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# āryavaidyaṅ



# āryavaidyan

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# āryavaidyan

Aryavaidyan is an international Journal of the encouragement and elucidation of the most ancient system of medicine, Ayurveda and its contemporary practice. This quarterly of the Arya Vaidya Sala, Kottakkal is a publication entirely devoted to the cause of Ayurveda and allied subjects such as ethnomedicine, naturopathy, siddha, unani and modern medicine. This is the one and only periodical for scholars, practising physicians, students and lovers of the subject.

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## MALAYALAM

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# āryavaidyan

सतताध्ययनं, वादः परतन्त्रावलोकनम् ।

तद्विद्याचार्यसेवा च बुद्धिमेधाकरो गणः ॥

"Constant study and discussion, a comprehensive understanding of the other sciences together with service to the Acharyas of these sciences are the group of factors that improve intelligence and memory power."

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The August issue of Aryavaidyan heralds the seventh year of the journal's progress. So we take it as our prestigious duty to greet, thank and congratulate all our readers, subscribers, contributors and well-wishers for the dedicated co-operation and encouragement extended to us — instilling vigour and confidence to go along the chosen path.

It was, as our readers are aware, intended to revive and revitalise the spirit of our predecessor Dhanwanthary — the medical journal started and managed by the founder of Arya Vaidya Sala himself as editor and run for 23 years in the early decades of this century, the proposal for the present journal opened petals, to carry forward the legacy of a pioneering periodical

always with visions of higher dimension but true to the composite culture of our tradition and sensitive to the advancements.

How far have we justified ourselves? We cannot and do not assess ourselves. We pass through sunny vistas and confusing mists. But we have clear aims and strong purpose. Although not completely successful and upto the mark, we have held our banner high and go forward with self-confidence, realising that the move so far tread is along the chosen path. And this realisation and promise of future help come to us from our experience, and the re-assurances of our readers, subscribers, contributors and well-wishers. So our thanks to them, again and again.

*Nitkris Rnan luty Vvri ar*

## SMOKE SIGNALS

Smoking is one risk factor that's least talked about, but which should get the best attention in a country of 225 million male and 113 million female tobacco users. Studies have established irrefutably that heart diseases are twice as common, heart attacks thrice as common and second heart attacks six times more common among smokers than non-smokers.

Incidentally cigarettes manufactured in India are more harmful than the ones manufactured in developed countries because these contain more nicotine (1-1.4mg) and tar (19-27mg) and carbon monoxide.

Smoking bidis don't help, nor do filter-tipped cigarettes.

All these may be hard options, challenging to the mind and your will power. But it is a small price to pay for a heart that gives you little cause to worry.

—SOURISH BHATTACHARYA,  
Indian Express dated 14-8-93

## FROM THE PAGES OF VAGBHATA—XXV

N. V. K. VARIER

अथातो द्रव्यादिविज्ञानीयमध्यायं व्याख्यास्यामः ।  
इति ह स्माहुरात्रेयादयो महर्षयः ॥

(Athato dravyadivijnaniyamadhyayam  
vyakhyasyamah ।)

Iti ha smahuratreyadaya maharsayah ॥

(Now we comment on the chapter  
titled "Study of substance and others."  
Thus spake the sages Atreya and others).

द्रव्यमेव रसादीनां श्रेष्ठं, ते हि तदाश्रयाः ।

(Dravyameva rasadinam srestham,  
te hi tadasrayah ।)

"Substance itself is of more  
importance among Rasa (taste and  
others). They are based on it."

When assessing the importance of  
the various aspects of an article, first  
preference is for the substance itself.  
Rasa (taste), Veerya (potency), Vipaka  
(post-digestion taste) and Prabhava  
(Special properties) separately or incom-  
bination are aspects that determine the  
action of substance. But all these  
properties are based on the substance  
itself. Without substance they cannot  
exist and act. And the substance has  
often an over-ruling action above these  
aspects. So substance or material itself

is of more significance when assessing  
properties of an article.

Samgraha says,

"यस्माद् दृष्टो यवः स्वादुर्गुरुरप्यनिलप्रदः ।  
दीपनं शीतमप्याज्यं वसोष्णाऽप्यग्निसादिनी ॥  
कटुपाकोऽपि पित्तघ्नो मुद्गो, माषस्तु पित्तलः ।  
स्वादुपाकोऽपि चयकृत्स्निग्धोष्णं गुरुफाणितम् ॥  
रसे स्वादौ यथा चैतत्तथाऽन्येष्वपि दृश्यते ।  
वातलं कफपित्तघ्नमम्लमप्यालकीफलम् ॥  
कुरुते दधि गुर्वेव बल्लिं पालेवतं न तु ।  
कपित्थं दाडिमं चाम्बळं ग्राही, नामलकीफलम् ॥  
कषाया ग्राहिणी शीता घातकी, न हरीतकी ।  
अप्रधाना पृथक् तस्माद्रसाद्याः संश्रितास्तु ते ॥  
प्रभावाश्च यतो द्रव्ये, द्रव्यं श्रेष्ठमतो मतम् ॥"

("Yasmad drsto yavah  
svadurgururapyanilapradah ।  
Dipanam sitamapyajyam  
vasosnaऽpyagnisadini ॥  
Katupakoऽpi pittaghno mudgo,  
masastu pittalah ।  
Svadupakoऽpi cayakrtsnigdhosnam  
guruphanitam ॥  
Rase svadau yatha caitattathasnyesvapi  
drsyate ।  
Vatalam kaphapittaghnamamlamapya-  
ksakiphalam ॥

Kurute dadhi gurveva vahnim  
 palevatam na tu ।  
 Kapittham dadimam camlam grahi,  
 namalakiphalam ॥  
 Kasaya grahini sita dhataki, na  
 haritaki ।  
 Apradhana prthak tasmadrasadyah  
 samsritastu te ॥  
 prabhasca yato dravye, dravyam  
 sresthamato matam ।”)

Since the Yava (*Hordeum vulgare*) is seen as sweet and heavy it creates Vata. Although cold ghee is creative of digestion and fat when hot slackens the digestive fire; Mudga (*Vigna unguiculata* ssp. *cylindrica*) though acrid in post-digestion is destructive of Pitta, but Masha (*Vigna mungo*) provokes Pitta. Molasses (crude jaggery) though sweet in post-digestion is creative of accumulation of Malas (wastes), unctuous, hot and heavy. In sweet taste, we see similar variations in others also. The fruits of Akshaka (*Terminalia bellerica*) like wise though sour is provocative of Vata and destructive of kapha and Pitta. Curds though heavy increases disgestive fire, but Palevatha (*Phoenix dactilifera*) does not. Fruits of Kapitha (*Feronia elephantum*) and dadima (*punica granatum*) though sour holds bowels. But Amalaka (*Embllica officinalis*) does not. Dhataki (*Woodfordia fruticosa*) is astringent, and cold and holds bowel movements, but not Haritaki (*Terminalia chebula*). So taste etc., are of less importance. They and Prabhava are dependant on Dravya (substance) and Dravya is of higher importance.

पञ्चभूतात्मकं तत्तु.....

(Panchabhutatmakam tatttu.....)

“On its part, it is made up of five Bhutas.”

Here the term Dravya (substance) connotes the products of Bhutas as Haritaki (*Terminalia chebula*) and other inanimate substances and animals or parts of animals as that of goat etc., as animate substances, says Aruna Datta.

Such are the substances made up of the five Bhutas.

There are two categories of substances, Karana Dravya (causative substances) and Karya Dravya (the effective substances or product of causative substance). Here, the effective substance is intended.

In this context, Charaka has computed Dravyas as Nine.

“खादीन्यात्मा मनः कालो दिशश्च द्रव्यसंग्रहः ।”

(“Khadinyatma manah kalo  
 disasca dravyasamgraha ।”)

The five Bhutas viz. Akasa, Vayu, Agni, Jala and Prthvi, Atma (soul), Mana (mind), Kala (Time), Disa (Direction) taken together are Dravyas in compilation.

And a Dravya is defined as

“यत्राश्रिताः कर्मगुणाः कारणं समवायि यत् ।  
 तद्द्रव्यं.....”

(“Yatrasritah karmagunah karanam  
 samavayi yat ।  
 Taddravyam.....”)

Dravya (substance including drugs) is one where actions and properties are created and which is the material cause (of its effect). But in this context, the causative Dravya is not the subtle Dravya described above. Here Dravya is effected Dravya, constituted by five Bhutas.



.....इमामधिष्ठाय जायते ॥ १ ॥

(.....Ksmamadhistaya jayate । 1 ॥)

"They originate based on Prthvi Bhuta."

Substances are produced with Prthvibhuta (earth) as structural base.

अम्बुयोन्यग्निपवनभसां समवायतः ।

तन्निर्वृत्तिविशेषश्च.....

(Ambuyonyagnipavananabhasam  
samavayatah ।

Tannirvrttirvisesasca.....।

"Its formation and characteristic distinctiveness are caused due to its watery source and inherence of Agni (fire). Pavana (air) and Akasa (ether)."

Water is the cause, the source of Dravya (Substance). So Jala Maha Bhuta (water) because of its juicy nature is considered the womb or generating cause of substance from where the structure originates. The three bhutas Akasa, Vayu and Agni are inseparable. This characteristic provides both for the accomplished formation and also the separate qualities.

Hemadri says, water is the cause of changes. In processing an earthen jar the mud is at first in a lump form. Moistened and by the action of fire, air and ether its manifestation with all parts are accomplished. Actions for hardening and rendering space etc. are taken. Similarly the formation of varieties can also be done. Thus from a lump different forms as jar, kettle and dishes are made.

Charaka says,

"रसनार्थो रसस्तस्य द्रव्यमापः क्षितिस्तथा ।  
निर्वृत्ती च विशेषे च प्रत्ययाः खादयस्त्रयः ॥"

(Rasanartho rasastasya dravyamapah  
ksitistatha ।

Nirvrttau ca visese ca pratyayah  
Khadayastrayah ॥")

"Rasa is the object of gustatory sense organ, Its material substances are water and earth. In manifestation and differentiation of Rasa, the other three Bhutas, Akasa, Vayu and Agni are causative factors.

.....व्यपदेशस्तु भूयसा ॥ २ ॥

(.....vyapadesastu bhuyasa ॥ 2 ॥

"Designation is but according to the predominance, to the exceedence of a certain substance ie how much a particular bhuta is in predominance. It is taken as a criterion to name the Dravya".

If Prthvi (earth) is more in a substance we call it a substance of Prthvi Bhuta. If Jala then Jalabhuta. But really all substances are constituted by all the five Bhutas. Though we take water as Jalabhuta because Jalabhuta is predominant, all other bhutas are also present.

तस्मान्नैकरसं द्रव्यं भूतसङ्घातसम्भवात् ।

(Tasmannaikarasam dravyam  
bhutasanghatasambhavat । )

"Because of this combination of bhutas there is no substance with a single taste only."

Since all substances are being constituted by five Bhutas, though in different proportions, the existence of a

substance with one taste alone is impossible. All substances have multiple tastes. Tastes are determined according to the combination of the Bhutas in different proportions. So tastes of different articles classified as the sweet group, sour group, salty group, bitter group, acrid group and astringent group are so specified only because of their property of predominance in one taste. Different articles of the same group vary in the intensity of the tastes as some sweet articles are more sweet and some less and some with sour, astringent, or other mixed taste and so on. The sweet taste is due to predominance of Prthvi and Jala bhuta. But there is no substance with two bhutas only since all substances consist of all five bhutas. All substances have multiple tastes.

नैकदोषास्ततो रोगास्तत्र व्यक्तो रसः स्मृतः ॥ ३॥  
अव्यक्तोऽनुरसः किञ्चिदन्ते व्यक्तोऽपि चेप्यते ।

(Naikadosastato rogastatra vykto  
rasah smrtah ॥ 3 ॥

Avyaktoऽnurasah kincidante  
vyaktoऽpi cesyate ।)

"Therefore diseases also are not with one Dosa alone. There that which is clear is termed as Rasa (taste). The indistinct is Anurasa (subtaste). That which becomes clear in the end is also taken as such."

Since all substances are constituted by the five Bhutas and consequently all tastes also are of five Bhuthas, there cannot be a disease with one Dosa alone. Diseases are due to upsetting the balance of the Dosa. They are provoked by taking unwholesome foods and their balance is retained or restored by wholesome substances in the form of medicines, food or therapeutic tech-

niques. These substances have various tastes in different proportions and since they cause provocation of Dosas as per their part in it, there is no possibility of a disease with one Dosa alone. All diseases have all the Dosas. But we diagnose a disease as Vatajwara, Pittajwara or of mixed Dosas, as Sannipata or of all three Dosas taking into account the predominant symptoms. In Vatajwara, it is not Vata alone that is upset but Pitta and Kapha also to a lesser degree. We name it as Vatajwara, because of the predominance of Vata symptoms. If the symptoms of two provoked Dosas are salient we call it a fever of mixed Dosas. If all three Dosas are seen provoked equally and in full force, we call it a disease of the three Dosas or Sannipata. In fact, a disease apparently with the symptoms of one Dosa alone is really not so and has other Dosas also which are not manifest. In the case of taste also there are lot of tastes in each substance of which some are manifested patently while others are latent. That which is distinctively clear we take as Rasa. That which is sensible as indistinct is Anurasa or subtaste. (The term Anu is to mean after, inferior, subordinate etc.) In certain substances we get a taste very clearly at first and later another taste may be felt clearly. The taste which is felt clearly later is also termed Anurasa.

Hemadri presents four forms of Rasas. That which is clear is "Rasa." The indistinct, the less displayed and that which is not felt at first but clearly felt in the end are all Anurasas or sub-tastes.

Really all substances are with six tastes. But only some are recognised

clearly. The existence of some are not felt. Still we have to infer that they are latent. One who eats an Amalaka (*Embllica officinalis*) at first feels an astringent and a sour taste but in the end sweet taste is felt. Similar experience can be quoted with other articles of food also.

गुर्वादयो गुणा द्रव्ये पृथिव्यादौ रसाश्रये ॥ ४ ॥  
रसेषु व्यपदिश्यन्ते साहचर्योपचारतः ।

(Gurvadayo guna dravye  
prthivyadau rasasraye ॥ 4 ॥

Rasesu vyapadisyante  
sahacaryopacaratah ।)

“The properties attributed to Rasas as heaviness, lightness etc., are really based on Prthvi (earth) bhuta and other bhutas of substances. They are described as in Rasas because of associated treatment.”

But we say, sweet is heavy, sour is light and so on. The Rasa has no independent existence, but only with the substance with which it is formed as earth and water make sweet, fire and earth make sour and so on. But since Rasa and properties as heaviness and others due to their associated existence are treated together, we say sweet is heavy and sour is light.

तत्र द्रव्यं गुरुस्थूलस्थिरगन्धगुणोल्बणम् ॥ ५ ॥  
पाथिवं गौरवस्वैर्यसङ्घातोपचयावहम् ।

(Tatra dravyam gurusthulasthira-  
gandhagunolbanam ॥ 5 ॥

Parthivam gauravasthairya  
sanghatopacayavaham ।)

“There, the substance that is heavy, corpulent, stable and predominating with property of smell is Parthivam—

earthly, creative of heaviness, stability, union (collection) and accumulation.”

The substance constituted predominantly with earth element Prithvi bhuta is heavy, bulky and firm. Such substances are with smell as their prime property. In the body such substances increase heaviness and accumulation. Such substance help to promote the collective state or union of tissues.

द्रवशीतगुरुस्निग्धमन्दसान्द्ररसोल्बणम् ॥ ६ ॥  
आप्यं स्नेहनविष्यन्दक्लेदप्रह्लादादबन्धकृत् ।

(Dravasitagurusnigdhamandasandra-  
rasolbanam ॥ 6 ॥

Apyam snehanavisyandakleda-  
prahladabandhakrt ।)

“The substance that is liquid, cold heavy, unctuous slow, dense and predominantly with the property of taste is of watery element (Jalabhuta). It is causative of lubrication, trickling, wetting, satiation and inter-connection.”

Here, although liquidity and denseness are opposite properties, due to the common property of moistening, the Jalabhuta predominance is recognised.

रूक्षतीक्ष्णोष्णविशदसूक्ष्मरूपगुणोल्बणम् ॥ ७ ॥  
आग्नेयं दाहभावनप्रकाशपचनात्मकम् ।

(Ruksatiksnosnavisadasuksmarupa-  
gunolbanam ॥ 7 ॥

Agneyam dahabhavarnaprakasapa-  
canatmakam ।)

“The fiery substance is with predominance of properties as harshness, acuteness, thermogenic, transparent, subtleness of form and creative of burning, brightness, colouration (as

white, dark), illumination, maturation, ripening and cooking."

The substance with Agnibhuta in predominance is harsh, acute, hot, transparent, subtle and providing form. It is creative of the properties described above.

वायव्यं रुक्षविशदलघुस्पर्शगुणोल्बणम् ॥ ८ ॥

रीक्ष्यलाघववैशद्यविचाररञ्जानिकारकम् ।

(Vāyavyam ruksavisadalaghusparsa-  
gunolbanam ॥ 8 ॥

Rauksyalaghavavaisadya-  
vicaraglanikarakam । )

"The substance in which Vayu (air) is predominant is rough, transparent, light, and has the property of tangibility or responding to touch sensation. It is creative of roughness, lightness, transparency and tiredness."

नाभसं सूक्ष्मविशदलघुशब्दगुणोल्बणम् ॥ ९ ॥

सौषिर्यलाघवकरं.....

(Nābhasam suksmavisadalaghushabda-  
gunolbanam ॥ 9 ॥

Sausiryalaghavakaram.....

"The substance in which Akasa (ether or sky) in predominance has properties of subtleness, transparency, lightness, and has the property of sound. It is creative of porousness and lightness."

