shakti* level because they will tolerate the *ayasa.* In *shishira, hemanta* and in *vasanta kala, sharira bala* will be at its optimal level and thus person can tolerate the *ayasa.* That means in *shresta bala kala and madhyama bala kala, balavan purusha* can do the exercise upto his *ardha shakti pramana* in these seasons whereas *alpa balavan purusha* should do exercise in *Vasanta kala* upto his *ardha shakti* level but in other seasons, it should be still less. That means he should do minimal exercises even not reaching up to *Ardha shakti.*

Ritu	*Shareerabala*	*Dosha stiti*	*Pramana of vyayama*
Shishira	*Shresta*	*Kapha sanchaya*	*Ardha shakti*
Vasanta	*Madhyama*	*Kapha prakopa*	*Ardha shakti*
Greeshma	*Heena*	*Vata sanchaya*	*Still less than ardha shakti*
Varsha	*Heena*	*Vata prakopa*	*Still less than ardha shakti*
Sharad	*Madhyama*	*Pitta prakopa*	*Still less than ardha shakti*
Hemanta	*Shresta*	*P. prasham*	*Ardha shakti*

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ROLE OF FOOD IN HEALTHCARE -AYURVEDIC PERSPECTIVE-III

*Dr. JYOTHI MARY THOMAS

SPECIAL DIET FOR VARIOUS CLASSES

INFANTS AND CHILDREN

Kasyapa samhitha classifies children into three classes according to their food pattern.

a. *Ksheerada:* Baby fed up only by breast milk. i.e., upto the age of six months.

b. *Ksheera-annada:* Period of feeding both with breast milk and other food stuffs. i.e. upto the age of two years.

c. *Annada:* Above the age of two years.

a. *Ksheerada: Ksheerada* should fed up only with breast milk. If the mother has not enough breast milk, another healthy lady, without any genetic disease, and whose baby is alive and healthy can be arranged for the feeding purpose.

Introduction to breast

According to *Charaka,* first feeding must made with unequal quantity of honey and ghee, chanting *manthras*. Then right breast should be offered for sucking.

Susrutha and Vagbhata, opined to continue this till fourth day.

Feed the child a particular combination of gold, ghee and honey (*hemaprasa*) first. Then butter equal to the palm full quantity of child with breast milk should be given for the next three days.

Alternatives of breast milk

Pure goat's milk or cow's milk diluted with three times water can be used.

Signs and Qualities of pure breast milk.

If the milk pour into water readly spreads and mixes with it, that milk is good in quality.

Breast milk is light, cold in potency, stimulates digestive fire, reduces *vata* and *pitta* and good in eye diseases.

B. *Ksheera-annada*

Basic rules

- Must have *Satwik* nature.
- Freshly prepared.
- Less salt, spice, chilly, ginger.
- Avoid onion, garlic etc.
- Always use some oil, especially ghee.
- Use warm food, do not heat again.
- Always use *madhura rasa pradhana* (carbohydrate rich) food.
- Must be *hrudyam*-Good in taste, smell and appearance.

Weaning time: On 6th month

Introduce *shadrasas* in small quantity.

Porridges with raggi, barley, wheat, banana etc., Mashed rice, potato, dal, rice water, coconut water, etc. can be used for weaning.

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C. Annada

More quantity of all types of food, by keeping the above rules.

II PREGNANCY

The women should be supplied with things she likes and which are good for health, nourished with more butter, ghee and milk.

Other Rules

- Always take food in proper time
- Avoid fasting
- Avoid pungent, hot, heavy food.
- Avoid alcoholic drinks, meat.
- Always take warm water.
- Take *hrudya, satwika* and balanced food.

Longings: Ayurveda consider foetal heart originates from maternal heart always and advise to honour the longings of the pregnant. Even unhealthy things shall be given as special diet for particular months:

7th month: If there is itching and burning, give food prepared with little quantity of salt and fat, easy to digest and sweet in taste. Can use drinking water with salt and coriander.

8th month: Gruel with more fat.

9th month: Food mixed with meat juice and ghee.

Thick gruel with more fat.

III. POST NATAL PERIOD

If the delivered feels hungry, oil or ghee containing the powder of black pepper and dried ginger.

After the digestion of the fat, thin gruel prepared with black pepper and dried ginger.

From 3rd to 7th day.

Thick gruel processed with nourishing vegetable added with more fat.

or

Rice soup prepared with milk.

From 7th day onward.

Change gradually to nourishing food.

From 12th day onwards

Meat can be introduced in the form of soup.

IV. BREAST FEEDING

Take *Satwik, madhura rasa* predominant food. Avoid alcohol and incompatible food. Wines, meat soups, milk, green gram, wheat water and flat bean etc. are good to increase breast milk.