Akasa is that which renders space in materials. So a substance with Akasa in predominance is creative of pores and lightness in body and materials.

.....जगत्येवमनौषधम् ।

न किञ्चिद्विद्यते द्रव्यं वशान्नानार्थयोगयोः ॥ १० ॥

(.....jagatyevamanousadham ।

Na kincidvidyate dravyam  
vasannanarthayogayoh ॥ 10 ॥

"There is no substance in the world which is a non-medicine since they are liable to various usages and combinations."

All substances can be used as medicine. Materials as sand and dust, which may appear as non-medicine are also medicines used in the proper context and combined with materials of various properties. Because all materials have properties, if usage of a substance is inappropriate in a particular condition, the same may become good for apt usage in another condition. If combination with a particular thing is not good, it may be combined beneficially with another material.

Hemadri remarks, "Although highly inappropriate, the juice of the castings of ass, goat and others in drops are helpful in breathing troubles (asthma) and cough and similarly though unwholesome, blackgram with butter find proper usage in facial paralysis.

द्रव्यमूर्ध्वगमं तत्र प्रायोऽग्निपवनोत्कटम् ।

अधोगामि च भूयिष्ठं भूमितोयगुणाधिकम् ॥ ११ ॥

(Dravyamurdhvagamam tatra  
prayoऽgnipavanotkatam ।

Adhogami ca bhuyistham  
bhumitoyagunadhikam ॥ 11 ॥ )

"Substances that move upward are generally more of fire and air elements and those that move downwards are more of earth and water elements."

Generally speaking, substances that make upward movements are predominantly of fire and air. An example is Madana (Randia dumetorum) fruit which is an emetic. But here the term

“mostly” is purposefully used since some articles have extra-ordinary powers called prabhava as Haritaki (*Terminalia chebula*) which is also of fire and air elements makes downward movement. A substance with more of earth and water makes downward movements — as Trivrith (*Operculina turpethum*). Although the nature of a substance with earth, water, fire and air altogether is not mentioned, we have to assume it to have both characteristics.

In Ayurveda, medicines are of two categories, Sodhana (purification) and Samana (pacification). Purification can also be in two ways, by medicines that make upward movement and those that create downward movement. The Bhutas (elements) that constitute a substance with upward movement and downward movement are pointed out. The Samana, substance is usually more of Akasa bhuta. Susruta (Ch. 41/6) says that substance with more of Akasa property is pacificatory. These rules are only general, since there are exceptions. The commonly quoted example is the differing properties of Danthi (*Baliospermum montanum*) and Chitraka (*Plumpago indica*) although both are more of fire and air elements, Danthi is cathartic while Chitraka is not purgative but very digestive. Draksha (*Vitis vinifera*) is more earth and water and so laxative. But Madhuka (*Glycyrrhiza glabra*) is also of earth and water, but it is an emetic.

Samgraha points out “those that work in both ways are of mingled elements. Samana is that which holds opposite property of Dosas. When they are of mingled elements the property is determined by that which is in excess. A substance with more of air (Vayu) holds

bowel movements, more of fire element increases digestive fire and is carminative, one with more fire and air is scraping, with earth and water is nourishing (increasing the bulk).”

इति द्रव्यं रसान् भेदेरुत्तरत्रोपदेक्ष्यते ।

(Iti dravyam rasan bhedairuttaratropadeksyate । )

“So with Dravya. The advices on tastes with their varieties are presented in another chapter.”

वीर्यं पुनर्बदन्त्येके गुरु स्निग्धं हिमं मृदु ॥ १२ ॥

लघुरुक्षोष्णतीक्ष्णं च तदेवं मतमष्टधा ।

(Veeryam punarvadantyeke guru  
Snigdham himam mrdu ॥ 12 ॥

Laghuruksosnatiksnam ca  
tadevam matamastadha । )

“Some say Veerya (potency) is of eight numbers, as heaviness, unctuousness, coldness, softness, lightness, roughness, heat and acuteness.”

Here the opinion of others on Veerya is at first given. By “others” preceptors like Kharana and others are meant, says Hemadri. Susruta deletes heaviness and lightness and adds transparency and viscidness.

So according to Susruta, Veerya is eightfold as hot, cold, unctuous, rough, transparent, viscid, soft and acute.

चरकस्त्वाह वीर्यं तत् क्रीयते येन या क्रिया ॥ १३ ॥

न वीर्यं कुरुते किञ्चित् सर्वा वीर्यकृता हि सा ।

(Charakastvaha viryam tat kriyate  
yena ya kriya ॥ 13 ॥

Na viryam kurute kincit sarva  
viryakrta hi sa । )

“Charaka defines Veerya by which the action is performed. Nothing is

performed devoid of Veerya. The properties in substance, causative of actions are all Veerya."

If there is no Veerya, no action is performed. So all actions are due to Veerya. This is Charaka's stand.

गुर्वादिष्वेव वीर्याख्या तेनान्वर्थेति वर्ण्यते ॥ १४ ॥

समग्रगुणसारेषु शक्त्युत्कर्षविवर्तितेषु ।

व्यवहाराय मुख्यत्वात् बह्वग्रग्रहणादपि ॥ १५ ॥

(Gurvadisveva viryakhya

tenanvarthetivarnyate ॥ 14 ॥

Samagraguna saresu

saktyutkarsavivartisu ।

Vyavaharaya mukhyatvat

bahvagrahahanadapi ॥ 15 ॥

"The term Veerya is attributed for properties such as heaviness and others (eight properties). Since it is the essence of the total properties and the particular abode of extreme efficiency and of more importance in presenting the properties and by them more of the properties as taste and others are recognised as compared to other properties, they are mentioned at the beginning itself with first preference given."

Veerya is the "Karana", the maker, effector of actions. So the eight properties described as heaviness etc., have the right to be termed as Veerya. The acting agent is Veerya. Properties as heaviness do not undergo change as tastes by digestion and so the property has stability. They have more ability to overcome the power of other properties. In texts they are described as more significant and compared to other properties and are given first preference.

It is these properties that act and so the term is sensible. They are the essence of all other properties of the substance and the seat of their maximum efficiency. When speaking of Dravya, it is those properties that are considered as important. By mentioning such properties as heaviness etc., other properties as taste etc., are also recognised. In Ayurvedic science, when speaking of properties, properties like heaviness are given first preference. The other properties as taste are given only second status. For instance, when describing the properties of Vata, we start from properties as "roughness, lightness and others." Since they are given first preference, the term Veerya is rightly attributed to them.

We have two set of properties. One, taste and others and two, properties as heaviness, lightness and others. It is already pointed out the properties as heaviness, lightness and others are not that of the tastes, but of the Dravyas. We speak of the properties of taste as heavy, light, because of its association with the Dravya. Really the maker of actions, are properties of heaviness, lightness and others. So they are the causative factors of Veerya.

अतश्च विपरीतत्वात् संभवत्यपि नैव सा ।

विवक्ष्यते रसाद्येषु, वीर्यं गुर्वादयो ह्यतः ॥ १६ ॥

(Atasca viparitatvat

sambhavatyapi naiva sa ।

Vivaksyate rasadyesu viryam

gurvadayo hyatah ॥ 16 ॥ )

"Since being the opposite (in condition) and so the same not accusing

Veerya, is never intended in Rasa and others, only in heaviness and others.”

Veerya is not intended in rasa and others, because Rasa has no stable essence. It changes when acted upon by the digestive fire. But properties like heaviness, lightness do not change by the action of digestive fire. Taste is not the seat of extreme efficiency. It acts because of its association with properties as heaviness and others. In dealings on the status of importance as the factor that points out multiple properties, is not given to tastes and so first preference also.

So although sometimes Rasa is spoken with Veerya. No Veerya resides in tastes but only in properties as heaviness and others.

उष्णं शीतं द्विधैवान्ये वीर्यमाचक्षते....

(Usnam sitam dvidhaivanye  
viryamacaksate....)

“Others speak of Veerya in two forms — hot and cold.”

Others like Susruta are of opinion that Veerya is only two — hot and cold.

.....अपि च ।

नानात्मकमपि द्रव्यमग्निषोमौ महाबली ॥ १७ ॥  
व्यक्तव्यक्तं जगदिव नातिक्रामति जातुजित् ।

(..... api ca)

Nanatmakamapi dravyamagnisomau  
mahabalau ॥ 17 ॥

Vyaktavyaktam jagadiva  
natikramati jatujit )

“Although substances are with variegated (composition) since Agni(fire) and Soma (moon – cold) are of greatest

strength, they never transcend them as the universe with its distinctive and indistinctive aspects.”

The universe, however immense never transcends its distinct and indistinct aspects. In Samkhya concept the Pradhana and Purusha are indistinct, Mahat and others are distinct. The universe whatever form it takes cannot transcend these two aspects. Similarly substances in different forms, as Sthavara (immovable) Jangama (that which moves), animate or inanimate, since Agni and Soma (fire and moon) being of supreme power can never transcend the two aspects of heat and cold.

तत्रोष्णं भ्रमतृङ्गलानिस्वेदाहाशुपाकिताः ॥ १८ ॥

शमं च वातकफयोः करोति, शिशिरं पुनः ।

ह्लादानं जीवनं स्तंभं प्रसादं रक्तपित्तयोः ॥ १९ ॥

(Tatrosnam bhramatrdglani  
sveda dahasupakitah ॥ 18 ॥

Samam ca vata kaphayoh karoti  
sisiram puna ।

Hladanam jivanam stambham  
prasadam raktapittayoh ॥ 19 ॥)

“Hot potency is creative of dizziness, thirst, tiredness, sweat, burning, quick maturation and alleviation of Vata and Kapha. Cold creates pleasing sensation, enlivening (vital energy), stoppage of movements and provides clearness (purity) of blood and bile.”

जाठरेणाग्निना योगाद्यदुदेति रसान्तरम् ।

रसानां परिणामान्ते स विपाक इति स्मृतः ॥ २० ॥

(Jatharenagninayogadyadndeti  
rasantaram ।

Rasanam parinamante sa vipaka  
iti smrtah ॥ 20 ॥

“The change of taste that originates when the tastes (Rasa) are acted upon

by the digestive fire, in the end of the transformation process of the tastes, is considered as Vipaka."

स्वादुः पटुश्च मधुरमम्लोऽम्लं पच्यते रसः ।

तिक्तोषणकषयाणां विपाकः प्रायशः कटुः ॥ २१ ॥

(Svadhuh patusca madhuramamloṣmlam  
pacyate rasah ।

Tiktosnakasayanam vipakah  
prayasah katuh ॥ 21 ॥)

"Generally sweet and salty are transformed to sweet, sour to sour. The Vipaka (taste after digestion) of bitter, acrid and astringent is generally acrid."

The post-digestion taste of sweet and salty is sweet. Sour taste after digestion also remains sour. The postdigestion taste of bitter, acrid and astringent is acrid.

So the Vipaka (post-digestion taste) observed is in three forms. Sweet, sour and acrid. But here the term "Generally" has special significance, because there are exceptions. When describing the properties of certain grains classified as Vreehis, it is shown that although they are sweet in taste in Vipaka become sour. Hareetaki (*Terminalia chebula*) is astringent in taste, but sweet in Vipaka, ginger (*Zingiber officinalis*) both dry and fresh long pepper (*Piper longum*) although acrid in taste, in Vipaka they are sweet.

If some say that bitter and astringent being acrid in after taste may create provocation of Pitta, it is not to be accepted. Because cold in Veerya (potency), they conquer Pitta, Veerya (potency) subdues Rasa (taste) and Vipaka (post digestion taste).

रसैरसौ तुल्यफलस्तत्र द्रव्यं शुभाशुभम् ।

किञ्चिद्रसेन कुरुते कर्मपाकेन चापरम् ॥ २२ ॥

गुणान्तरेण वीर्येण प्रभावेणैव किञ्चन ।

(Rasairasau tulyaphalastatra dravyam  
Subhasubham ।

Kincidrasena kurute karmapakena  
caparam ॥ 22 ॥

Gunantarena viryena prabhavenaiva  
kincina । )

"The three tastes of post digestion are of equal effects (results of action) of the three tastes — (the taste sensation felt by tongue). The good and bad actions of the substance are done some by the tastes, some by digestion (post-digestion action), some by other properties (of the substance), some by Veerya (potency) and some by Prabhava (extra-ordinary power)."

The post-digestion tastes, as sweet, sour and acrid have the same properties and actions of the original tastes of sweet, sour and acrid sensed by our gustatory organ — the tongue. An article which is sweet in taste to the tongue when it undergoes transformation by the action of the digestive processes is with the same property and action of sweetness described for the original sweet taste. Sweet is aphrodisiac. The sweetness of post digestion has the same effect. Here the effect is compared to that of a fruit that increases virility and not as that of a flower which exhilarates immediately with sweet odour.

The good and bad actions of a substance are performed by different aspects of a substance.

A substance has two categories of properties. The twenty properties are



heaviness, lightness and others and properties as Rasa, Veerya, Vipaka and Prabhava. The action of a Dravya can be due to any of these aspects of properties whichever is stronger than the others. Some have actions due to Rasa, some due to Vipaka and some due to other properties belonging to heaviness, lightness and others, some by Veerya which as already noted is dependant on the properties of heaviness and others and some on Prabhava. Prabhava is an extra-ordinary property effecting peculiar operations. The good or bad actions of the Dravya can be by due to any of these which is over-whelmingly strong in the Dravya.

यद्यद् द्रव्ये रसादीनां बलवत्त्वेन वर्तते ॥ २३ ॥  
अभिभूयेतरांस्तत्कारणत्वं प्रपद्यते ।  
विरुद्धगुणसंयोगे भूयसाऽल्पं हि जीयते ॥ २४ ॥

(Yadyad dravye rasadinam balavatvena  
vartate ॥ 23 ॥

Abhibhuyetaramstattatkarantvam  
prapadyate ।

Viruddhagunasamyoge bhuyasaऽlpam  
hi jiyate ॥ 24 ॥ )

"Whichever in the substance as Rasa and others, exists as stronger, that subduing others, turn as the cause of action. When opposing properties come together the weaker is defeated by the stronger."

Among Rasa (taste), Veerya (potency), Vipaka (post digestion taste) and Prabhava (peculiar power) existing in the substance that property of the substance with more strength nullifies the property of others which are comparatively weak and so the stronger one becomes the cause of the action of the particular substance. Because

when two opposing properties come together, the major one defeats the minor ones.

रसं विपाकस्तौ वीर्यं प्रभावस्तान्वपोहति ।  
बलसाम्ये रसादीनामिति नैसर्गिकं बलम् ॥ २५ ॥

(Rasam vipakastau viryam  
Parabhavastanyapohati ।

Balasamye rasadinamiti naisargikam  
balam ॥ 25 ॥

"Tastes (Rasa) are expelled by post-digestion taste (Vipaka), both of them (Rasa & vipaka) are expelled, by potency in chief (Veerya) and Prabhava (peculiar power) expells all others. In equal strength of Rasa, Veerya, Vipaka and Prabhava this is how the power acts in its own natural way."

By opposing properties is meant the gathering of substances with opposite properties. Opposites are of two kinds, i. e. by form and by action. Example of opposite forms are substances opposite in properties as heaviness and lightness or heat and cold. Example of opposite of actions are for conquering of Vata curing properties of rough and hot substances together. Here the action of the lesser property is conquered by the major Property. Milk although cold, being sweet, unctuous and heavy acts against Vata. Here the cold does not provoke Vata.

The action of taste is rendered ineffective by Vipaka. For instance, honey is sweet in taste but acrid in Vipaka and so the Vata-conquering power of honey is defeated and it actually becomes provocative of Vata due to the acrid taste. The taste and Vipaka of Buffalo meat are sweet. But in potency it is hot. So the meat of buffalo vitiates Pitta since

Veerya is stronger than Vipaka and Rasa. Prabhava overcomes Veerya, Vipaka and Rasa. For instance, Sura (the alcoholic beverage) prepared from rice which is sour in taste and after taste and hot and is a galactogogue. When the strength of properties is equal the natural way of action is as follows.

रसादिसाम्ये यत् कर्म विशिष्टं तत् प्रभावजम् ।  
(Rasadisamyē yat karma visistam  
tat prabhavajam । )

“Although Rasa, Veerya and Vipaka are similar, the special action seen are due to prabhava.”

In two substances even if Rasa, Veerya and Vipaka are of the same type, if one substance manifests a special action, it has to be understood as its Prabhava (special power — peculiar action). Prabhava exceeds the properties as Rasa, Veerya and Vipaka and demonstrates peculiar characteristic that cannot be explained by the other properties.

दन्ती रसाद्यैस्तुल्याऽपि चित्रकस्य विरेचनी ॥ २६ ॥  
मधुकस्य च मृद्वीका, घृतं क्षीरस्य दीपनम् ।

(Danti rasadyaistulyaऽpi  
Citrakasya virecāni ॥ 26 ॥  
Madhukasya ca mrdvika,  
ghrtam ksirasya dipanam । )

“Danthi although equal to Chitraka in taste, aftertaste and potency is purgative, Mridweeka, although equal in taste, potency and post-taste to Madhuka is purgative, and ghee equal to milk is digestive.”

Nagadanthi (Baliospermum montanum) and Chitraka (Plumbago indica) are both of the same taste (acrid), post-digestion taste and hot in potency. Nagadanthi is a purgative. But

Chitraka is not a purgative but one that stimulates gastric fire and increases digestion.

Similarly Mridveeka (Vitis vinifera) and Madhuka (Glycyrrhiza glabra) are both sweet in taste and after taste and cold in potency. But Mridweeka works as laxative, while Madhuka is not. It is an emetic. The properties of ghee and milk are the same in taste, post-taste, and potency. But ghee increases digestion while milk does not.