V. ACCORDING TO *PRAKRUTI*
(Body-mind constitution)

a. *Vata* constitution

Since *vatic* persons are lean and weak, there is chance for *vata* vitiation, always take food with properties to pacify *vata* and also consider the *'vishamagni'* in *vata* constitution.

General rules: Always take warm food. Can take some spicy food. Avoid extreme chilled food and drink. Minimize intake of rawfood. Take food in small quantities with more frequency. Can have all nourishing food, animal soups, fish, oily food etc. Avoid dry food. Emphasis sweet, sour and salty tastes.

Diet chart for *vata* constitution: Main dishes should prepared with red rice, njavara rice, wheat, black gram, raggi. Always add ghee with wheat dishes.

They can use meat of beef, pork, mutton, chicken and turkey, egg from hen, duck, turkey.

Milk products: Butter, butter milk, curd, paneer, ghee.

Vegetables: All vegetables except under ground

tubers, mushroom and bitter gourd.

Pulses: All pulses except bengal gram, big pea, dal.

Fish: Fresh water as well as salt water fishes, sea food etc.

Avoid: Bengal gram, brown gram, dal, potato, underground tubers except elephant's foot, pigeon pea, curry leaves duck, unripened mango, carbonated drinks, dried fruits, dried meat, dried fish.

***b. Pitta* constitution:** *Pitta* persons have more digestive fire and there is a chance for the *pitta* to get vitiate, always take more heavy, cold potent food.

General rules: Avoid warm, spicy, hot potent food. Minimize the intake of beverages and wine. Reduce the use of pungent, sour and salt tastes. Take more raw items, more sweet astringent, bitter tastes and chilled food.

c. Diet chart for *pitta* constitution: Main dishes with rice, red rice, njavara rice, barley, soochi, wheat, raggi, oats. With little bit oil (Ghee is more advisable).

They can use: Vegetables and pulses, Ash gourd, white gourd, bitter gourd, snake cucumber, snake gourd, Indian spinach, ivy gourd, all leafy vegetables. Radish, drum stick, beetroot, underground tubers in small quantity.

Avoid: Carrot, brinjal, potato, unripened mango, garlic and asafoetida. Use all pulses except, flat bean and horse gram.

Fruits: Almost all fruits except, water melon, lemon and orange.

Meat: Pork, beef, turkey, mutton, chicken in small quantities.

Egg. All eggs except hen egg.

Fish: All fishes except prawn.

Oils: All oils except mustard oil and gingelly oil.

Others: Jaggery, sugar, corriander and rocksalt, deserts.

Soft drinks: Coconut water, fruit juices, curd and sugar.

Drinking water: Water boiled with curry leaves, corriander, white sandal, fried rice etc.

Avoid: All wines and beverages.

g. *Kapha* constitution: *Kapha* persons have less digestive fire. Always take hot, hot potent, food. Give importance to bitter, pungent and astringent tastes.

General rules

1. Always take warm foods
2. Take food in small quantities.
3. Avoid heavy food, cold potent food, carbonated food, frozen food and deserts.
4. Reduce the use of sweets, milk, milk products, oils, fat, egg, big fishes etc.
5. Take plenty of fruits and fresh vegetables.
6. Use more honey.

Diet chart: Main dishes with rice, wheat, raggi, oats etc. Wheat and oats are more advisable than rice, avoid black gram.

Vegetables: White gourd, bitter gourd, snake gourd, curry leaves, ginger, onion, garlic, Indian cereal, reddish, ajwa, drum stick, brinjal, carrot, Indian gooseberry etc., amosphophallus.

Avoid: Potatoes.

Pulses: Green gram, big pea, bengal gram, dal etc.

Fruits: Since almost all fruits have cold potency, use fruits in moderate quantity. Use only in day time.

Meat: Deer, rabbit, kiwi, chicken, pigeon.

Avoid: Sheep, horse, duck, crab, molluscous and torture.

Fish: Small fishes from saline water.

Avoid: Big fishes and prawns.

Eggs: Not so good.

Milk and milk products: Over use of milk is not advisable.

Use: Goats milk and camels milk. Ghee in moderate quantity.

Avoid: Cows milk and buffalos milk, curd and butter.

Oils /Fat: Use in small quantity. Gingelly oil and mustard oil are more advisable.

Others: Wines, beverages, honey.

Soft drinks: Lemon+ginger+water. Honey with water.

Avoid: Carbonated drinks.

Drinking water: Always use warm water boiled with dried ginger, garlic, curry leaves. Holy basil, Khadira etc.

ACCORDING TO SEASON

A. EARLY WINTER

General principle: Digestive fire is powerful.
Main tastes to be used : sweet, sour and salt.

Food items to be used: Main dishes with flour of wheat, blackgram, rice, freshly harvested corn.

Meat: Meat from all fattened animals.

Soups: Meat soup mixed with fat.

Wines: Wine from jaggery, supernatant portion of grapes wine.