इति सामान्यतः कर्म द्रव्यादीनां, पुनश्च तत् ॥ २७ ॥  
विचित्रप्रत्ययारब्धद्रव्यभेदेन भिद्यते ।

(Iti samanyatah karma dravyadinam,  
punasca tat ॥ 27 ॥

Vicitrapratyayarabdhadravyabhedena  
bhidyate । )

“These are the actions of substances in general. Again it differs according to the particular and variegated combining factors — Vicitrapratyayarabda— of the structure of the substance.”

The foregoing is a description of the actions in general of the substances. The particular actions have not been described so far. By which Bhutas, the tastes, potencies and others are formed, the substance also can be assumed to be with the same Bhutas and being the base of the Bhutas.

Coming to particular actions, we have to see how they differ. It is due to the dissimilarity of the causative Mahabhuta of the substance, constituted with combination of dissimilar Mahabhutas and variegated properties not conferring to the tastes etc.

It can be explained as follows. In some substances the way in

which the Bhutas are collected and organised can be followed by the tastes and other properties. It is called constitution of similar combinations – Samanapratyayarabda. They do not transcend the common properties. In substances where dissimilar Bhutas are collected in organisation dissimilar properties are exhibited. This is due to variegated combination of dissimilar constituents. Here common properties are transcended. This is known as Vichitrapratyayarabda.

स्वादुर्गुरुश्च गोधूमो वातजिह्वातकृद्यवः ॥ २८ ॥  
उष्णा मत्स्याः पयः शीतं कटुः सिंहो न सूकरः ॥ २८२ ॥  
(Svadurgurusca godhumo vatajivvatavata-  
krdyavah ॥ 28 ॥

Usna matsyah payah sitam katuh simho  
na sukarah । 28½ । )

“Godhuma is sweet and heavy and conquers Vata, but Yava creates Vata. Fish is thermogenic but milk is cooling. The post-digestive taste of lion’s meat is acrid whereas the pig’s meat is sweet itself.”

Godhuma (*Triticum astivum*) is sweet and heavy and so conquers Vata. This is an example of Samanapratyayarabda whereas Yava (*Hordeum vulgare*) although has the same properties as that of Godhuma (wheat) is creative of vata. This is an example of dissimilarity in the combining constituents or bhutas of Vichitrapratyayarabda.

Fish is sweet and heavy. But it is still not cold in potency but hot. This is an example of dissimilar Bhuta combination. Milk is sweet and heavy and accordingly of cold potency because of similarly composed structures. But the flesh of lion is sweet and heavy but is

not sweet in post-digestion but acrid due to the combination of dissimilar Bhutas in the substance. The flesh of the pig is sweet and heavy in taste and is sweet in post-digestion also because of similar combination of substance.

Substances that have tastes, after tastes, and potencies as per the usual order are referred with attention to the attribute of Rasa. And since properties as heaviness etc., although have their base on the substance, being associated with taste are also taken as having similar combination substances and are referred to by their tastes. But many substances of dissimilar combination have to be presented with the specific properties of each substances.

मधुरं किञ्चिदुष्णं स्यात्कषायं तिक्तमेव च ।  
यथा महत्पञ्चमूलं यथा चानूपमामिषम् ॥  
लवणं सैन्धवं नोष्णमम्लमामलकं यथा ।  
अर्कागुरुगुडूचीनां तिक्तानां चोष्णमुच्यते ॥  
किञ्चिदम्लरसं ग्राहि किञ्चिदम्लं भिनत्ति च ।  
यथा कपित्थं संग्राहि भेदि चामलकं यथा ॥  
पिप्पली नागरं वृष्यं कटु चावृष्यमुच्यते ।  
कषायः स्तम्भनः शीतः सोऽभयायामतोऽन्यथा ॥  
तस्माद्रसोपदेशेन न सर्वं द्रव्यमादिशेत् ।”

(“Madhuram kincidusnam  
syatkasayam tiktameva ca ।  
Yatha mahatpancamulam yatha  
canupamamisam ॥  
Lavanam saindhavam nosnamamlama  
malakam yatha ।  
Arkaguruguducinam tiktanam  
consnamucyate ॥  
Kincidamlarasam grahi kincidamlam  
bhinatti ca ।  
Yatha kapitham samgrahi bhedi  
camalakam yatha ॥

Pippali nagaram vrsyam katu  
 cavrsyamucyate ।  
 Kasayah stambhanah sitah  
 so Sbhayamato Snyatha ॥  
 Tasmadrasopadesena na sarvam  
 dravyamadiset ।”)

The Anupa meat is sweet, but a bit hot. Mahatpanchamula is astringent and bitter and also hot. Saindhava salt is neither hot, nor sour. Amalaka is hot. Arka (*Calotropis gigantea*); Agaru (*Aquilaria agallocha*) and Guluchi (*Tinospora cordifolia*) although bitter are taken as hot. Some sour tastes hold up bowels, some sour articles are aperitive. For examples Kapitha (*Feronia elephantum*) fruits are useful for holding up bowels and Amalaka (*Embllica officinalis*) as aperitive. Long pepper and ginger (hot, acrid) are aphrodisiac. While black pepper which is hot is an anaphrodisiac.

Astringent taste is creative of stoppage of bowel movement. But Abhaya (*Terminalia chebula*) is not so, it creates bowel movement.

So depending on taste alone do not classify all substances. Because by knowing the differences in taste alone we cannot say the action of the substance and where it is to be applied. In substance of dissimilar combination, the other properties cannot be determined by the association of tastes.

इति श्रीवैद्यपतिसिंहगुप्तसूनु श्रीमद्वाग्भटविरचितायामष्टाङ्गहृदयसंहितायां सूत्रस्थाने द्रव्यादिविज्ञानीयो नाम नवमोऽध्यायः ॥

(Iti srivaidyapatisimhaguptasunusrima dvagbhataviracitayamastangahrdayasam hitayam sutrasthane dravyadivijnaniyo nama navamo Sdhyayah ॥)

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### LITERACY-ONLY WAY TO DEFUSE INDIA'S POPULATION BOMB ?

Though India was the first country in the world to introduce family planning, its population is steadily increasing and is expected to reach 1.4 Billion by 2025. India is then expected to replace China as the country with the largest population in the world. The state of Punjab is 16 Years ahead economically when compared to other states, but has the same population status with the rest of the country. In contrast, the Family Planning Programme has had the most visible results in Kerala, where the Literacy rate is almost 100%. Whereas the growth rate in the whole of India is 2.14% during 1981-91, it is only 1.34% in Kerala.

—THE STATE OF WORLD POPULATION  
 UNFPA Report 1993

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## AYURVEDIC EDUCATION IN INDIA \*

PANDIT SHIV SHARMA

"Both are M.D's..... They were amazed at the transformation in my wife's condition..... He (another doctor) admitted nothing in Western medicine could have achieved anything like the same result..... This is now the third week that my wife is without any insulin and she feels much better than when she took it. The nasty symptoms which are so often an accompaniment of Diabetes have practically disappeared, and certain toe-nails which had stopped growing and which became like shrivelled, dead pieces of wood are beginning to grow again....had not realised that Ayurvedic medicine could be so effective.....".

The above passages are not picked up from the outpourings of some orthodox and "non-scientific-minded" habitual patron of Ayurveda in India. The two M.D's referred to above are Englishmen practising in England. The writer of the letters from which the foregoing passages have been quoted is also an Englishman; more, he is the managing director of a pharmaceutical concern in England, manufacturing allopathic medicines. He has never visited India, nor had ever heard of Ayurveda, except through an article which he read in the Manchester Guardian. Not satisfied with the results of the western medical treatment which the patient had continued for a period of ten years, his curiosity and hope aroused by Taya Zinkin's article in the Guardian (Nov. 29, 1958), he decided

to take a chance with Ayurveda. The above extracts from his letter are an index of the reactions of the patient, her husband and her physicians to the results of the Ayurvedic treatment.

I refer to two more cases, involving diseases of infection (and not of degeneration in which Ayurveda is supposed to excel). I am driven to give these examples by the tremendous ignorance which persists even among some enlightened Indians on the subject, leave aside the large circle of the foreign readers of the Weekly.

"An article in the Indian Medical Digest (Sep. 1951 issue) describing how a case of bacterial endocarditis was cured, claimed that the patient was lucky to have been born during the era of antibiotics but for which the

\* Published in the Souvenir of Ayurveda College, Kottakkal in 1962.

patient had practically no chance of recovery. This patient had a relapse five months after the cure". The antibiotics completely failed to repeat the miracle. Seven times the doses of penicilin, reinforced by a number of other potent antibiotics, left the bacteria totally cold. Finally, it was announced that the infection had become antibiotic-resistant and the prognosis was very grave. While the reprints of the article were still in circulation, the patient was sinking. At this stage he was placed under Ayurvedic treatment. It brought down the temperature to normal within five days. An ECG taken fifteen days later revealed full compensation of the heart. Today, ten years after the Ayurvedic cure, the patient is playing badminton and active. The Ayurvedic medicines that cured him cannot kill a single bacterium in vitro, even in their highest concentration. A laboratory test will prove them to be utterly innocuous to the "infecting" organism. They by-pass the infection and act on the constitutional resistance of the patient.

A leading Bombay lawyer recently got an attack of pyelitis. Antibiotics were administered in haste as the patient, emerging from a heart disease, could not be left with pyogenous germs in the system without serious danger. As in the former case, the earlier doses of antibiotics performed a miracle and the urine cleared up. Soon after, the patient had a relapse. The antibiotics were tried in singles, twice and finally, in greater numbers and in various permutations, but the miracle refused to repeat itself. The pus cells, first fluctuating in number, finally shot up in complete defiance of the antibiotics.

This development, in the presence of latent heart disease, naturally caused considerable anxiety, if not panic; and the doctor in charge, suggested that Ayurvedic treatment might be resorted to, as no allopathic drug-combination was of any avail. The first dose of an Ayurvedic herbal decoction (again, not aimed at inhibiting or killing the germs), reduced the pus cells to half the number. Later the urine cleared up and the albumin, too, disappeared completely.

Innumerable such cases are an answer to the native question — "Should Ayurveda continue to be taught when the modern science has assimilated all that is good and useful in every other system".

The tragedy of ignorance behind this question is manifold. Firstly, this question is sometimes asked by people who are, by and large, quite intelligent and sincere and should know better. Secondly, a large body of effective therapeutic measures covering a wide field of health and disease and many important dimensions of human personality still remain outside the pale of allopathy. EEG of a patient under even the most refreshing hypnotic sleep will be the same as that taken during the waking state, whereas one taken during drug-induced sleep will show the patient to be actually asleep. A specialist reading the former EEG will wrongly conclude that the patient was fully awake even though the latter's relief from the hypnotic sleep might be far more satisfying than the one produced by sleeping tablets. It is possible that in course of time the unprecedented patronage available to this system all over the world may enable it to widen

its horizons further; but, from all indications, such a goal does not appear to be attainable within the foreseeable future. What Ayurvedic education has to offer, therefore, cannot be replaced by any other substitute.

But the main fallacy behind this question is the assumption that genuine Ayurvedic education is imparted to the students in the Ayurvedic Colleges and that they practise Ayurveda after they graduate from these institutions. The major part of the Ayurvedic student's academic career is taken away by allopathy and he rarely practises Ayurvedic medicine afterwards.

Before I take up this crucial issue, on the correct appreciation whereof depends not only the future development of Ayurveda but also the health of millions of our countrymen, I would like to make a reference to the complaint against the government recognition of Ayurveda "merely because of its being cheap and ancient". The irony of it is that its chances of popularity with modernism would be much greater if it was something new and expensive. At the risk of repetition, I reproduce the presidential pledge of the All India Ayurvedic Congress taken in Bombay in 1938. "To refrain from advancing arguments in favour of Ayurveda on grounds as those of its 'Indian origin', 'great past', 'spiritual sanctity', 'cheapness', 'swadeshism' 'national interest', or the like".

Two persons who have held the exalted office of the Health Ministers of India earlier viz., Raj Kumari Amrit Kaur and Shri D. P. Karmarkar, never showed the slightest respect for the concept of cheapness or antiquity in their actions

or speeches. Neither of them could ever be considered guilty of economy of words in expressing their administration of "science" and "scientific outlook", whatever they might mean by those terms.

Anyway, the aim of this article is not to plead for any introduction of a new measure. Already there are about 70 Ayurvedic and Unani Colleges existing in the country which are either run by the Government or subsidised or recognised by them. The question is whether they are delivering the goods or not.

Here the salient difference between the allopathic and the Ayurvedic background should be kept in mind. Allopathy developed outside India. It is continuing to make rapid progress in the lands of its origin and growth. Any inefficiency or inadequacy in the teaching of allopathy in India cannot retard its development in the world, nor can it deprive India of the fruits of that development. In other words, Allopathy does not depend on India for the development and maintenance of the standards of its teaching. They can be borrowed wholesale from advances made elsewhere. So far, the entire structure of allopathic education and practice in India has been borrowed from outside.

Such is not the case with Ayurveda. India is the originator of this science. The onus of setting up the patterns and standards of Ayurvedic education rests entirely on this country.

In particular careful thought should be given to the following anomalies. The ultimate shaping of Ayurvedic teaching

is still in the hands of allopaths who are not conversant with Ayurveda. Again, many of them are openly inimical to its growth and development. Consider the following episodes:-

(a) The president of the Indian Medical Council, in pursuance of a resolution passed by the Council, officially called upon the Central Government to abolish Ayurveda in India. He, also approached the faculty of Ayurveda, Government of Bombay for permanent recognition of an Ayurvedic College in his capacity as the President of the governing body of that institution. Acceptance of his pleas by the Central and the State Governments would mean permanent abolition of Ayurveda by the Centre and permanent recognition thereof by the Bombay State.

(b) Col. P. B. Bherucha, I. M. S., as President of the British Medical Association Punjab, deposed before an important committee set up by the Government of India that any money spent on the indigenous systems would be a total loss. Subsequently as Chairman of the Board of Indigenous Medicines, Punjab, he held no "scientific" compunction in "furthering" the interests of Ayurveda.

(c) Dr. Jivaraj Mehta, having opposed the interests of Ayurveda all his life abandoned his prejudicial stand as an allopath in order to do his duty by Ayurveda as the Chief Minister of a new State.

(d) The Chairman of all the official Ayurvedic bodies, prior to Shri Morarji Desai's Chief Ministership of Bombay were allopaths who were openly skeptical of the values of the indigenous systems

which they were supposed to foster in the State.

(e) Dr. Shivapuri, Presiding over the All India Medical Conference went so far as to advocate withholding of allopathic aid to all ministers and parliamentarians found guilty of supporting Ayurveda. But as a member of the Planning Commission he voted nearly ten crores of rupees for expenditure on Ayurveda and allied systems during the third Five Year Plan.

These gentlemen, at medical conferences, lay gatherings, club meetings and in the press, advocate the abolition of Ayurveda "in the interests of their countrymen", while accusing us of "vested interests", and then turn back and support Ayurveda, again, in the interests of their countrymen, without accusing themselves of any vested interests. The most blatant denouncers of Ayurveda calm down completely whenever it suits them to do so.

Not given to speaking two languages, I naturally want the ministers in charge of these subjects to entrust the destiny of Ayurveda to people who speak only one language; even if such an appeal to politicians be misconstrued as a subtle personal attack on themselves. People in politics sometimes lose the faculty of imagining the possibility of a person being honest.

It should be clear that it is never a maulvi who is charged with the maintenance of a temple or a Hindu priest with that of a mosque. It is never a singer who runs an academy of dancing and never a chemist who plans the teaching of physics. It is Ayurveda alone whose destiny has been placed,



unreservedly, whether directly or indirectly in the hands of its professional opponents. No other subject in India or anywhere else in world (barring colonial subjugation) has been subjected to such an anomalous treatment. It is, therefore, imperative that if Ayurveda has to serve humanity and rise to its fullest stature, it should be freed from the unnatural stranglehold of its opponents.

This brings us to the people selected by these allopaths to conduct Ayurvedic institutions. I will cite one typical example. I and the Surgeon General of a State were once asked to assist the Public Service commission in selecting a Vaidya for a Government post. One of the candidates who was a great favourite of the anti-Ayurvedic allopaths, started the interview by condemning Ayurveda as an unscientific system. Another candidate, far superior to the former in his scholarship and clinical acumen, maintained that a person whose grasp of the Ayurvedic concepts was adequate would find them more consistent and scientific than those of any other medical system. He was prepared to answer any question to prove his contention. The Surgeon General a total stranger to Ayurveda and the language in which its texts are written, made it almost a personal issue, and fought tooth and nail for the appointment of the former candidate, who, according to the doctor, had exhibited a strong scientific bent of mind by openly condemning Ayurveda. Even the Chairman of the Public Service Commission appeared to be amazed at the inordinately inflexible stand the Surgeon General took on a question which he should have treated with graceful

aloofness. In fact, academic consideration apart (which of course, were of primary importance) my suspicious against this candidate were aroused by the extremely unnatural interest shown in him by a person who had never shown the interest in the future well-being of the Ayurvedic system. Generally, the people picked up for the Ayurvedic posts by these allopaths are willing to accept, without demur, insultingly poor salaries and humiliating submission to their allopathic masters. These 'vaidyas' not only discretely avoid any controversy with the allopaths when they condemn or mis-represent Ayurveda but sometimes even join the campaign of vilification of Ayurveda to curry favour with them.

#### **"Shuddha" and "Integrated" methods of Ayurvedic Education :**

The most crucial aspect of Ayurvedic education is the curriculum. Two slogans, both utterly misleading hold sway at present, viz. "Shuddha Ayurveda" and "integrated medicine". Very few ministers and laymen realise that no system of medicine exists which can be termed as Shuddha Ayurveda or integrated medicine.

While leading a deputation to one of the topmost executive health authorities in the country, I found that the deputation hardly got a chance to put in a word even edgeways as the high dignitary expanded and dilated upon, how he looked at things with the objectivity of a scientist and how he believed in Ayurveda taking all that was best in modern medicine. He impressed upon the members of the deputation that since truth was only one, there could not be more than one

true medical science, for which reason he believed in the integration of the different schools of medicine into a single national medical system of India, incorporating all that was good, useful and scientific in all the systems. But when the deputationists asked him whether it was not unscientific on his part to actually encourage the formation of four different "national" medical systems, since simultaneous "integration" was being attempted in four different directions, the prevailing policy of the Government of India being that of integrating (a) Ayurveda with allopathy, (b) Siddha with allopathy, (c) Unani with allopathy and (d) Homeopathy with allopathy, they drew a blank. Overlooking the contradictions inherent in the concept of this fourfold integration turning into a single national medical science, when I enquired whether it would not be more sensible to first "integrate" Ayurveda, Unani and Siddha into one entity (since they are practically a single system in different languages), we were told that any such effort would be misunderstood as communal discrimination by certain minorities. On asking whether the strictly scientific attitude on which the dignitary had dwelt so persistently included communal consideration and compromises with perpetuation and propagation of unreal distinctions, the deputationists were told that they had put the things very cleverly; and there the matter ended.

The fact of a single system being taught under different names on the basis of superficial peculiarities arising out of different geographical, linguistic and cultural locales is an aspect of Ayurvedic education that has been

connived at by the one-world-system enthusiasts. They also refuse to face another fact that integration of allopathy and Ayurveda is nowhere in sight after half a century of wild goose chase in this direction. The very graduates of the Ayurvedic colleges who demanded a separate "faculty of integrated systems of medicines", a separate "board for integrated medical practitioners" and "uniform integrated medical courses all over India"; and who refused to accept their degrees unless the term "Ayurveda Nishnat" was removed from them, for once blundered into naked truth when they impeached the Government, that "They have failed to implement integration in teaching, integration in practice and integration in research".

It is natural that among different approaches to preservation of health, certain practices should be common. But the fact that certain areas overlap does not mean that all the differences of approach can be satisfactorily unified. Simply because a person can be made unconscious both by an anaesthetic and by hypnosis, we integrate chloroform with hypnotism. We can use both these techniques on the same patient and both are useful at times. A man can travel by car or air. But he cannot put one leg in a car and another in a plane, and start a single "integrated" motion. In any case we must have some clear idea of the prospective new alloy, the integrated medicine before we can teach it. It is an amazing feat of jugglery that "integrated medicine" has been taught for half a century without "integration" being anywhere in sight even today.

As it is, during a short period of 4 to 5 years, two different systems are

sought to be pushed into the brains of the students, who are forced to join the Ayurvedic institutions on their failure to get admission to the medical colleges. The admission requirements make the mind exclusively receptive to allopathy. There are disputes between the governments and the students as to the percentage of time to be spent on allopathy and Ayurveda. Whatever be the percentages, neither Ayurveda nor allopathy gets the benefit of the undivided attention of the scholar. The first class student who gets admission into medical colleges cannot practise allopathic medicine until they have spent a minimum of five years. Students who fail to get admission into these colleges are supposed to become subsequently so very much superior to the former in intelligence that not only can they master the same amount of allopathy (since less is not permissible for practice) within half that period but also master, along with it, another system which, in many respects, is entirely alien to allopathy. And since the chimerical integration of allopathy and Ayurveda is still out of sight, they have to "integrate" the two systems within their own heads. This gives them a "separate" system which makes both allopathy and Ayurveda absolutely inferior to the new integrated product.

Ayurvedic graduates cannot be blamed for this situation. Any person passing through that course will have inadequate practical knowledge of Ayurveda and would prefer to practise allopathy further made easy by free samples of patent medicines. As a result, most of them refuse to practise Ayurveda which requires considerably greater effort.

The following tell-tale instance are revealing. A batch of students took up the Ayurvedic course at the Lucknow University. Intrigue and sabotage broke up the Ayurvedic section and the students, who had been mainly taught allopathy in the Ayurvedic classes, were absorbed into the Medical College and passed out with MBBS. This episode led the University to start an independent Ayurvedic College. After two years of study at this college, the students went on strike on the grounds that they joined the Ayurvedic College under the impression that they would be taught chiefly allopathy. They wanted to study allopathy and not Ayurveda.

An inspection of dispensaries jointly by the Principal of the Podar Ayurvedic College and myself revealed that these graduates hardly ever administered Ayurvedic treatment to their patients and some of them were 100 percent, second rate allopaths. One of them stated that he had never prescribed an Ayurvedic dose during the fifteen years of his professional career. Another "Ayurvedic Graduate", an applicant for inclusion in the State Employee Health Insurance Scheme, decided to forego the appointment rather than give an assurance to the government that he would try to prescribe Ayurvedic medicines.

The Ayurvedic students are the orphans of the storm of transition. They must be protected against intrigues of inter-medical politics. Their true well wishers, usually, cannot compete, in finance or in craft, with the deeply entrenched allopaths, text-book writers, and the rich and unscrupulous publishers. Of course there are many

fine and disinterested people among all these groups, but it is the law of nature that the interested people fight with their backs to the wall, whereas the selfless and the disinterested people give up the fight in disgust, unless some one of them is fired with a missionary zeal, which is rather a rare phenomenon.

I had once warned the delegates of the health panel of the Planning Commission that colleges which bore the Ayurvedic name put merely produced second-rate allopaths might help the health ministers to claim in the legislative bodies that so much money was being spent on Ayurveda, but they were not delivering Ayurvedic goods since the blessings of Ayurveda were not reaching the Indian masses. I had also stated in unequivocal terms that unless steps were taken to introduce intensified Ayurvedic teaching in Ayurvedic institutions they would be converted into allopathic colleges. Many members of the health panel at that time felt that I was putting the case too strongly, but all of them have lived to see the conversion of the two biggest Ayurvedic Colleges of India, which were being run on the lines of mythical integration into allopathic colleges. The College of Indian Medicine, Madras, the only Government Ayurvedic institution in that State and the Ayurvedic College of the Banaras Hindu University, have both been converted into regular medical colleges. One of the allopaths responsible for introduction of the 'mixed' course in Bombay admitted that they had hit upon the course as the quickest way to eliminate Ayurveda by exposing its "hollowness and worthlessness".

### **Shuddha Ayurveda**

The term Shuddha Ayurveda, the alternate course introduced by certain States as a reaction against the failure of the mythical integration is as misleading as the term integrated medicine. Just as the main Ayurvedic concept of 'Tridosha' is outside the corpus of allopathy, the belief that Shuddha Ayurvedic course is confined to teaching of purely Ayurvedic texts is equally untrue. Shri Morarji Desai, one of the very few, who gave earnest thought to the problem of Ayurvedic teaching, has described very correctly the position of the Shuddha Ayurvedic course, in his inaugural address delivered at the 40th Ayurvedic Congress held at Trivandrum in May 1955. He says:—"But when we call it the Shuddha Ayurveda course it is not done in order to show that there is any great purity in what we are doing and that there is a great impurity in what others are doing. But as one system of Ayurveda was already established by us in Bombay, the Government, to distinguish the new system, had to give some other name to it, and therefore we call it the Shuddha Ayurveda. There is always bound to be some mixture here and there..... By Shuddha Ayurvedic course we only want to imply that it is a course taught by people who have faith only in Ayurveda and who are trying to teach it by the methods of Ayurveda. "Mishra (integrated) course, to my mind, is neither fish nor fowl; for, as I see, the graduates who are turned out of these colleges in my own state (I do not know about any other state) practise Allopathy rather than Ayurveda. How can we call them Ayurvedic colleges? If a man

who learns physics shows that he knows chemistry, how can he ever be called a student of physics? I cannot understand this. If those who pass out of Ayurvedic colleges practise Allopathic medicines all the while and also follow the allopathic system of diagnosis, how can the teaching which produces them ever be called Ayurvedic teaching? That is why, we call the latter the Shuddha Ayurvedic Course”.

Since the Ayurvedic funds and offices at the higher levels are controlled by allopaths who favour the integrated system, it is natural that funds are spent on institutions staffed by their pet “scientific” Vaidyas. Some of their college magazines glorify allopathy and scurrilously attack the “Shuddha” system and its protagonists and get away with this yellow Journalism because their allopathic paymasters enjoy the fun. The Shuddha Ayurvedic Colleges are usually run on the personal sacrifice of eminent Ayurvedic physicians, who give their honorary services and also collect donations from their patients to keep these colleges going, as for instance, the Shuddha Ayurvedic College on Cumpalla Hill. The purchase of the plot, the erection of the building, the collection of equipment and the services of the teachers, represented a personal sacrifice of missionaries having faith and mastery in Ayurveda. Of course, some supplementary modern

medicine is imparted to the student at the end of the main Ayurvedic course. Yet, whenever these institutions are attacked, this fact is deliberately eschewed. It would not be fair to blame the laymen, who do not know the true state of affairs when they accuse the sponsors of this intensive Ayurvedic course of believing Ayurveda to be an absolutely perfect science needing no supplementation whatsoever.

In the words of Charaka himself, “The science of life shall never be complete”. The entire world consists of teachers for the wise and enemies for the fools. Therefore learn even from an enemy all that is conducive to usefulness, health and longevity..... Therefore the question of Ayurveda, and for that matter any science being perfect does not arise.

It is necessary that an earnest effort be made by the authorities to assess the results of nearly half a century of efforts to give shape to and stabilise what is termed as the integrated medicine. Stabilisation apart, even the shape is not in sight. It is only fair that semi-allopathic and pseudo-Ayurvedic courses conducted in the name of Ayurvedic teaching be replaced, without delay, by genuine and intensive training in Ayurveda, to enable the graduate to practice the science, with knowledge, confidence, efficiency and dignity. ●

## PLANTS: MYTH, MAGIC AND MEDICINE

V. V. SIVARAJAN

Food and medicine are, in fact, two sides of the same coin, i.e. human health. While food provides nutrients to keep our body healthy and strong, medicine serves to prevent or cure diseases. We know that, since very early times, plants have provided both to man. Our concern here, however, is plants that are used for medicinal purposes. Medical science has progressed by leaps and bounds in recent times. Yet most medicines that we now use are either plant products or their carbon copies synthesised artificially. So, it would be interesting and amusing too, to have a brief look at the historical development of plant medicine. The first question would be: How and when did man discover that plants could be of medicinal value?

This is, probably, as ridiculous a question as asking, how did the game of foot ball, or for that matter any other game that we play now, originate? Because such a question presupposes a precise time and manner in which it might have taken birth. In fact, we can only say that they have evolved

from similar games that have been played earlier, by a process of gradual transformation. Similarly, modern medicine also cannot be traced back to a single point of time or place, instead it owes a lot to the concepts and practices of ancient people in various parts of the world. Attributing it to Hippocrates or anybody else would be gross oversimplification of the whole story. In fact, we have evidences at hand to believe that the Neanderthal man who lived some sixty thousand years ago in Iraq had used plants as medicine. So, the question of plant medicine cannot be answered without reference to ancient cultures and practices.

Plant medicine, in fact, had a tortuous history. Probably, it started with ancient beliefs, myths and lores, got involved with astrology and such other occult theories, developed into folk medicine and herbalism and finally evolved into theoretically and practically sound systems of traditional and modern medical systems. In this discourse, my intention is to take a

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brief look at the intriguing course which medicine might have taken during its development.

In his long struggle to achieve mastery over powerful forces of nature, man has always turned to plants for help— for food, shelter, clothing, weapon and also medicine. Indeed they provided all and much more. The early man, by his instinctive ability, discovered that the plants displayed an astonishing amount of vital energy, which he thought, if harnessed and directed can be used for various human requirements. He found that there is a time for everything in nature for germination, growth, defoliation, refoliation, flowering, fruiting and ultimately for death and decay. He could not rationalise on that. He failed to understand why Morning Glory opens its flowers only at the day-break and Four O'clock plant only in the evening. He was amazed to find that, like a shy person, the Touch-me-not plants fold their leaves at the slightest touch and the sunflower blossoms turn round tracking the sun. He could not explain these, but surmised that plants are magical. He attributed everything to the "supernatural", populated with gods and demons and assigned guardian spirits, both benign and evil, to trees and flowers which were also supposed to have great influence on all aspects of human life. The corollary was that by propitiating these spirits, using their plant or floral symbols, one could, or so they believed, gain miraculous powers to control the forces of nature.

This belief in the magic of plants, in turn, generated a treasure of myths and plant-lore, many of which are

current among some people even today. Thus, the ancient Greeks believed that the twelve great gods residing in Mt. Olympus ruled the earth, heaven, sea and the netherworld. Each of these gods had a distinctive personality and had their favourite plants also. Thus, the chief god, Zeus, had Oak symbolising enduring might. His son Ares, the god of war, preferred Ash, the tree that supplied shafts of spears. Athena, the goddess of wisdom, Olive and so on. Ancient Germans (teutons) believed that the fate of the world is decided by a huge Ash tree (*Fraxinus* sp.), which they called 'Yggdrasil' or the 'Tree of Destiny', Evergreen and immortal, this tree was so huge that its branches touched the Heaven, the canopy shading the entire earth and protecting everything on it. Its roots penetrated the earth right into the netherworld, it was believed, but are continually being gnawed by an evil serpent. A time would come when the tree would crash down and this would spell the doom of the entire world.

Indians were people who believed that trees were more benevolent than one's own kith and kin and who venerated them since very early times. with a wide variety of culture and social mores, India is a treasure-house of plant myths and lores. Indian mythology speaks about the five celestial trees (*Mandaram, Parijatam, Santanam, Harichandanam and Kalpa-vriksham*) of which the last one, born with several other miraculous things during the churning of the milky ocean (Palazhi) was capable of bestowing anything that we desire. Some people believe that this was a mulberry tree. Such a huge tree is still venerated at the Joshi Math of

Garwal Himalayas, beneath which Adi Sankaracharya is believed to have meditated during his Himalayan sojourn. Many tribes believed that trees were abodes of spirits and would not dare to shake trees at night for fear of disturbing the spirits in their sleep. Some would apologise and pray forgiveness before cutting trees down. We have tantalising myths about several trees like Mahua (*Bassia latifolia*), Sal (*Shorea robusta*), Peepal (*Ficus religiosa*), Banyan (*Ficus bengalensis*), Champa (*Michelia champaca*), Palasa (*Butea monosperma*), Babul or Kikar (*Acacia arabica*) and so on. Special reverence was paid to those growing in the premises of places of worship or tombs of saints and sufis. The 'sacred basil' (*Ocimum tenuiflorum* / *O. sanctum*) was considered to be an incarnation of goddess Lakshmi and is still venerated in most of the Hindu households. Neem tree (*Azadirachta indica*), consecrated to 'Sital' or 'mariamman' the goddess of smallpox, and its medicinal prowess has been vindicated by recent researches.

While such stories have their roots in mythology, some other marvels and monsters have been created from tall tales spun on plants of distant continents by ancient travellers. Thus, the Europeans, for a long time, had believed that there was a tree along the Irish coast which produced large conches (barnacles) with geese in them, instead of fruits. They called it "the goose-barnacle tree." Some people even thought that the marsh geese in Europe originated this way. Now we know that such a plant does not exist. Similarly, the story of the 'vegetable lamb tree' or 'the Tartarian lamb tree' owes its origin to the first century Greek

historian, Herodotus. While describing the cotton plant in one of his memoirs, he had also written that in the tropics, there is a fantastic plant which produced floss that excelled the best wool in Europe (one should remember that at that time they were familiar with only sheep's wool). Told and retold, the floss become lamb itself. Finally, a 14th century traveller, Sir John Mandeville, even claimed that he had eaten the meat of this 'vegetable lamb.' This story was prevalent in Europe until the close of the 19th century and that was the time when they started acquainting with tropical plants.

The trouble with such stories is that they are admixtures of facts and fantasies with specks of truth hidden in them like the proverbial needle in the haystack which could be identified only by careful sifting. Thus, the Mandrake (*Madragora officinalis*) was widely used as a pain killer and was the only anaesthetic available to people undergoing surgical treatment in Europe throughout the middle ages. Since very ancient times, this mediteranean plant was believed to have magical powers, probably due to its toxicity. To add to its mystique, this plant has the form of a distorted, dwarf human and hence was considered devilish. It was believed that anyone who touches it would die instantly, but anyone who successfully pulled it out will acquire magical powers. So those people seeking such attainments would set out in the night with their dogs, would lash the beasts around the plants and would walk away from the scene. The dogs, in their effort to join their masters, would pull these plants out and would die in most cases, but their



masters would acquire the miraculous powers that they have been seeking for.

This belief in the plant magic and the consequent myths and lores woven on them might have, in the long run, paved the way for witchcraft and sorcery. Witches and sorcerers exploited plants to deliver their clients not only from diseases (which they thought is due to the displeasure of spirits), but also from various other miseries. Thus, if a woman was found with an illegitimate pregnancy, they would provide her with a concoction which would certainly lead to miscarriage. If a young man found his sweet-heart unresponsive and cold, the witch would give her a potion guaranteed to soften her heart. In fact, they had remedies for every human problem, starting from the infecundity of his cow to the destruction of his enemies. But they did all these in utter secrecy with the accompaniment of elaborate magical rites and of course, for a price. Their practice quite often bordered on wickedness and cruelty so much so that they had to undergo terrible repression (the usage 'witch hunting' has come like this). But they survived all that, because they gave the people the sort of services that neither the state nor religion could provide. Quite expectedly, they survived all the onslaught and the remnants of it can be found even in some sections of the modern society.

All that apart, there was a positive aspect for this. Probably, they were the first to study plants vis-a-vis their curative properties of course, in their own instinctive ways. Many modern names of plants even now carry the

stigma of their widespread use in such occult practices. Ironically though, many such plants have been later found to have great medicinal properties and have been accepted in modern medicine. A remarkable thing about plant magic is that it swayed people through many periods of human experience. As long as ignorance kept them enslaved to superstition, the idea of magic of plants remained powerful, infiltrating every human activity from romance to agriculture and was acknowledged as instrumental to health, happiness and success.