Vegetables: More juicy vegetables.

Soft drinks from sugar cane juice.

Use lot of milk and milk products. Drinking water should always be warm.

B. SPRING

Kapha, which increased in winter become liquefies by the heat of sun, diminishes the digestive fire.

Food should be easily digestible and dry. Bitter, Pungent, astringent, salt tastes are good.

Avoid: Sweet, sour taste.

Food items to use: Main dishes from old barley, old wheat. Meat of animals of desert like land can be used.

Meat from deer, rabbit, kiwi and chicken can use. Cook it in fire without oil.

Vegetables of fruits: All light vegetables fruits with *deepana* quality, avoid brinjol.

Pulses: *Deepana* type, greengram, flat bean, kidney bean, bengal gram, horse gram, corn, mustard seed.

Soup: Only veg. soups with little oiled.

Fish: Not advisable.

Juices: With mango, coconut etc.

Soft drinks: Honey diluted in cold water.

Drinks with fruit.

Water with dried ginger.

Drinking water: Water boiled with dried ginger with acacia catchu, fried rice etc. Garlic water.

Others: Always use asafoetida, ajwain.

C. SUMMER

Use more sweat taste. No beverages. Try to avoid pungent, sour and salty tastes. Try to use sweet, light, fatty, cold and liquid food.

Main dishes: With wheat, barley, white rice.

Veg: Ash gourd, ivy gourd, snake gourd. Avoid drum stick, brinjol and carrot.

Fruits: Mango, Jackfruit, Monkey jack, Coconut, Pomegranate, Grapes etc.

Drinking water: Kept inside a fresh mud pot, along with leaves of plantain and coconut and made fermented.

Diary products: Cows milk, buffalos milk, butter, curd.

Some classical preparations

a. ***Rasa:*** Very thick

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GARUDAKODI

(Aristolochia indica. Linn)

- An antidote against snake poison

* BABY JOSEPH AND SOPHY PAUL

Malayalam	:	***Garudakodi***
Sanskrit	:	***Iswari***
English	:	***Indian Birthwort***
Hindi	:	***Hooka-bel***
Family	:	***Aristolochiaceae***

Distribution & Habitat: The plant found scrambling over hedges and bushes throughout India.

Habit and General features: It is a perennial twiner with long, slightly tuberous roots. Leaves simple, alternate, short petioled, ovate lanceolate. Flowers greenish purple pitcher shaped upto 4 cms long basal part swollen and funnel shaped. Seeds many with papery wings.

The name iswari indicate it is useful to have the power to neutralize or resist.

Aristolochia means "excellent birth" and refers to the traditional use of the fresh juice to induce labour. In India root was used mainly to ease childbirth.

Part used: Whole plant

Actions and Uses : The dried root of the plant is used in snake poison, insect bite, *jwara, krimi* and *vrana.*

The root and rhizomes useful in gastric stimulant, bitter tonic, dyspepsia, bowel troubles of children and in fevers. The leaves are stomachic, tonic and anti periodic.

Ayurvedic Properties:

Rasa	-	*Tiktha, Katu*
Guna	-	*Laghu, Ruksha, Tikshna*
Virya	-	*Ushna*
Vipaka	-	*Katu*
Actions	:	*Kaphavatahara, Vishagna, Deepana.*

Therapeutic uses: *Nastartava, Krimi, Jwara, Swasa, Kasa.*

Important Formulations: *Kaayathirumeni enna, Nilidalaadi thailam, Paranthyaadi thailam, Pathadi gulika* etc.

Chemical constituents: The penanthrene alkaloid Aristolochic acid, aristolochine and other poly substituted penanthrene derivatives are the major constituents. In fruits present saponins and flavonoids. The oil of the roots was found to contain glycerides of palmetic, stearic, lignoceric, cerotic, oleic and linoleic acids. Sitosterol, ceryl alcohol, isoaristolochic acid, reducing sugars, alkaloid aristolochine reported. Tannins, isoaristolic acid, allantoin, ishwarone, ishwarane, etc.

Ethnobotanical studies: Aristolochia indica is used as an antidote to snake bite and insect bites (Singh 1998), in menorrhagia (Reddy 1989). The seeds are used as anti inflammatory. Antitussive , in arthritis and in biliousness (Tripati 1996). Leaves

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are used as antispasmodic, antiasthmatic (Iha 1996), for acne and ulcers (Reddy 1989), in fever and headache (Dixit 1984) and as an antidote to snake bite (Kapoor 1980). Root is used for leucoderma, in menorrhagia, contraceptive and analgesic (Varma 1996) in worm infestation, rheumatism, skin diseases, fever, cold, cough, flatulence. Dyspepsia (Maheswari 1984) as diaphoretic, febrifuge, anti natal treatment, antidysenteric (Saha 1998), tonic, stimulant (Kapoor 1990). Root and leaves are used as emetic, emmenagogue and abortifacient agents (Imam 1997).

Dutta and *Sastri* reveals different fractions from the total alcoholic and aqueous extracts of the root and stem tested for ecbolic property on isolated guinea pigs and rats uteri oxytocic activity by potassium chloride present in the above extracts. The alcoholic extracts didn't show abortifacient actions (Anand 1962).

50 % ethnolic extract of the plant in a preliminary biological analysis found to be devoid antibacterial, anthelminthic, antiviral, hypoglycaemic and anticancer activities.

The methanolic extract of the plant significantly inhibited (80 %) aflatoxin production (Shankarrao 1994). Aristolochic acid obtained for the plant showed chemosterilization effect. Fresh adults treated with chemosterilant exhibited a very haphazard effect with some oocytes highly vitillogenic and some quite degenerate.

Indian institute of experimental medicine, Kolkatta conducted detailed study on reproductive biology with Aristolochia indica. Root extract in ether, chloroform and alcohol administered orally at the single dose of 100 mg/kg bw. Given at the post implementation period showed 100 % interoceptive activity in mature female mice. No toxic effect reported. (Pakrashi 1976) alcoholic and petroleum ether extracts of the root at 1:20 concentrations affected the oestrous cycle adversely ending at the dioestrous stage in female rats. Biochemical studies reveal significant reduction in RNA, sialic acid, glycogen of uterus vagina and ascorbic acid of adrenal gland (Pandey 1993)

In mice the water soluble acidic part of alcoholic extract of the root showed 100 % interoceptive activity at a single dose of 50 mg/kg orally (Pakrashi 1977).

Aristolic acid isolated from the root given in the dose of 60 mg/ kg bw prevented Oestrogen induced weight increase and epithelial growth of mouse uterus.

In male reproductive system:The water soluble part of the chloroform fraction of the root when fed orally at a dose of 75 mg/kg caused degenerative changes of varying degrees in the seminiferous germinal cell components with prominent nuclear degeneration in all cell types. Significant reduction in the fluid content in the accessory sex organs of the experimental mice indicating an impaired endocrine function of the testis. (Pakrashi 1977).

Anti inflammatory: Sharma 1977 reveals the water soluble portion of the alcoholic extract at a dose of 100 mg/100g administered in male rats for 16 days was found to exhibit anti inflammatory action.

Aristolic acid was not found mutagenic to bacterial system. The juice of the root was found to have relaxant effect on the rhythmic contractions of uteri of rats and human beings.

The acqueous part of ethanolic extract of the root at a dose of 250-600 mg/kg didn't produce any significant antipyretic activity in rats compared to aspirin. The ethanolic activity having diuretic activity. (Dhawan 1977).

The alcoholic extract of the root having antibacterial activity, the aqueous and ethanolic extract shows antifungal activity. The hexane extract showed insecticidal activity.

Antimicrobial activities: Kumar V.P, Chauhan N.S, PERD centre, Ahamedabad studied the antimicrobial activity of Aristolochia indica. It exhibited significant antimicrobial activity and

properties that support folkloric use in the treatment of some diseases as broad-spectrum antimicrobial agents.

Ravikumar S, Nazar S from Manonmaniam Sundaranar studied the antibacterial activity of Aristolochia indica. The butanolic extract of Aristolochia indica showed maximum inhibitory activity against the cattle pathogen Listeria monocytogen. The mean zone of inhibition indicates that the growth of Salmonella enteritidis and Pseudomonas aeruginosa were highly inhibited by the coastal medicinal plant extract than the other bacterial species and also the antibacterial activity was found higher in the butanolic extract than water extract.

Cultivation : Aristolochia grow on a wide range of soil from sandy to clayey loams with good organic contents. Seeds or tubers used as planting material. Cow dung or any organic manure should apply when preparation of land. After 2 years dig out the soil and collects roots.

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.

RESULTS AND DISCUSSIONS

Macroscopic features:

Roots : long, cylindrical, a few irregularly bent, surface almost smooth with fine longitudinal wrinkles and transverse cracks, external surface light greyish brown, inner whitish, fracture short and splintery, odour camphoraceous, taste strongly bitter.

Microscopic features:

Roots – Cork 8-10 layers, composed of tabular, thin walled cells ,cork cambium single layered, secondary cortex 15-17 layers of thin walled, plenty of simple, round to oval starch grains, in the middle region stone cells round, each xylem arm is capped by thin patches having simple pits and radiating canals. A ring of cambium present between phloem and xylem, xylem consists of large vessels, tracheids, fibre tracheids and parenchyma, medullary rays 8-10 in number, multiseriate, scattered groups of stone cells present.