Though not completely free from the 'hang-over' of plant magic, a more empirical approach gradually took shape and this heralded the beginning of herbalism. Plants and flowers were, still considered to be messengers of gods and demons and even the modern man is not completely free from all these. Even now, we keep an implicit faith on floral symbols and floral language (see Table 1). That is why, we have different flowers for different occasions, one for reassuring our love for the beloved, another to mourn the death of a close friend and still others for worship of god.

Probably, the knowledge of plants can cure diseases came to man rather instinctively, for he might have seen even animals seeking out appropriate herbs when they are ill. Consequently plants became the earliest sources of medicines and still often remain the only hope for the sick. Even at this age of miracle drugs and miracle cures, plant drugs or their synthetic equivalents account for the majority of them.

Meanwhile, herbal drugs came under the strong influence of astrology, too. All ancient literature on herbal medicine are replete with references to this. Astrology, which probably originated in ancient Babylonia and then spread throughout the world, is based on the assumption of a basic unity of the universe and postulates an interdependence of its component parts which would mean that happenings in one part will have influence on others also. First, they discovered the planets and the zodiac, a circular path in which the sun and the moon was then thought to travel. Later, they divided the zodiac into twelve equal parts, each corresponding to a constellation with a distinctive personality of its own and each with a ruling planet. These planets, in turn, were believed to have influence on various parts of the human body and were deemed to rule all human conduct.

Further, they also inferred that, like everything else here, plants also conformed to the general pattern of nature and consequently, each plant was related to one of the twelve zodiacs, ruled by its respective planet (See Table 2).

This correlation with planets, constellation, man and plants might have led physicians to think that planets also will have a role to play in the treatment of the sick. Thus, Paracelsus (1493-1541) who was instrumental in giving a new direction to plant medicine by enunciating the idea that the curative properties of plants are due to their chemical composition, himself tried to reconcile medicine with astrology at times. He went much farther than his contemporaries and suggested that even administration of medicine would be affected by astrological factors and that a medicine beneficial at one time

TABLE - 1

Floral symbols and messages

Plant/flowers	What they symbolise	Message
Aconite	Dislike	Your attention is not welcome
Almond	Hope	I enjoy your friendship
Apple	Goodness	You are very good
Aster	Regret	I am sorry. Please excuse me
Balsam	Impatience	I cannot wait any more
Begonia	Warning	Be careful. We are being watched
Blue-bell	Loyalty	Be assured, I am your's
Carnation (Pink)	Encouragement	Go ahead
Carnation (white)	Devotion	I love you
Chrysanthemum (white)	Honesty	I trust you
Dahlia (yellow)	Distaste	I dislike your attention
Ever-lasting flower	Farewell	I must go, but I shall never forget you
Hydrangea	Fickleness	You change your ideas too often
Jasmine	Elegance	You are admirable
Petunia	Proximity	Be with me
Rose (Red)	Love	I love you
Sunflower	Showiness	You pretend too much

(From David Conway, 1973. *The Magic of Plants*, London.)

TABLE-2

Zodiacal sign	Ruling planet	part of Body influenced	Body system influenced	Sympathetic plants
Aries	Mars	Head	Cerebral	Basil, thistle, wormwood etc.
Taurus	Venus	Neck, throat	—	Daisy, fennel, foxglove, meadow sweet, mints, periwinkle etc.
Gemini	Mercury	Hands, lungs	Nervous	Dill, honey-suckle, maiden hair marjoram, mulberry etc.
Cancer	Moon	Breast, Stomach	Alimentary	Adder's tongue, white poppy, willows etc.
Leo	Sun	Heart, spine, lower arm	Cardiac	Chicory, Marigold, mistletoe etc.
Virgo	Mercury	Abdomen, hands, intestines	Visceral	see above - Gemini
Libra	Venus	Lower back, kidneys	Renal	see above - Taurus
Scorpio	Mars	Pelvis, sex organs	Reproductive	see above - Aries
Sagittarius	Jupiter	Hips, thigh, liver	Hepatic	Agrimony, chestnut, Dandelion etc.
Capricorn	Saturn	Knees, bones	—	Hemlock, hanbane, night-shade etc.
Aquarius	Saturn	Shin, ankles	Circulatory	see above
Pisces	Jupiter	Feet	Hepatic	see above - Sagittarius)

(From David Conway 1973. *The Magic of Plants*, London)

may be harmful at another, depending on the planetary influence.

In this sort of 'astrological herbalism', in addition to knowing which part of our body came under the domination of each zodiacal sign, it was also necessary to know which plants enjoyed the patronage of the respective planets (see Table 2). The rationale was the ailment of a given body part (dominated by a given planet) could be cured by herbs that are patronised by the same planet which causes the ailment. That is how, the Cancerian Adder's Tongue (*Ophioglossum vulgare*) used to be prescribed for all sorts of indigestion and pain and inflammation of breast, for quite some time.

Basil	= <i>Ocimum basilicum</i>
Thistle	= <i>Silybum marianum</i>
Worm wood	= <i>Artemisia absinthium</i>
Daisy	= <i>Bellis perennis</i>
Fennel	= <i>Foeniculum vulgare</i>
Fox-glove	= <i>Digitalis purpurea</i>
Meadow sweet	= <i>Filipendula ulmaria</i>
Mint	= <i>Mentha viridis</i>
Periwinkle	= <i>Catharanthus roseus</i>
Dill	= <i>Anethum graveolens</i>
Honey suckle	= <i>Lonicera periclymenum</i>
Maiden hair	= <i>Adiantum lupulinum</i>
Marjoram	= <i>Origanum vulgare</i>
Mulberry	= <i>Morus alba</i>
Adder's tongue	= <i>Ophioglossum vulgare</i>
White poppy	= <i>Papaver sp.</i>
Willow	= <i>Salix alba</i>

Chicory	= <i>Chicorium intybus</i>
Marigold	= <i>Calendula officinalis</i>
Mistletoe	= <i>Viscum &amp; Loranthus sp.</i>
Agrimony	= <i>Argemone eupatoria</i>
Chest-nut	= <i>Aesculus hippocastanum</i>
Dandelion	= <i>Taraxacum officinale</i>
Hemlock	= <i>Conium maculatum</i>
Henbane	= <i>Hyoscyamus niger</i>
Night-shade	= <i>Atropa belladonna</i>

Regardless of the astronomical discoveries by Copernicus, Galileo and Kepler, astrology remained successful until 18th century. Kepler himself was a professional horoscope caster though at a times, he considered astrology to be a foolish daughter of astronomy. During the 19th century, 'the Age of Enlightenment', there was a lull, but as we all know, astrology has now come back and is more successful than ever. We now have even courses in astrology in some of our universities.

This is not the only occult explanation foisted on herbalism. There was the 'Doctrine of signatures' which was prevalent throughout ancient world. We do not know when it came into being and who enunciated it, but it was much simpler than "astrological herbalism" to comprehend. This basically holds that man is a microcosm of the macrocosm and that there is a subtle oneness between him and nature. The adherants of this notion would have us believe that the nature is pregnant with meanings, its external aspects always bearing the marks of its inner significance. It suggested that the external appearance of our body parts can be correlated with plants and their parts for medical purposes. As far as the

herbalist was concerned, this meant that the healing virtues of plants and plant parts could be discerned from their appearance or the distinctive 'signatures' they bear. Paracelsus made it explicitly clear when he said: "The mind need not concern itself with the physical constitution of plants and roots, It recognises their powers and virtues intuitively thanks to the signatures they carry", i.e. their resemblance with human body parts. In practice, plants and plant parts which bore resemblance with human organs were thought to cure diseases of those parts. Thus wild pansy with heart-shaped leaves was considered to be a cardiac tonic. Plants with kidney shaped leaves were thought to cure renal afflictions, hair like plants for healthy growth of hair and eye-like flowers for ophthalmic treatment. Plants with flame coloured flowers were used to treat inflammations and those with multicoloured ones were thought to improve the multifaceted brain faculty.

By the advent of the 18th century, the doctrine of signatures fell into disrepute and was since then discarded. The place of this occult medicine was taken over by an empirical school, which judged plants depending on the results they gave. The traditional systems of medicine in various parts of the world — the 'Oriental medicine' of Korea, the Tibetan medicine, 'Jamu' of Indonesia, 'Zhon-Yi' of China and 'Ayurveda, Siddha and Unani' of India — all might have come this way. They have, indeed developed by trial and error method and have been highly influenced by the cultural ethos of the respective communities.

Nevertheless, they represent the sum total of the knowledge and practices

used in diagnosis, prevention and elimination of physical, mental and sometimes even social maladies, exclusively relying on practical experience, transmitted from generation to generation either orally or in writing. Many of their concepts and ideas are inexplicable in terms of modern medical science, but the fact remains that they provided relief to the sick for centuries and still continue to do so. The potential value of these systems for future health care programmes are now being gradually realised. Governmental and non-governmental agencies, including the World Health Organisation, have now come in a big way to promote these systems to provide health-care to the increasing populace of the world. This has given a new lease of life to herbal medicine, which was on its death-bed for some time due to the onslaught of modern medicine.

The study and use of plants for medicinal purposes is the concern of herbalism. It is of no less concern to orthodox or modern medicine which puts equal faith in the curative properties of plants. Our experience with herbal medicine in the recent times, have proved the worth of plants, but herbalism, as such, has been considered by many to be an aberration fit only for quacks, fools and hypochondriacs. So, at this time when 'green medicine' is coming back to mainstream life very fast, we should ask ourselves: How does herbalism differ from modern medicine?

The most common view, held widely even now, is that herbal medicine is more 'natural'. They are indeed, in the sense that herbalists often use plants and plant parts as such in their medicines

and the preparation is rather very simple or little sophisticated. In modern medicine, it involves isolation, purification and administration of only "active ingredients." The advantage of the latter is that it acts very fast and with certainty and the disadvantage that the patient's co-operation in treating his own illness is kept minimal. On the other hand, herbal drugs acts slowly, but during the time of cure the body gets a chance to rebuild and fortify its own defensive mechanisms. To put it in a different perspective, modern medicine is based on the philosophy of pathogenecity and the treatment is aimed at eliminating these pathogens. This antibiotic method of treatment helps cure the obvious disease, but on the whole leaves the entire body system weaker and hence vulnerable. Herbal systems on the other hand, treats the whole individual as an integrated, wholesome ecosystem and diseases as manifestations of imbalance in body elements. The treatment is aimed at restoring the lost balance and fortifying it against all possible afflictions.

Men of modern medicine are gradually realising by hind sight, that this 'probiotic' approach to medicine has many merits compared to the other. Then, how is it that herbalism was relegated to the back seat all through? All earlier men of medicine were herbalists. In India we had scores of such reputed men, like Charaka and Susruta. In fact, Susruta is considered to be the father of modern surgery. They have compiled excellent treatises on Indian herbal medicine. In Europe, men like Hippocrates and Galen published their herbals which are popular even today. The circulation

of these herbals enabled anybody, who could read, to indulge in self medication without harmful effects. The poor has been doing it all along, because herbalism did not require any special skill or expensive apparatus, provided the patient knew which plants suited his condition best. So, in course of time, there came two kinds of 'green medicine'. The one carried on by specially qualified physicians became orthodox medicine, while the term 'herbalism' was attached to the ones practised by amateurs and laymen.

Since then, herbalism and orthodox medicine have evolved independently. The latter has made rapid strides thanks to developments in science and technology, while the former has stagnated and even decayed to a certain extent. But, ironically though, one would find in retrospect that the developments in modern medicine owe a great lot to the knowledge derived from folk and traditional herbal medicine. Though men of medicine despise herbalism overtly, they have plundered the latter for the benefit and progress of their own system. we have innumerable examples for this.

Foxglove (*Digitalis purpurea*) is a highly toxic plant. A single leaf can cause paralysis or cardiac arrest. Alkaloids like Digitalin and Digitoxin isolated from this plant are now used in the treatment of various ailments from epilepsy to cardiac diseases. It was in 1775 that curative properties of this plant was first discovered by Dr. william withering. He had heard about an old lady in England, famous for her herbal cures. Withering sent one of his terminal heart patients to this lady for treatment. But the lady cured him.

An amazed withering searched her medicine kit and discovered this plant. Finally his experiments with this herb proved that the plant which can cause serious cardiac problems can also cure its maladies. Later experiments with synthetic equivalents of these alkaloids proved that they are not as efficacious as the one got from the plant itself. This was an eye-opener for men of modern medicine who understood that plants can do what chemists cannot.

Attention of medical men fell on the seemingly unimportant, weedy species *Catharanthus roseus*, also known as *vinca rosea* (*Madagascar periwinkle*) quite accidentally, when they heard that the Jamaican tribals drank a sort of "periwinkle tea" for curing diabetes. This plant has been the subject of intensive chemical studies since 1950<sup>8</sup> and the result was the discovery of a large number of alkaloids including vinblastin and vincristin which are now widely used against juvenile blood cancer and a variety of other ailments.

Times were when steroids like cortisone were isolated from animals. This proved to be too expensive and chemists turned their attention to plants, until finally they discovered it in yams (*Dioscorea* sp.) Diosgenin isolated from species of this genus is now widely used in our family planning programmes. Most of us might have taken aspirin for various types of pains. In fact, this was first isolated from a plant commonly called 'Meadow sweet' (*Filipendula utmaria*) in 1835, which was used by traditional healers in Europe against various kinds of fevers, flu, rheumatism etc., from ancient days.

The story of the miracle cure of Malaria, quinine, is even more intere-

sting. During world war II, American army was marching from island to island in the south Pacific, when they encountered a more formidable enemy than the Nazis viz. Malaria. Thousands perished. Finally, it was quinine which saved the situation. Even now, quinine is used extensively. The tribal people of Andes in Latin America had been using the bark or its powder against all sorts of fever since very ancient times. They called it the 'fever bark.' During the 17th century the Spanish missionaries who arrived there used it and also tried to promote it throughout Europe (hence called 'Jesuit bark' or 'Jesuit powder'.) But this was not acceptable to medical men. The drug was even prohibited in many countries. Finally, it was in 1820, that the French scientist, Joseph Pelletier, isolated quinine and found it very effective in curing malaria. Since then, the demand for this plant had been on the increase, so much so that by 19th century its stock in the Andes, the original home of the plant, was very highly depleted. Subsequently, the colonial powers, aware of the potential uses of this plant, tried to cultivate it in their various tropical colonies, including India and Indonesia. The Dutch were more successful in growing them in Java (Indonesia) and currently most of the supply come from South America, Africa and Indonesia.

Ancient Indian mystics and saints used the 'Indian snakeroot' (*Rauwolfia serpentina*) to acquire, what they say, a philosophical detachment required for meditation. It was also used by herbalists to treat mental illnesses and as an antidote for snake poison. About fifty alkaloids including reserpin have been

isolated from this plant since modern medicine discovered it in 1952 and is now widely used in the treatment of hypertension. The Government of India has now imposed a ban on the export of this because of its over-exploitation.

It is true that many such claims made on plants by ancient herbalists have since been belied. For example, the European 'Mercury' (*Mercurialis alba*) was thought to be a good laxative by Hippocrates (4th century B.C.). But Dioscorides, the personal physician of the 1st century Roman Emperor, Nero, prescribed it for parents who wanted to choose between male and female children. He said that those who consume a potion of the male plant would have male offsprings while those who take that of the female plant would have female ones. In 16th century, the English Herbalist, John Gerard prescribed it for a totally different purpose. He stated that one can even put his hands on molten lead without burning them, if one has washed hands in an extract of this plant prior to that. Greek mythology holds this herb in high regard and believes that the medicinal prowess of this herb was discovered by God's messenger, the Mercury. The scientific name of this plant commemorates this myth. Anyway, recent studies on this herb have failed to corroborate any of these claims, leave alone its medicinal values. In fact, they have established that consuming this plant could be harmful, because it would destroy the membranes of the stomach.

The important point here is that modern medicine has gained more than it has lost by its association with her-

balism, folk and traditional medicine. This is borne out by the fact that a good percentage of the medicines prescribed at present are plant products. Plants, in fact, help us in two different ways, by providing drugs directly and by providing the blue prints for their artificial synthesis. We can synthesise the drugs, but the models have to come from the plants. Almost all synthetic drugs that we get in the market now are made on the basis of the blue prints or are improvised versions of the models that we have got from plants. This is a pointer towards the need for the conservation of the plant diversity, on the one hand and on the other, for the need for continued research on plant drugs. This is especially important now because several diseases like cancer are still eluding cure even as new scourges like AIDs are threatening the very survival of humanity on this plant. We should have humility to admit that we still know only very little about the medicinal value of plants. The traditionalists among us say that there is not a plant which is not medicinal. Yet we have studied only very few of them in this respect. For example, India has a rich and varied flora consisting of about 15,000 species of flowering plants, yet we do not use more than a thousand of them in medicine, at present. Higher plants are, still, the 'sleeping giants' in drug development. And herbalism, folk and traditional herbal medicine are likely to provide us useful clues to the medicinal values of plants and hence can well be the path-breakers in this respect. ●

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#### ON SCIENCE

Concern for man himself and his fate must always be the chief interest of all technical endeavours, concern for the great unsolved problems of the organisation of labour and the distribution of goods—in order that the creation of our mind shall be a blessing and not a curse to mankind. Never forget this in the midst of your diagrams and equations.

—ALBERT EINSTEIN



## ROLE OF VIRECHANA IN ANAESTHESIA

Dr. D. N. PANDE and Dr. S. B. PANDE

The procedure by which Doshas are eliminated through the lower opening is known as Virechana. It also includes elimination of excretory products through the anal opening. The word Virechana is derived from Vi+Rich+ Nich, Lyvt-Maladeha Nissaroonam, which means elimination of Doshas and excretory products from the body. Virechana eliminates the doshas from Amashaya and this property of Virechana is known as 'Adhobhaghar'. It eliminates 'Pitta' initially. Kapha dosha is also eliminated by 'Virechana'. Virechana is included in Ayurveda as Poorvakarma for preparation of patients before surgery (Sushruta, Sut. 5/1). Now-a-days it is used as an enema for emptying the lower bowel before surgery. This study explores the utility of Virechana in anaesthesia.

Sixty healthy patients of either sex posted for routine operation were selected. They were divided in two groups-I & II. The patients of group I were treated with Virechana while group II served as control. The 30 patients of

group I were given Kshat-sakara Churna-6 Masha five days before surgery.

All the patients of both groups were examined on the day of operation. Atropin .6 mg and Phenargan 25 mg I.M. was given one hour before operation and before the commencement of anaesthesia. Details are given below.

TABLE-1  
Mean age and weight of patients

Group	Mean Age	Mean Weight
I	39.67 ±9.78	53.83 ±6.96
II	38.99 ±8.36	51.77 ±5.06

TABLE-2  
Changes in mean temperature before and after premedication

Group	Mean temp. in °F	
	Before premedication	After premedication
I	98.14 ±0.62	99.53 ±0.68
II	97.83 ±0.66	99.98 ±0.84

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TABLE-3

## Mean B. P. changes

Group	Mean B. P. in mm of Hg		
	Pre treatment	Post treatment	60 minutes after premedication
I	89.00 ±4.12	89.40 ±3.61	90.58 ±4.35
II	88.35 ±4.59	88.35 ±4.59	90.74 ±4.38

TABLE-4

## Changes in pulse rate

Group	Mean pulse rate		
	Pre treatment	Post treatment	60 minutes after premedication
I	78.47 ±4.22	78.17 ±5.84	90.97 ±7.55
II	97.40 ±4.80	77.40 ±4.80	96.80 ±8.89

TABLE-5

## Changes in respiratory rate

Group	Mean respiratory rate		
	Pre treatment	Post treatment	60 minutes after premedication
I	19.00 ±2.30	19.00 ±2.30	19.17 ±2.41
II	18.80 ±1.32	18.80 ±1.32	19.17 ±2.23

TABLE-6

## Premedication response

Effect	Group I		Group II	
	No.	%	No.	%
<i>Sedation</i>				
Present	23	83.33	19	63.33
Absent	05	16.67	11	36.67
<i>Apprehension</i>				
Present	04	13.33	08	26.67
Absent	26	86.67	22	73.33

*Excitement*

Present	01	3.33	03	10.00
Absent	29	96.67	27	90.00

*Dizziness*

Present	04	13.30	06	20.00
Absent	26	86.70	24	80.00

*Emetic sequelae after premedication:*

No patient had emetic sequelae (nausea and vomiting) after premedication in both the groups.

*Effect of Virechana on the course of subsequent anaesthesia:*

TABLE-7

## Mean induction time of different groups

Group	Mean induction time (in minutes)
I	5.20 ±0.77
II	6.80 ±1.66

TABLE-8

## Dose requirement of Flaxedil

Group	Dose of Flaxedil (mg)
I	102.67 ±12.80
II	114.67 ±14.07

TABLE-9

## Undesirable effects during anaesthesia

Effect	Group I		Group II	
	No.	%	No.	%
<i>Hiccup</i>				
Present	00	00	06	20
Absent	30	100	24	80

**TABLE-10**  
Mean anaesthetic time in minutes

Group	Mean anaesthetic time in minutes
I	70.67 ±6.29
II	77.30 ±13.47

**TABLE-11**  
Mean surgical time

Group	Mean surgical time
I	63.00 ±7.83
II	63.00 ±12.87

**TABLE-12**  
Post-operative response

Group	Mean blood pressure (mmHg)	Pulse rate
I	90.93 ±4.71	91.73 ±7.36
II	93.00 ±6.82	96.67 ±5.98

**TABLE-13**  
Recovery Response

Type	Group I		Group II	
	No.	%	No.	%
Fully awake and safe	26	86.67	18	60.00
Not awake but safe	04	13.33	12	40.00
Not awake not safe	00	00	00	00

**TABLE-14**  
Post-operative response

Effect	Group I		Group II	
	No.	%	No.	%
<i>Vomiting</i>				
Present	02	6.67	04	13.33
Absent	28	93.33	26	86.67
<i>Nausea</i>				
Present	02	6.67	04	13.33
Absent	28	93.33	26	86.67

**TABLE-15**

Mean time at which analgesia was demanded by patients

Group	Time of analgesic required
I	1.97 ±0.83
II	1.57 ±0.88

#### Discussion

Some definite advantages after Virechana were seen in the study.

The results can be summarized as follows.

- 1) There is a greater rise in temperature in group II but it is statistically insignificant.
- 2) In both groups there was no change in B. P. at any level. The slight change after premedication is statistically insignificant.
- 3) There was definite rise in pulse rate in both groups which is statistically insignificant. But in group I the rise in pulse rate is less than group II. This difference in mean pulse rate could be ascribed to the action of Virechana which kept the doshas in state of equilibrium.
- 4) The mean respiratory rate was found identical in both groups.
- 5) Both groups showed good sedation but it was higher in group I. The difference is statistically significant. This can be attributed to Virechana which kept the patient calm and quiet and thus the pharmacological action of promethazine hydrochloride was enhanced in Group I. The incidence of apprehen-

nsion, excitement and dizziness in both the groups seem to be different but statistically it is not significant.

- 6) Both groups I and II were induced with Ether  $N_2O$  and  $O_2$  and maintained with  $N_2O+O_2$  and Flaxedil (muscle relaxant). It was found that induction time was reduced in group I and thus consumption of Ether was less. The requirement of Flaxedil is also less in group I.
- 7) The incidence of good recovery was identical in both groups.
- 8) The statistically significant difference in the mean pulse rate in group I and II during recovery period can be attributed only to the effect of Virechana Karma which brought the

doshas in the state of equilibrium, keeping the mind sedated and helping in controlling the tachycardia produced by flaxedil.

#### Summary

The present study reveals the fact that Virechana plays an important role in preanaesthetic stage, during induction and after general anaesthesia. It may be helpful in increasing the safety margin of the patient by decreasing the side effects of the modern anaesthetic drugs. By sedating the mind and relaxing the body, it can control the tachycardia and hypotension by reducing the anaesthetic requirement and by helping in smooth induction and safe recovery from general anaesthesia. This can be only achieved by achieving 'Samadosha' of body.

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## NIMBA: A HISTORICAL BIOGRAPHY FROM ANTIQUITY TO MODERN TIMES - PART II

Prof. P. V. SHARMA

### 2. 5 Kasyapa Samhita

The Kasyapa Samhita<sup>28</sup> is a treatise mainly on paediatrics and hence it throws light on the uses of nimba in diseases of children.

Nimba is included in the group of drugs used as Stanyasodhana<sup>29</sup> (purifying breast-milk) (p.7). It is also used in treatment of Balagrahas in various ways (p. 102, 104). The paste of nimba leaves acts as Sodhana (cleansing) and Ropana (healing) for wounds (p. 125). Under the chapter on fumigation, a number of formulations contain nimba leaves. There is one named 'Arista dhupa' which is prepared of all the five parts of nimba mixed with ghee (p. 171, 172). Nimba is mentioned as a member of the Thriphaladi group indicated in disorders caused by Kapha and deficient digestive fire (p. 222). It is also an ingredient in Katuka ghrta useful in Sannipata fever (p. 223). It is applicable in Sutika roga (puerperal disorders) as asava along with Sarngesta etc. (p. 312). In this condition, in order to purify

mouth there is a leha (linctus) containing nimba leaves, madhuka etc. (p.313). For erysipelas there are several preparations (p. 328, 330). Bath in the decoction of nimba leaves alleviates oedema (p. 344).

From a survey of the ancient literature it is clear that nimba occupied its due position gradually and after a long struggle. Its chief competitor seemed to have been Guduci (*Tinospora cordifolia* (Willd.) Miers ex Hook. f. & Thoms) which has the advantage of being madhura in Vipaka and thus having Rasayana effect whereas nimba is Katu in Vipaka though both have Tikta rasa. Tikta rasa because of being composed with Vayu and Akasa bhutas increases Vata by excessive use. The risk is counteracted in Guduci by its Vipaka (madhura) as well as Virya (usna) and that is why it was preferable in such conditions. However, the blood-purifying, antiseptic and healing properties of nimba were predominant

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for which it was recognised as one of the best drugs.

### 3. Medieval treatises

Medieval period is characterised by compilatory nature. Though resting on the ancient tradition, it adds some new knowledge. Just to avoid repetition, under this heading, only the additional informations on the use of nimba will be given. For this, the following three representative texts have been selected:

- 1) Cakradatta (11th cent. A.D.)
- 2) Sarngadhara Samhita  
(13th cent. A.D.)
- 3) Bhavaprakasa  
(16th cent. A.D.)

#### 3.1 Cakradatta

The Cakradatta<sup>30</sup> of Cakrapanidatta, a scholar commentator on the Samhitas of Caraka and Susruta, is an authoritative text on Ayurvedic medicine in the early medieval period. It contains mercurial formulations which are absent in the preceding works. Cakradatta follows mostly Vrnda's Sidhayoga and also the Chikitsakalika of Tisatacarya<sup>31</sup> (both 10th cent. A.D.)

As regards the uses of nimba, the following informations are noteworthy:

Soup of nimba and patola is wholesome in fever caused by Pitta and Kapha (1.39). Nimba is an ingredient in Mrdvikadi Kasaya indicated in Pittajvara (1.86). In order to relieve excessive heat and burning sensation in Pittajvara, froth produced by pounding nimba leaves is applied externally (1.96). In Kaphajvara, there are nimbadi kvatha (1.104) and Katukadi kvatha

(1.103) which contain nimba. Fever caused by Pitta and Kapha is the main area of nimba and as such it enters into three formulations — Guducyadi kvatha (1.123), Patoladi kvatha (1.128) and Amrtastaka kvatha (1.129). Vyosadi kasaya (1.190) indicated in Tridosaja jvara contains nimba. Besides Aparajita dhupa, there is astanga dhupa consisting of nimba leaves, Guggulu, Vaca, Kustha, Haritaki, Sarsapa and Yava (1.226).

In Jvaratisara (fever associated with diarrhoea), there is Vyosadyaurna which contains nimba (2.22-25).

In Nagarjuna Yoga prescribed for piles the fruits (seeds) of nimba are used (5.61). Karanjadi kvatha indicated in Visucika contains nimba, it induces emesis and thereby brings relief (6.87).

Phalatrikadi kvatha, a popular remedy for anaemia and Jaundice contains nimba along with other bitters (8.7). Haridraghrta also contains nimba (8.53). Even single juice (decoction) of nimba bark is useful in jaundice (8.24).

Baladya ghrta prescribed in Rajyaksha (consumption) contains nimba. It is useful in tuberculous fever associated with cough, wasting and pain (10.83).

Guducyadi kvatha containing nimba is useful in vomiting particularly caused by amlapitta (acid gastritis) (15.10). Padmakadya ghrta also contains nimba (15.27).

Nimbadi dhupa (20.48) is used for fumigation in insanity caused by extraneous factors.

Navakarsika kvatha (23.21-23) is indicated in Vatarakta. It contains nimba

and other eight drugs, one karsa (10 g), each. That is why it is named as Navakarsika (nine drugs in the quantity of one karsa each). It is efficacious in Vatarakta, leprosy and other skin diseases.

In Paittika sula, emesis is induced by administering decoction of patola and nimba (26.24). Triphaladi kvatha (26.31) and patoladi kvatha (26.63) indicated in sula also contain nimba. The latter consists of patola, triphala and nimba. This decoction mixed with honey is useful in fever, vomiting, burning sensation and colic caused by pitta and kapha. Nimba enters into the formulation 'Rohinyadi ghrta' (30.20-22) indicated in Paittika gulma.

Nimba is an ingredient in decoctions useful in Paittika premeha (35.15) and also in Trikantakadya ghrta and taila (35.32-33). Triphaladi taila (36.31-33) indicated in obesity contains nimba.

Punarnavastaka kvatha, a popular remedy for Udararoga (abdominal enlargements) and Sotha, contains nimba (37.51, 39.10). Oil of nimba seeds is used as snuff in gandamala (cervical adenitis) (41.20). In apaci (scrofula), the ash of mustard seeds, nimba leaves and marking nut pounded with goat's urine is applied externally (41.29).

In wounds and sinuses nimba has got wide applications. The dirty wounds should be washed with decoction of the leaves of nimba and patola (44.26). Nimba leaves are effective wound-cleanser and as such enter into a number of formulations. Tilastaka (44.28), Sodhanakesari lepa (44.29). Patolyadi lepa (44.31) and Triphaladi kvatha

(44.32). The paste of nimba leaves and sesamum act as cleanser when combined with honey and as healing agent if mixed with ghee (44.35). Nimba leaves may also be used singly in that way (44.34). Nimbapatradi vartti is a wick-like preparation used in deep wounds and sinuses (44.36). Juice of the leaves of nimba, karanja and nirgundi destroy the maggots seen in dirty wounds (44.67, 68). Jatyadi (44.77) Karanjadya (44.83-85) and tiktadya (44.87) ghrtas are indicated in wounds contain nimba leaves as one of the ingredients. In sinus too nimba is useful (45.3, 22). In Bhagandara (fistula-in-ano), nimba leaves enter into two formulations (46.6.9). In upadamsa it comes in karanjadya ghrta (47.14).

Kustha also is an important area of nimba. It is used in an emetic formulation known as panchakasaya (50.3). Nimba is a member of the anti-itching group (50.49) and is included in the formulation Navakasaya (50.58), patoladi kvatha (50.60) and abhayaristadi curna (50.64). There is a formulation Panchanimba curna in which all the five parts of nimba are used. It is efficacious in kustha, all skin diseases, fistula, filaria, vatarakta, wounds, prameha, obesity and pradara (50.74.83). Pancatikta ghrta and Panchatiktaghrta guggulu are new introductions. Besides, these, other ghrtas and tailas also contain nimba (50.111, 116, 120, 124, 139, 154).

One who takes regularly the powder of nimba leaves and amalaka mixed with ghee becomes free from eruptions and allergic manifestations on skin (51.9). Under the treatment of

amlapitta, nimba comes in a number of formulations such as dasanga kvatha (52.11), vasaguggulu (52.14), Chinnodbhavadi kvatha (52.18) and patoladi kvatha (52.19). There is a formulation based on parched grain flour (saktu) and containing panchanimba (five parts of nimba). It is known as panchanimbadi saktuyoga and is efficacious in severe amlapitta (52.27-28).

Under the treatment of erysipes, the following formulations contain nimba — mustadi kasaya (53.18), Navakasayaguggulu (53.19), amrtadi kvatha (53.20) and patoladi kvatha I and II (53.21, 22). Under visphota, kundalyadi kvatha (53.27), vrsadya ghrta (53.34) and panchatikta ghrta (53.35) contain nimba. Under masurika (pox) there is nimbadi kvatha (54.19) which is efficacious in various types and complications of pox. Moreover, nimba comes in other formulations such as drakshadi kvatha (54.16) Patoladi kvatha (54.21) and khadirastaka kvatha (54.25). In Ksudraroga (minor skin diseases) Nimba enters into formulations indicated in dhobi's itch (55.14), padminikantaka (55.21-22) and boils on scalp (55.81). Regular use of nimba oil as snuff removes greying of hairs (55.123-24).

In galasundi (elongated uvula) gargle of vacadi kvatha containing nimba is prescribed (56. jihvaroga 11). In throat disorders, intake of the decoction of nimba is prescribed (56. kantharoga, 13). Panchapallava kvatha is prescribed for mouth-wash in stomatitis. It contains leaves of patola, nimba, jambu, amra and jati<sup>32</sup> (56. kantaroga 32).

Nimba oil processed with drugs is useful for checking discharge from ear (57.35). Nimba leaves are also used in

treatment of eye diseases (58.22.25,31). Nimbapatradi gudika (58.35) is useful in conjunctivitis. Beside, Vasakadi kvatha contains nimba (58.44). Dhatriphaladi kvatha (58.66) contains nimba and is efficacious in all sorts of corneal ulcer and opacity. Patoladya ghrta (58.82), Haridradi vartti (58.129) also contain nimba. In the context of poisoning, it is mentioned that one who takes lentil with two leaves of nimba daily does not fall prey to poisoning for a year (65.3).

Thus Cakradatta has documented many traditional uses of nimba for prevention and cure of diseases.

### 3.2 Sarngadhara Samhita<sup>33</sup>

Sarngadhara, the author of this treatise, was contemporary or somewhat junior to Sodhala, the author of the Gadanigraha<sup>34</sup>. In madhyama Khanda (section II), the materials are arranged according to pharmaceutical forms which are again put implicitly in the order of diseases.