PHYSICAL CONSTANT VALUES

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

THIN LAYER CHROMATOGRAPHY

Powder - 5 gm
Extract - Ethyl alcohol
Solvent System - Toluene : Ethyl acetate – 85 : 15

Rf Values	Colour in UV rays
0.21	Blue
0.60	Blue
0.89	Red
0.96	Blue

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Tvak Pareeksha..... from P. No. 15

Udaanavaayukopa, Maamsaavrita vaatakopa, Lavanarasaatyupayoga, Kshutanigraha, Vamana vyaapat, Vasti vyaapat, Tutthadagdha, Aparihaarasevana, Parihaarakaala mithyaayoga, Tvaggata salya, Kateekataruna Marmaviddha, Aamaasayagata visha, Doosheevisha, Krikalaasa dashta, Lootha visha, Savisha damsa, Moolaka visha, Vishadigdha viddha, Paittika Alasaka, Andhapootanaa Graha, Arajaska, Sahajaarsa, Chinna Svaasa, Daaha Jvara, Granthi Visarpa, Gulma, Hridroga, Asaadhya Baalagraha, Jvara poorvaroopa, Aagantu Jvara, Kapaala Kushtha, Paittika Khalati, Jaraaja Klaibya, Krimi, Kushtha, Kushtha poorvaroopa, Kaphaja Kushtha, Tvaksthita Kushtha, Lohitakshaya, Masoorikaa poorvaroopa, Naigamesha Graha, Paanduroga, Pitri Graha, Poothinasya, Svayathu, Pachyamaana Sopha, Vaatika Upavishtaka, Urahkshata, Vaatarakta poorvaroopa, Asaadhya Vaatarakta, Tridoshaja Vidradhi, Paittika Visarpa, Vishoochikaa, Paittika Vishoochikaa and Vaatika Yonikanda.

***Roopa* (Appearance)**

Choornaavakeernaabhah = Dusty appearance. **Ref**: Asaadhya Vrana.

Malacchavih (Malah, Maleemasah) = Dirty appearance.

Ref: *Pisaacha Graha, Prameha poorvaroopa* and *Jaraasosha.*

Peeta Raajee = Yellow lines. **Ref**: *Rudita damsa.*

Raktaraajee - Red lines. **Ref:** *Rudita damsa* and *Kardama Visarpa.*

Amanojnadarsanam - Unpleasant appearance. **Ref:** *Dushta Vrana.*

Aatata (Aayaama) - Stretched skin. It is commended as "*Aayaamah vistaranam*" (Chakra.C.N.3.7), "*Aayaamah sankuchita anga desasya deergheekaranam iva*" (Dal.S.Ci.1.70) and "*Aatanyate vistaaryate*" (Chakra.C.Ci.28.30).

Ref: *Snaayugata Vaatakopa, Snaayu Marmaviddha and seen in Vaatika Granthi, Vaatika Gulma, Vaatika Kushtha, Tvaksthita Kushtha, Paarsvasoola, Uttaana Vaatarakta, Vaatika Visarpa and Vaatika Vrana,*

Upalepa *(Upadeha, Upasneha, Pralepa)* = Coating appearance. It is commended as "*Upadehah liptam iva*" (Dal.S.Su.22.11).

Ref: *Kaphakopa, Sannipaatakopa, Heena sodhana nasya and seen in Kardama Visarpa, Kushtha poorvaroopa, Kaphaja Kushtha, Medogata Kushtha, Prameha poorvaroopa, Kaphaja Visarpa and Kaphaja Vrana.*

Kathinah = Hard skin. **Ref:** *Slaishmika Lootha visha.*

Kardama iva - Resembles of wet mud. **Ref**: *Kardama Visarpa.*

Krisataa - Thinness of skin. **Ref:** *Tvaksthita Vaatakopa.*

Kledah (*Upakledah, Vikledah*) = Wet skin. It is commended as "*Kledah mala ardravatvam*" (Hem.Ah.Su.12.52).

Ref: *Pittakopa, Kaphakopa, Amlarasa atyupa, Atisnigdha vranavartiyoga, Sastrakshaara, Agnivibhrama, Galagolikaadashta, Lootha visha, Paittika Lootha visha, Lootha doosheevisha, Rakta Lootha visha, Sveta Lootha visha, Asaadhya Mooshika visha, Savishadamsa, Triteeya vishavega, Savisha Mootrasparsana, Savisha Pureeshasparsana, Savisha Savasparsana and Vishadigdhaviddha. It is manifested in Aroomshikaa, Arsobhagandara, Kardamavisarpa, Mandala Kushtha, Paittika Kushtha, Kaphaja Kushtha, Paamaa Kushtha, Rishyjihvaa Kushtha, Sarkaraarbuda, Saraavikaa, Sataaru, Paittika Sopha, Kshataja Sopha, Udara rishta, Udumbara Kushtha, Valmeeka, Raktaja Vaatarakta, Vinataa, Asaadhya Visarpa and Paittika Vrana.*