Nimba is an ingredient in guducyadi kvatha indicated in all types of fever (II.2.8). Bhunimbadi kvatha contains nimba which is useful in Kaphaja jvara (ibid 20-21). Amrtaastaka contains nimba which is useful in fever caused by pitta and kapha (ibid 26-27). Patoladi kvatha (ibid 57) indicated in quotidian fever contains nimba. Punarnavadi kvatha (ibid. 78-79) is, in fact, punarnavastaka of other texts. This is to be used after mixing with cow's urine. Patoladi kvatha indicated in upadamsa contains nimba (ibid. 134). In medieval period, Manjishta (*Rubia cordifolia*) gained popularity as blood-purifier and was used frequently in



disorders of the blood and skin including leprosy. Sarngadhara samhita has documented two decoctions named as laghu manjishtadi kvatha and brhat manjishtadi kvatha (ibid 138-44).<sup>35</sup>

In the context of Kalka (paste), there is one nimba-kalka. It is said that external application of the paste of nimba leaves cleanses and helps in healing the wound while by intake it alleviates vomiting, kustha disorders of pitta and kapha and worms (II.5.5.) Sudarsanaurna containing nimba as one of the ingredients (ibid. 26-36) is also a novel gift of the medieval period. Gradually it became very popular for treating various types of fever particularly chronic ones. Panchanimbaurna prepared of all the five parts of nimba and other drugs is particularly indicated in kustha (ibid. 148-53).<sup>36</sup>

jatyadi ghrta applicable in wounds etc. contains nimba (II.9.56). Panchatiktaghrta (ibid. 85-86) is prepared by processing ghee with decoction and paste of five bitters — vasa, nimba, guduci, kantakari and patola. It is useful in malarial fever, kustha, worms and piles. Thripthaladi taila containing nimba is used for application in head boils (ibid. 151). The oil of nimba seeds impregnated with juice of bhrngaraja and decoction of asana removes premature greying of hairs by snuff (ibid. 152). Like jatyadi ghrta, jatyadi taila also contains nimba. It is indicated in sinus and chronic ulcers (ibid. 166-169).

Thus Sarngadhara has contributed a good deal by including nimba in different formulations out of which some are new introductions.

### 3.3. Bhavaprakasa

The Bhavaprakasa<sup>37</sup> is the work of Bhavamisra who compiled it when Europeans had already settled in India. He has described therein Phirangaroga (syphilis) which is said to be caused by sexual intercourse with phirangini (European women). Thus Bhavaprakasa stands at the juncture of medieval and modern periods just as Cakradatta stands at the juncture of ancient and medieval periods.

Sudarsanaurna (Ci.1.125-135) described in Sarngadhara Samhita is repeated here which shows its popularity. There is also one nimbadiurna useful in several types of fever (ibid. 136-38). Nimba is also in guducyadi kvatha which is indicated in fever caused by Pitta and Kapha (ibid. 429). In Yogaraja kvatha (ibid. 636-38) for Sannipatajvara, padmakadi yoga (ibid. 650) for haemoptysis in Sannipatajvara, Draksadi kvatha (ibid. 765), for quotidian fever, patoladi kvatha for remittent fever (ibid. 764), Drakshadyastadasanga kvatha (ibid. 822-24) for chronic fever and haritakyadiurna (ibid. 830) for fever caused by polluted water contain nimba. Inclusion of nimba in various formulations indicates that, during the period, it gained popularity in treatment of different types of fever.

In piles, the soup of nimba and patola is prescribed with diet (Ci. 5.48). One should take juice of nimba leaves mixed with honey to eradicate intestinal worms (ibid. 7.24). Astadasanga lauha prescribed in pandu and kamala contains nimba (Ci. 8.55). In Amlapitta, it is drug of choice and enters into composition or chinnodbhavadi kvatha

(Ci.10.16) and vasadi kvatha (Ci.10.17). The former decoction, if added with triphala, is useful in paittika vomiting (Ci. 17.17).

In Vatarakta, nimba is an ingredient in navakarsika kvatha (Ci.29.58), mahapindataila (ibid. 119)<sup>38</sup> and triphala guggulu (ibid. 214). Arjunadya taila ghrta for prameha contains nimba (Ci. 38.102). In obesity, triphaladya taila contains nimba (Ci. 39.58). It is to be used in all ways—intake, anointment, gargle snuff and enema. Punarnavadi kvatha for udararoga (Ci. 41.60-61) is the same as Punarnavastaka only added with musta. Amrtavallyadi taila containing nimba is used as intake in galaganda (goitre) (Ci.44.32).

Nimba is an important drug for abscess, wounds etc. It is included in Gayatryadi kvatha (Ci. 46.34), Nimbapatradi lepa (Ci. 47.59), patoladi kvatha (ibid. 72) and Jatyadi ghrta (ibid. 88). There is also a formulation containing nimba leaves which is used in treatment of chronic ulcers (ibid. 70). In sinus and fistula too it is useful (Ci. 49. 11, 50. 22). In Upadamsa, a venereal disease, nimba is used in a number of formulations such as nimbadya yoga (Ci. 51.16) sampakadi lepa (ibid. 24) Karanjadya ghrta (ibid. 38) and Bhunimadya ghrta (ibid. 39).

Kustha (leprosy and skin diseases) has been an important area of nimba from time immemorial. Bhavaprakasa has recorded Pancanimbavaleha (Ci. 54. 54.63) which is a modified form of brhat pancanimbakaurna of Gadani-graha. Besides, Mahabhallatakavaleha (ibid. 84), three types of Manjishtadi kvatha (ibid. 99-106), Mahamaricadya taila (ibid. 114) and Kacchuraksasa taila

(ibid 138.) contain nimba. In erysipelas, bhunimbadi kvatha contains nimba (Ci. 56.34). In visphotaka, draksadi (Ci. 58.20), bhunimbadi (ibid. 21) and chinnadi (ibid. 24) kvathas contain nimba. For syphilis, there is nimbadiurna (Ci. 59.22-23) containing nimba, haritaki and dhatri which is effective in the disease. For masurika (pox) there is nimbadi kvatha (Ci. 60.47). Decoction of nimba and patola mixed with honey is taken in kaphaja type of pox (ibid.45).

For treatment of wounds with multiple openings, nimba oil cooked with realgar etc., which is known as manahsiladya taila (Ci. 61.61. is used 61-62). In a paste for alasa (dhobi's itch) Nimba is an ingredient (ibid. 119).

In chronic headaches, pathyadi kvatha (also known as Pathyasadanga kvatha) has been quite popular. (Ci.62.56). In treatment of eye diseases, nimba leaves are an ingredient in ropana vartti (Ci. 63.201), nayanasonanjana (ibid. 223) and chandraprabha vartti (ibid. 228) Patoladi kvatha (Ci. 66.159) used as mouth-wash for disease of mouth contains nimba leaves. There is also haridradi taila (ibid.165).

In diseases of children, rohinyadi ghrta (Ci.199) and Bhadramustadi kvatha (ibid. 150) contain Nimba. The former is indicated in balagraha and the latter in all types of fever. In Balagrahas, decoction of five bitters (Panchatikta) is also prescribed for sprinkling. The five bitters are nimba, patola, kantakari guduci, and vasa (ibid. 92-93). This Bhavaprakasa has given first position to nimba among bitters.

(to be continued)

## REFERENCES and NOTES

28. Pub. Chaukhamba Sanskrit Series office, Varanasi 1953.
29. Surprisingly enough the Stanyasodana mahakasaya of Caraka does not contain nimba (See SU4. 12)
30. Pub. Chaukhamba Sanskrit series office, Varanasi 1983 (5th ed.)
31. Tisata mentions nimba in the trayantyadi group (V. 53) which contains all the bitters used in disorders of pitta and kapha.
32. The commonly known panchapallava consists of the tender leaves of amra, jambu, kapittha, bijapura and bilva (Vaidyakapari-bhasapradipa 3.153)
33. Pub. Master Khelari Lal & Sons, Benaras city, 1933.
34. Pub. Chaukhamba Sanskrit series office, Varanasi, pts. I-III, 1968-69. In this text there are several formulations of nimba for fever (pt. 2. P. 82, 84, 122) Khadiradya curna for worms (p. 266); trayantikadi kvatha (p. 282) in haridraka jvara (acute hepatitis): and nimbadi kvatha (p. 844) for Visphotaka contain Nimba. The regular intake of the paste of nimba leaves for six months eradicate obstinate diseases of skin including leprosy (p. 778).
35. Bhavaprakasa has introduced one more as Madhyama Manjishtadi
36. It is different from that mentioned in Cakra-datta. Chakradatta's formation is named here as prthupancanimba curna (pt. 2, p. 777). Besides, there are pancarista (pt. 1, P. 182), brhat pancanimba (pt. 1, p. 183) and pancanimbaka curna (pt. 2, p. 800) for kustha for amlapitta also there is one pancanimba curna (pt. 2, p. 822).
37. Pub. Chaukhamba Sanskrit sansthan, Varanasi pt. II, 1980 (5th ed.)
38. Bhavaprakasa has described three types of Pindataila (Ci. 29. 119-25) ●

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### On the Pearl

To the poet, a pearl is the tear of the sea, to the oriental, it is a drop of dew solidified, to the ladies it is a jewel which they wear on the finger or neck. But for the chemist it is a mixture of phosphate and carbonate of lime with a little gelatin. And for the naturalists, it is simply a morbid secretion of the organ that among certain bivalves produces mother-of-pearl

— JULES VERNE

## A NOTE ON ETHNOMEDICINAL STUDIES OF CHHINDWARA, PLANTS USED IN SNAKE AND SCORPION BITE

M. K. RAI

During the ethnomedicinal survey of Patalkot and Tamiya, the author has collected first-hand information on plants used in snake and scorpion bite. A review of literature reveals that a little work has been done on ethnomedicinal plants of M. P. in general, and Chhindwara in particular (Jain, 1962; Rai, 1985, 1987; Rai and Ojha, 1989; Sahu, 1982).

The site of the study was selected in Chhindwara District. Patalkot and Tamiya are two famous places which are situated on the slopes of Satpura mountains. Patalkot is situated 82 K.M. north-west to Chhindwara proper. The main tribes of this area are Gond and Bhabha. About 80 percent Bhabha and 20 percent Gond reside in the valley of Patalkot.

In the present study, ethnomedicinal surveys were made frequently in the forest area of Patalkot and Tamiya during 1983-90. The data were

collected by interviewing the Bhumka (medicine man) of the area, and some vaidyas. The tribes were also taken to the field in case of doubtful herbal medicines.

### PLANTS USED

1. *Acanthospermum hispidum* DC (Family - Asteraceae) Vernacular name "Bicchiakanta". The fruit is used in scorpion bite.
2. *Borreria stricta* (Linn. f.) K (Family - Rubiaceae) Vernacular name — "Singwala". Whole plant is used in scorpion bite.
3. *Cassia tora* Linn. (Family - Caesalpinaceae) Vernacular name — "Panwar", "Pawar", "Chakunda". Claim: Root is used in snake bite.
4. *Cissampelos pariera* Linn. (Family - Menispermaceae) Vernacular name — "Kadupad", "Patha". Root is used in snake bite with tobacco.

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5. *Clitoria ternatea* Linn. (Family — Fabaceae) Vernacular name — "Aparajita". Flowers and roots are used in snake bite.
6. *Heliotropium strigosum* Willd. (Family — Boraginaceae) Vernacular name — "Muta". Whole plant is used in snake bite.
7. *Hoppea dichotoma* Willd. (Family — Gentianaceae) Vernacular name — "Hoppea". Whole plant is used in snake bite.
8. *Leucas aspera* Spreng. (Family — Lamiaceae) Vernacular name — "Chhota halkusa". Root is used in scorpion bite.
9. *Oldenlandia affinis* (R & S) DC. (Family — Rubiaceae) Vernacular name — "Bicchu booti". Plant juice is used in scorpion bite.
10. *Oroxylum indicum* (Linn.) Vent. (Family — Bignoniaceae) Vernacular name — "Bhespadar", "Naagphan", "Arbe". Seeds are used in snake bite.
11. *Paspalum commersonii* Lam. (Family — Poaceae) Vernacular name — "Janglikodo", "Kodo". Whole plant is used in scorpion bite.
12. *Plesmonium margaritifera* Schott (Family — Araceae) Vernacular name — "Muchodi kanda". Tuber is used in snake bite.
13. *Strobilanthes callosus* Nees (Family — Acanthaceae) Vernacular name — "Maruadona", "Sanbuti". Root-Juice is given in snake bite.

All the plants and their family have been given in table-I.

It is concluded that an extensive search should be done to trace out the traditional medicinal plants. It is the need of the hour to keep on record the

TABLE-1

Ethnomedicinal plants used in scorpion and snake bite

Plants	Family	Disease
<i>Acanthospermum hispidum</i>	Asteraceae	Scorpion bite
<i>Borreria stricta</i>	Rubiaceae	Scorpion bite
<i>Cassia tora</i>	Caesalpinaceae	Snake bite
<i>Cissampelos pariera</i>	Menispermaceae	Snake bite
<i>Clitoria ternatea</i>	Fabaceae	Snake bite
<i>Heliotropium strigosum</i>	Boraginaceae	Snake bite
<i>Hoppea dichotoma</i>	Gentianaceae	Snake bite
<i>Leucas aspera</i>	Lamiaceae	Scorpion bite
<i>Oldenlandia affinis</i>	Rubiaceae	Scorpion bite
<i>Oroxylum indicum</i>	Bignoniaceae	Snake bite
<i>Paspalum commersonii</i>	Poaceae	Scorpion bite
<i>Plesmonium margaritifera</i>	Araceae	Snake bite
<i>Strobilanthes callosus</i>	Acanthaceae	Snake bite

knowledge of herbal medicines, as due to culture collapse, modernization etc. the authentic knowledge of the rare herbal medicine is being lost. Herbal nurseries, and small scale industries should be started to conserve the medicinal plants.

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#### Our Neem

The writings of Charaka say that a decoction of the root bark, flower, fruit and leaf of neem can be used to treat leprosy. Ancient writings prescribed neem for treating diabetes, eczema and jaundice among other diseases

—FRONTLINE AUGUST 13, 1993

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## STUDIES ON THE MEDICINAL USES OF PLANTS BY THE SAHARIYA TRIBE OF MADHYA PRADESH

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### ABSTRACT

The present paper deals with 15 important medicinal plant species used by the Saharia tribes of Madhya Pradesh for the treatment of various kind of ailments and diseases. This tribe is dispersed over eighteen districts, but their largest concentration and native home is in the Gwalior and Chambal Divisions of Madhya Pradesh.

### Introduction

The Sahariya tract of Madhya Pradesh lies between  $22^{\circ}13' - 26^{\circ}45'N$  latitudes and  $75^{\circ}30' - 78^{\circ}45'E$  longitudes. According to the 1981 census, the total population of the Sahariya tribe is about 2,57,338. They are dispersed over eighteen districts, but their largest concentration is in Gwalior and Chambal Divisions of Madhya Pradesh. The Gwalior division comprises of Shivpuri, Guna, Gwalior and Datia districts and Chambal division of Morena district. They are also found in some parts of Sehore, Shajapur and Dewas districts, Sahariya is one among the seven primitive tribes of Madhya Pradesh namely Baiga, Bharia, Abujhmaria, Hill-korwa, Kamar, Sahariya and Birhor. They are Dravidian in origin. They assert kinship with Rajputs and are considered as an

offshoot of Bhil. They have little land with the result that they utilize many species of the forest flora for food, fodder, fibre, medicine, gum, drinks, fish poison, brooms and baskets in their daily life. Due to close association with the forest environment they have intimate knowledge of wild plants used for medicine. They have acquired this knowledge from generation to generation by verbal tradition only.

### Material and Methods

The present work is an outcome of two years' (1990-91) extensive and intensive surveys carried out among the Sahariyas. About 20 tribal villages inhabited by the Sahariyas were visited. The first hand ethnomedicinal information was gathered from old and experienced medicine men locally known as 'Jankar'. The voucher specimens of

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plants were collected and preserved at the ethnobotanical herbarium of National Botanical Research Institute, Lucknow.

The ethnomedicinal uses of plants presented here has not been reported earlier. Chopra (1956), Jain (1963, 1965), Bhatnagar (1973), Dixit & Pandey (1984), Agarwal (1986), Ambusta (1986), Saxena (1986), Maheshwari & Singh (1988), Maheshwari & Painuli (1990) and Sikarwar & Kaushik (1992) have not reported them.

#### Enumeration

The fifteen plants of medicinal importance are arranged alphabetically followed by family, local name, locality, (District name in bracket) ethnomedicinal uses and field number (EBH).

1. *Actinopteris australis* (L. f.) Link (Polypodiaceae) *Local name:* Morpankhi, *Locality:* Malankho (Guna) The paste of whole plant is used for gastric trouble (EBH 8847).
2. *Ageratum conyzoides* L. (Asteraceae) *Local name:* Gokhan, *Locality:* Singhpur (Guna). The paste of whole plant is used as an antidote for snake bite (EBH 8829)
3. *Alangium salvifolium* (L. f.) Wang (Alangiaceae) *Local name:* Kala ankol, *Locality:* Godan (Guna) Savda (Datiya). The paste of the root bark is used as an antidote for snake bite (EBH 8819, 8850).
4. *Ampelocissus latifolia* (Roth) Planch. (Vitaceae) *Local name:* Nibrobo; *Locality:* Malankho (Guna). The

root paste is used as a tonic (EBH 8807)

5. *Anogeissus latifolia* Mall. ex Bedd. (Combretaceae) *Local name:* Safed Dhao; *Locality:* Sesaipura (Morena) The paste of stem bark is used for cough (EBH 8458)
6. *Craterostigma plantagineum* Hoch. (Scrophulariaceae) *Local name:* Baisurai; *Locality:* Chanderi (Guna) The whole plant is applied for rheumatism and gout (EBH 8850).
7. *Gymnema sylvestre* (Retz.) Schult (Asclepiadaceae) *Local name:* Appo; *Locality:* Singhpur (Guna). The whole plant is used for tuberculosis (EBH. 8810).
8. *Lannes coromandelica* (Houtt.) Merr. (Anacardiaceae) *Local name:* Gurjan, *Locality:* Karahal (Morena). The paste of stem bark is applied for injury (EBH 8427)
9. *Momordica dioica* Roxb. (Cucurbitaceae) *Local name:* Bankakoda; *Locality:* Ramnagar (Datiya). The paste of root is used for abortion (EBH 8833).
10. *Prosopis cineraria* L. (Mimosaceae), *Local name:* Chanker; *Locality:* Ramnagar (Datiya). The decoction of stem bark is used for dysentery and diarrhoea (EBH 8848).
11. *Syzygium heyneanum* Wall. ex Gamble (Myrtaceae), *Local name:* Jaljambu; *Locality:* Sirole (Datiya). The powder of stem bark is used for fever (EBH 8858).
12. *Terminalia alata* Heyne ex Roth (Combrataceae) *Local name:* Saj;



*Locality:* Indergarh (Datiya) The paste of stem bark is used for easy delivery (EBH 8814)

13. *Vitex negundo* L. (Verbanaceae). *Local name:* Lengarh; *Locality:* Sesaipura (Morena). The paste of leaves is used for typhoid fever (EBH 8450).
14. *Xeromphis spinosa* (Thumb.) Keay (Rubiaceae) *Local name:* Manhar; *Locality:* Godan (Guna). The paste of stem bark is used for snake bite (EBH 8820).