Ghanam *(Bahalam)* - Thick Skin. *"Bahalam ghanam" (Yog.C.N.5.7- 2).* **Ref:** *Charma Kushtha, Kaphaja Khaalitya, Kitibha Kushtha, Kaphaja Kushtha, Maamsagata Kushtha, Maamsastha Masoorikaa, Raktapaaka, Udumbara Kushtha and Kaphaja Svitra.*

Chanchumaalakayuktam - Compact beak like ring mark on skin. It is due to *Sarpita dashta.*

Tanu *(Abahalam)* - Thin skin. *"Tanu aghanam" (Vac.M.N.49.15), "Tanu asaandram" (Yog.C.Ci.7.14) and "Tanu abahalam" (Chakra. C.Ci.12.12).*

Ref: *Aruna Kushtha, Jaalagardabha, Kapaala Kushtha, Maamsastha Kushtha, Raktastha Masoorikaa, Rishyajihvaa Kushtha, Sidhma Kushtha, Vaatika Sopha, Paittika Sopha, Atipakva Sopha, Svitra, Asaadhya Udara, Visphota and Vaataraktaja Vrana.*

Bhairavah (Ghorah) - Skin with bizzare look. It is due to Jaalinee Lootha visha.

Ref: Dushta Vrana.

Valih - Wrinkles. *"Valih sithileebhootam* ***Charma"*** *(Yog.C.Su.26.43.3) and "Valih tvaksankochah" (Dal.S.Su.35.29). It is due to Lavanarasa atiyoga and seen in Pakva Sopha and Atipakva Sopha.*

Sithilataa *(Saithilyam)* - Looseness of skin. It is due to *Atidagdha and seen in Sadyovrana* and *Pakva Sopha.*

Sookapravardhanam - Adherent bristles like appearance on skin. It is seen in *Sookavrindadashta.*

Sankochah *(Kochah, Nikunchanam)* - Contraction of skin. *"Tvak kochah tvak sankochah"(Dal.S.N.5.9).* It is due to *Stambhana atiyoga, Tvakdagdha and Savishapraanidashta.*
Ref: *Vaatika Kushtha and Mahaa Kushtha.*

Siraavritah - *Manifestation of vein on skin.*
Ref: *Kardama Visarpa, Paittika Khaalitya* and *Kaphaja Vrana.*

Sutejah - Dazzling appearance. *"Sutejasam kaantiyuktam"(Chandra. Ah.U.4.21).*

Ref: *Yaksha Graha.*

Styaanam - Solid or massive skin. **Ref:** *Mandala Kushtha.*

Sthirah - Stable skin. *"Sthiram Kathinam"(Vij.M.N.49.12) and "* ***Sthiratvam achalatvam"*** *(Vac.M.N.49.27).* It is due to *Sandhyasthidagdha.*

Ref: *Mandala Kushtha, Kaphaja Kushtha, Maamsagata Kushtha, Kaphaja Visarpa, Kapharaktaja Vrana, Asaadhya Kapha Vrana and Rugna Vrana.*

Snaayujaalaavatah - Covered by sinew. It is seen in *Kaphaja Vrana.*

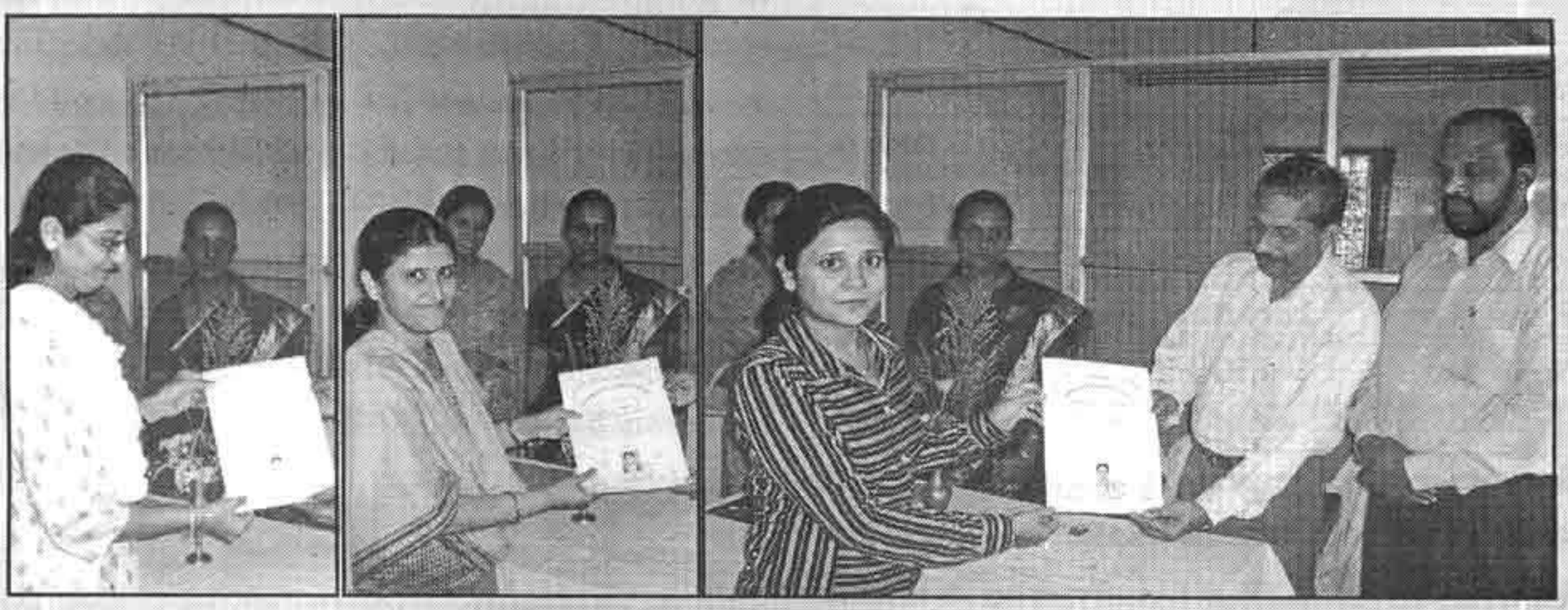
Vikriti **(Lesion)**

Avadaranam *(Daranam, Daranam, Dalanam, Prabhedah, Sphutanam, Galanam, Vidaaranam, Pariputanam)* - Crack on skin. *"Tvagavadaranam baahyatanmaatraavada ranam charmaa vadaranam tu sannam api tvachaam daranam" (Chakra.C.Su.20.14), "Sphutanam vidaaranam"(Hem.Ah.Su.11.22), "Tvachah charmanah sphutanam daranam" (Arun.Ah.Su.11.22), and "Galati videeryati" (Vij.M.N.49.20).* It is due to *Vaataprakriti, Raktakshaya, Vaatika Raktadushti, Svedakshaya, Tvaggata Vaatakopa, Lavanarasa atiyoga, Atirooksha Vranavartyupayoga, Savishapraa nidashta, Paittika keetavisha, Jaalinee Loothaa Visha, Mootra Loothaa visha, Trimandala Lootha visha, Savisha Abhyanga, Savisha Mukhaalepa and Vishajushta bhooshana.*

Ref: *Charmadala, Daarunaka, Kardama Visarpa, Pitta Kushtha, Medasthita Kushtha, Kushtha rishta, Mahaa Kushtha, Asaadhya Vaatarakta, Vaatika Sopha, Rishyajihvaa Kushtha, Paandu poorvaroopa, Aamasopha chedana, Pakva sopha, Asaadhya Unmaada, Vaatika Upavishtaka, Vaatika Visarpa, Paittika Visarpa, Visarpa Upadrava, Vaatika Vrana and Paittika.*

Next issue

The Convocation...



Dr. Dipal Patel (Vadodara), Dr. Neelima Hemant Rajguru (Nashik) and Dr. Manisha Naringe (Vadodara). Recieving their Certificate from Dr. C. S. Krishnakumar, Director, Nagarjuna Ayurvedic Institute, Kalady after completing their re-orientation programme on Panchakarma and Kerala Special Treatments in the Institute.

Borderline personality disorder

Borderline personality disorder (BPD) is a condition characterised by impulsive actions, mood instability, and chaotic relationships. A person with a borderline personality disorder often experiences a repetitive pattern of disorganisation and instability in self-image, mood, behaviour and close personal relationships. This can cause significant distress or impairment in friendships and work. People with this disorder can often be bright and intelligent, and appear warm, friendly and competent. They sometimes can maintain this appearance for a number of years until their defence structure breaks down, usually around a stressful situation like the break-up of a relationship or the death of a parent. BPD tends to occur more often in women than men. This may be related to genetic or hormonal influences. There may be an innate predisposition to this disorder in some people. The cause of BPD is unknown. People with BPD are impulsive in areas that have a potential for self-harm, such as drug use, drinking, and other risk-taking behaviors. Risk factors for BPD include abandonment issues in childhood or adolescence, sexual abuse, disrupted family life, and poor communication within the family. In BPD, relationships with others are intense and unstable, swinging wildly from love to hate and back again. People with BPD engage in frantic efforts to avoid real or imagined abandonment. They may also have uncertainties about their identity or self-image. They tend to see things in terms of extremes, either all good or all bad. Such people also typically view themselves as victims of circumstances and take little responsibility for themselves or their problems.

Critical Analysis.... From P. No. 21

Analysis on Duration of practice according to seasons

Season	Heart rate	Exercise
Jan – March	120 -140	Heavy & moderate
March – May	120-140	Heavy & moderate
May – July	Less than 120	Light
July – Sept	Less than 120	Light
Sept – Nov	Less than 120	Light
Nov – Jan	120-140	Heavy & moderate

Because in other seasons as *sharira bala* will be *alpa*, he can not t tolerate *ayasa*.

Analysis on limitations (Analysis on Ill effects)

If the person does excessive exercises or if heavy exercises done for long duration then person will definitely suffer with different aliments. Classics have mentioned specific diseases such as Kasa, *Jwara* and *Chardhi*. After taking the cross reference of *nidanas* of these diseases, it can be conferred that these diseases have manifested due to practice of excessive exercise and other activities which induces *shrama* rather inducing *ayasa*. It is mentioned that if such activities done excessively, Such actions destroys the body just like a lion which fights with elephant and dies after winning over it (due to excessive exhaustion). Even though doing *poorna vyayama*, person dies because of *poorna bala nasha*. (Crossing the limit of Ardha shakthi).

Conclusion

Vyayama is mentioned under daily regimen. One must do *vyayama* considering all the factors and upto their *ardha shakti pramana*. Isotonic exercises should be preferred for practice. By practicing *vyayama* regularly one will get multidimensional beneficiary effects.

Role of food.... From P. No. 25

b. ***Rasala:*** Curd churned and mixed with pepper powder and sugar.

c. ***Raga:*** Syrup which has all tastes prepared with many substances.

e. ***Panaka panchasara:*** Syrup prepared with black berries, grapes and dates in equal quantity cold and added with powder of cinnamom, cardamom, cinnamom zeylanicum and kept inside a fresh mud pot.

f. Cornflower mixed with very cold water and sugar.

g. ***Sasanka kirana:*** Hollow finger like fried pastry with cornflower and buffalos milk and sugar.

D. RAIN

Digestive fire under go further decrease and get vitiated by the doshas, food with a quality to increase fire, pacify both *vata* and *pita* and easy to digest can be taken.

Main dishes: With old grains, wheat, rice, raggi and barley.

Veg./ Pulses: Snake gourd. Reddish, ivy gourd, ash gourd, green gram.

Meat: Meat of animals from desert like land. Meat juice with spices. eg. Meat of buffalo, deer, kiwi, rabbit

Soups: Soup of Pulses. Eg. Green gram.

Wines Prepared from grapes, fermented decoctions.

Light drinks: Diluted butter milk processed with salt and powder of pepper and dried ginger.

Drinking water: Always use boiled water.

E. AUTUMN

Pitta become aggravated. Food with bitter, sweet and astringent taste and light in nature should be used.

Main dishes: With rice, wheat, barley and oats.

Veg/Pulses/Fruits: Snake gourd, Indian gooseberry, green gram.

Meat/ Fish/ Wine: Not advisable.

Soups: Very thin meat soups, soup with pulses.

Soft drinks: With sugar, sugar cane and honey.

Drinking Water: *Hamosodaka*.

Others: Avoid alkaline substances hearty meal, curd, oil fat and liquors.

F. LATE WINTER

As same as early winter.

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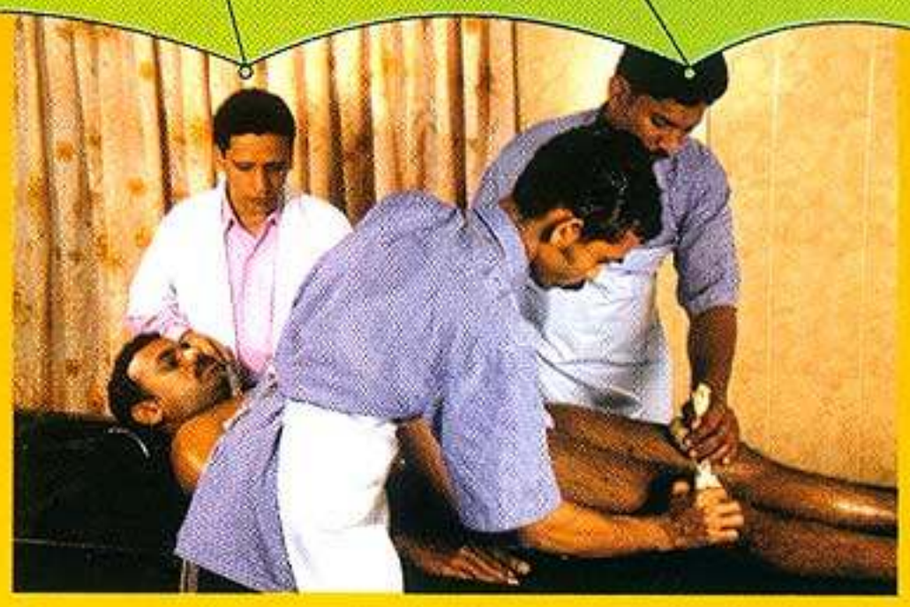
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