15. *Ziziphus mauritiana* Lamk. (Rhamnaceae). *Local name:* Ber; *Locality:* Gorus (Morena). The decoction of the ripe fruits is used for cholera (EBH 8423)

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## EXCERPTS FROM CHIKITSAMANJARI – IX TREATMENT OF RAKTHAPITHA

P. UNNIKRISHNAN

1, 2 Excessive ingestion of hot, acidic, alkaline and pungent substances gives rise to the vitiation of Pitha. As a result, the blood dependent on liver and spleen finds exit through the natural upper and lower orifices. The upper portals of excretion are nose, eyes, ears and mouth, while the lower are the penis, vagina and anus. However, when the magnitude of vitiation of pitha becomes great, blood may ooze out even from the hair follicles.

Depending upon the doshas involved in the vitiatory process, the aetiological classification of the disease is in seven types. Vitiation of a single dosha gives rise to three varieties— Vata, Pitha and Kapha — dual doshas to three – vata pitha, vata kapha and pitha kapha and vitiation of all doshas – vatapithakapha, is the last variety.

3 Rakthapitha manifesting through the upper orifices termed Oordhwaga can be cured, that manifesting through lower orifices termed Adhoga can be

managed and when there is simultaneous vitiations of all doshas manifesting through both portals the condition is known as Ubhayayana, which will not respond to treatment.

If the disease that has subsided flares up frequently if it alters its route of exit from upper to lower or vice-versa, or if the quantity discharged<sup>4</sup> from the body is excessive, or if the manifestation is via dual routes in patients with impaired digestion, they should not be treated.

In the Oordhwaga variety of rakthapitha, satiation therapy (Tharpana) should be followed with purgation (Virechana). In Adhoga, depending upon the stamina of the patient emetics are to be administered and when Vamana or Virechana are contraindicated to the patient, he should be treated with Sthambhanas.

The blood that is ejected from the orifices naturally should not be suppressed by medication initially as

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this may cause other diseases due to vitiation of raktha, such as unconsciousness, fever, vaticakustha, prameha (diabetes) or bhagandara (ano-rectal fistula) instantaneously. 6

In the initial stages, fasting should be advised. If the patient is weak, feeble or debilitated, satiatory (Tharpana) line of therapy should be followed. Kanji prepared from medicines of Seetha (cold) substances are very effective in this condition. 7

Iruveli - *Coleus zeylanicus* (Benth)  
Crammer.

Sevya - *Vetiveria zizanioides* Linn. 8

Parpata - *Oldenlandia corymbosa* Linn.

Kulurmegha - *Cyperus rotundus* Linn.

A medicated potion prepared from the above raw drugs will cure Rakthapitha.

The Shadamga kashaya mentioned earlier should be prepared excluding Chukku (dry *Zingiber officinale* Rose) and including Chittamrithu (*Tinospora cordifolia* (Willd) Hook f. & Thoms) and Atalotakaver (root of *Adathoda vasika* Nees).

A Kashaya prepared from the following raw drugs should be taken with a small quantity of honey for the cure of Rakthapitha.

Vasa - *Adathoda vasika* Nees. 9

Guloochee - *Tinospora cordifolia*  
(Willd) Hook f. & Thoms.

Bandhuka - *Pentapetes phoenicea* Linn.

Alternatively the decoction prepared from Guloochee (*Tinospora cordifolia* (Willd) Hook. f. & Thoms)

alone has curative properties similar to the above.

Chandana (*Santalum album* Linn.) should be finely powdered and mixed with butter. This medicine should be swallowed for the relief of Rakthapitha. Atalotaka (*Adathoda vasika* Nees and the buds of Peral (*Ficus bengalensis* Linn.) each 24 Grams should be crushed well and a Kashaya is to be prepared. This medicine should be taken with milk for the cure of Rakthapitha. 10

Boiled buds of Peral (*Ficus bengalensis* Linn.) should be crushed well, mixed with butter and taken to relieve rakthapitha. Alternatively the powder of Sahasravedhi shall also be taken with butter. 11

If there is vitiation of vayu in the patient, he should take goat's milk (boiled) to which five times water is added and reduced. Similarly, cow's milk shall also be used. 12

Oordhwaga Rakthapitha will be cured by the ingestion of medicated potion prepared from the raw drugs given below. 13

Vasa - *Adathoda vasika* Nees.

Japa - *Hibiscus rosa-sinensis* Linn.

Madhuka - *Madhuka longifolia* (Koeing)  
Mac Bride

Lodhra - *Symplocos racemosa* Linn.

Bala - *Sida rhombifolia* Linn.

Amrita - *Tinospora cordifolia* (Willd)  
Hook. f. & Thoms each 8 Grams. 14

In Adhoga rakthapitha, Kashaya prepared from the following ingredients will be very effective. 15

Varee - *Asparagus racemosus* Willd.

Madhuka – *Madhuka longifolia* (Koeing)  
Mac Bride.  
Katphala – *Gmelina arborea* (Roxb.) Linn.  
Dhathakee – *Woodfordia fruticosa*  
(Linn.) Kurz. each 12 Grams.

Paste of thila, black variety (*Sesamum indicum* Linn.) when taken with 1/5th of its quantity of sugar, mixed with goat's milk will cure Rakthapitha. A small quantity of honey should be added to this medicine at the time of consumption.

Oordhwaga, Adhoga and Ubhaya-yana varieties of Rakthapitha will be cured by the ingestion of the medicated potion prepared from the drugs given below.

Sathavaree – *Asparagus racemosus* Willd.  
Gopakanya – *Hemidesmus indicus*  
(Linn.) R. Br.

Chandanam – *Santalum album* Linn.  
Usheeram – *Vetiveria zizanoides* Linn.  
Valakam – *Coleus zeylanicus* (Benth.)  
Cramer

Thanduleeyaka – *Amaranthus spinosus*  
Linn.

Draksha – *Vitis vinifera* Linn.  
Samanga – *Mimosa pudica* Linn.  
Utpalam – *Kaempferia rotunda* Linn.  
Yastee – *Glycyrrhiza glabra* Linn.  
each 5 Grams

The Kashaya detailed above will also cure Pradara (excessive bleeding from vagina) insanity and vishamajwara accompanied by burning sensation.

An oil medicated by the following, when applied on the head or when used for Dhara (irrigation) will yield desirable results in Rakthapitha.

Expressed juice from

Karuka – *Cynodon dactylon* (Linn.) Pers.  
Chittamrithu – *Tinospora cordifolia*  
(Willd.) Hook. f. Thoms  
as swarasa

Ponnamgani – *Alternanthera sessilis*  
(Linn.) R. Br. ex DC.

Ertatimadhuram – *Glycyrrhiza glabra* Linn  
Chandanam – *Santalum album* Linn.

Kadalippazham – fruit of *Musa* sp. as  
Kalka and thaila as sneha.

When there is epistaxis nasya with any of the following will arrest bleeding.

Expressed juice from

Doorvarasa – Juice *Cynodon dactylon*  
(Linn.) Pers.

Ikshurasa – Juice *Saccharum officinarum*  
Linn.

Paya – Milk  
Dadimapushpathoya – flower juice  
*Punica granatum* Linn.

Andeerasam – *Mangifera indica* Linn.

Finely powdered Samkha (Conch) or Gairika, is to be mixed with the kalka of Dhathakee (*Woodfordia fruticosa* (Linn.) Kurz.) or Madhuka (*Madhuka longifolia* Koenig) Mac Bride). This mixture should be administered for nasya with breast milk, which will put an end to nasal bleeding.

A medicated oil prepared from the following when applied on the head will cure Rakthapitha, warmth of the head and headache.

Karkulur – *Cyperus rotundus* Linn.  
Madhuka – *Madhuka longifolia* (Koenig.)  
Mac Bride

Useera – *Vetiveria zizanoides* Linn.

Bala - *Sida rhombifolia* Linn.  
Amritha - *Tinospora cordifolia* (Willd)  
Hook. f. Thoms as kalka  
Milk - as drava and Thaila as sneha

Rakthapitha manifesting through the urinary tract will be cured by the medicated milk prepared from the following. 22

Orila - *Desmodium Gangeticum* (Linn.) DC

Moovila - *Pseudartria viscida* (Lina.) W. & Arn.

Cheruvazhuthina - *Solanum torvum* Linn.

Velvazhuthina - *Solanum indicum* Linn.

Nerinjil - *Tribulus terrestris* Linn.

Bala - *Sida rhombifolia* Linn.

Abheeru - *Asperagus racemosus* Willd.

A medicated milk prepared from the following will relieve the pain caused as a result of Rakthapitha finding exit through the urinary tract. 23

Gokandaka - *Tribulus terrestris* Linn.

Abheeru - *Asperagus racemosus* Willd.

Parninee - *Vigna radiata* Wilezek.

Rakthapitha manifesting through the anus and penis will be cured instantaneously by the ingestion of milk medicated from the following. 24

Peral mottu - bud *Ficus bengalensis* Linn.

Peral veru - root *Ficus bengalensis* Linn.

Mocharasam - fruit juice *Artocarpus integrifolia* Linn.

In Adhoga Rakthapitha, milk medicated with Mustha (*Cyperus rotundus*

Linn.) or Vatasringa (*Ficus religiosa* Linn.) will work wonders. 25

Butter medicated from the expressed juice of Ponnangani (*Alternanthera sessilis* (Linn.) R. Br. ex DC.) to which Chandana (*Santalum album* Linn.) or Gairikaraja (Powder of red ochre) mixed well with cow's Milk, when ingested will relieve Rakthapitha. 26

Prepare a medicated ghee with the water extract derived from the following. 27

Chandana - *Santalum album* Linn.

Sarika Hemidesmus indicus (Linn.) R.Br.

Madhuka - *Madhuka longifolia* (Koenig) Mac Bride

Instantaneous cure from rakthapitha can be attained by the consumption of this ghee to which honey and sugar is to be added.

Medicated ghee from Swaduchathushka\* is a good remedy to get rid of rakthapitha.

A potion medicated with Jeevanthee (*Holastemma annulare* (Roxb) K. Schumn) and chandana or the following raw drugs will bridle oordhwaga and adhoga rakthapitha. 28

Chandana - *Santalum album* Linn. 29

Villwa - *Aegle marmelos* (Linn.) Corr.

Abda - *Cyperus rotundus* Linn.

Parpata - *Oldenlandia corymbosa* Linn.

Usheera - *Vetiveria zizanioides* Linn. 5 Grams each.

Sathavareegulam should be ingested.

- \* 1) Draksa - *Vitis vinifera* Linn  
2) Yashtyahwa - *Glycyrrhiza glabra* Linn.  
3) Dudgdham - Cow's Milk  
4) Iksurasam - *Saccharum officinarum* Linn. (Juice)

Thukasudha (Maranta arudinacea Linn.) should be added with the fine powder of the following.

- 30 Arakku - Lac  
Uzhunnu - Phaseolus mungo Linn.  
Payar - Vigna radiata wilczek.  
Aswagandha - withania somnifera  
(Linn.) Dunal

31 This mixture is to be added to an admixture of equal quantities of oil and ghee that is fuming. Eladi choorna, one-fourth the quantity of the above mentioned powder is also to be mixed with this combination and churned well. When the medicine becomes cold, it should be applied on the body for

the relief of generalised burning. This is also a good remedy to relieve wasting and anaemia. It is nutritive and will build stamina. This combination is known as Lakshadi. As and when necessary, treatment of Rakthathisara (dysentery) and Raktharsa (Bleeding piles) shall also be propounded. The entire spectrum of aetiological factors detailed in chapter elsewhere are to be stringently avoided.

Fresh, warm cow's dung is to be applied on the head for the arrest of nasal bleeding.

Prayers to Ganesha are to be offered.

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#### OUR NEEM

The neem has played countless roles in Indian life.....

The *datun* (tooth brush) with its built-in "tooth paste" may not be the only reason why Indians have relatively better teeth and gums, but the sight of people chewing neem twigs, is still common in the country. Ancient writings such as Ayurvedic Samhitas refer to neem as an effective remedy against *dantaroga* (dental diseases).

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# തായ്‌വേദുകൾ തേടി

## ദിലീപ് കുമാർ

വിദ്യാധിപൻ, 'അറിയുക' എന്നാണർത്ഥം. വേദം അറിവാണത്. അപ്പോൾ ആയുർവേദം ആയുസ്സിനെക്കുറിച്ചുള്ള അറിവാണത്. സഹസ്രാബ്ദങ്ങളുടെ അന്വേഷണത്തിലൂടെ ഉരുത്തിരിഞ്ഞതാണതിന്റെ സാരതത്വം. പക്ഷേ, ഗതകാലസംസ്കാരത്തെ ഉൾക്കൊള്ളാൻ കഴിഞ്ഞിട്ടില്ലാത്ത ഒരു സമൂഹത്തിന് സ്വന്തം തായ്‌വേദകളോട് പ്രതിപത്തി തോന്നാനിടയില്ല. അതുകൊണ്ടുതന്നെ, ക്രിസ്തുവിനുമുമ്പ് ആറോ ഏഴോ നൂറ്റാണ്ടുകൾ വരെ പഴക്കമുള്ള ഈ ശാസ്ത്രത്തിന്റെ ഉള്ളുകളിലേക്കിറങ്ങിച്ചെല്ലാനും അവർ മിനക്കടാറില്ല. ഈ ചുറ്റുപാടുകളിൽ നിന്നുകൊണ്ടു വേണം വൈദ്യരത്നം പി. എസ്സ്. വാരിയർ എഴുതിയ ആയുർവേദലേഖനങ്ങളെ വിലയിരുത്താൻ. സ്വന്തം പത്രാധിപത്യത്തിൽ നടത്തിപ്പോന്ന 'ധന്വന്തരി'യിൽ പ്രസിദ്ധീകരിച്ച ലേഖനങ്ങളിൽ നിന്ന് തിരഞ്ഞെടുത്ത ചിലതാണ്, 'തായ്‌വേദകൾ' എന്ന ലേഖനസമാഹാരത്തിലുള്ളത്.

കേവലം നിത്യവൃത്തിക്കുവേണ്ടി വൈദ്യശാസ്ത്രമ്യേസിച്ച ഒരാളായിരുന്നില്ല വൈദ്യരത്നം പി. എസ്സ്. വാരിയർ. അതിനാൽ, ക്ഷീണാവസ്ഥയിലായിരുന്ന ആയുർവേദത്തെ സജീവമാക്കാനും ദേശീയജീവിതത്തിലേക്ക് പുനരാവാഹിക്കാനും അദ്ദേഹം തയ്യാറായി. ചികിത്സ

യോടും ഔഷധനിർമ്മാണത്തോടുമൊപ്പം തന്നെ ആയുർവേദത്തിന്റെ ആശയപ്രചാരണത്തിനും പ്രാധാന്യം നൽകിയത് ഇതിനു തെളിവാണ്. മുഖ്യമായും 'ധന്വന്തരി'യിൽ പ്രസിദ്ധീകരിച്ച ലേഖനങ്ങളിലൂടെയും പത്രാധിപക്കുറിപ്പുകളിലൂടെയുമാണ് ആ യത്നം സഫലമായത്. അത് വീണ്ടും നമ്മെ ഓർമ്മിപ്പിക്കുകയാണ് 'തായ്‌വേദകൾ' എന്ന സമാഹാരം.

ശാസ്ത്രപഠനത്തിലെ അനാസ്ഥ ആയ വ്യക്തികളുടെ ക്ഷീണാവസ്ഥയ്ക്കു കാരണമാവുന്നതെന്ന ഉപദേശമാണ്, 'ചില സാരസിദ്ധാന്തങ്ങൾ' എന്ന ആദ്യലേഖനത്തിലുള്ളത്. ഈ ദർശനം ഇന്നും പ്രസക്തംതന്നെ. അഷ്ടാംഗഹൃദയത്തിലെ "ശുദ്ധേ ശുക്രാർത്ഥേ സത്വഃ...." എന്ന ശ്ലോകമുദ്ധരിച്ച് അതിന്റെ നിലവിലുള്ള വ്യാഖ്യാനങ്ങളെ മുൻനിർത്തിയാണ് വൈദ്യരത്നം ഈ പ്രശ്നം ചർച്ച ചെയ്യുന്നത്. "നാം നമ്മുടെ ശാസ്ത്രത്തിൽ കടന്നു നല്ലവണ്ണം പരിശ്രമിച്ച് അതിന്റെ തത്വങ്ങളെ മനസ്സിലാക്കുകയാണ് ഒന്നാമതായി ചെയ്യേണ്ടതെന്നും, അതില്ലാതെ വെറുതെ (അന്യചികിത്സാരീതികളുമായി) വാഗ്വാദത്തിനൊരുങ്ങിയതുകൊണ്ട് യാതൊരു പ്രയോജനവും ഉണ്ടാകാൻ ഇടയില്ലെന്നും" (പുറം-31) പറയുമ്പോൾ അദ്ദേഹത്തിന്റെ നിലപാട് സുവ്യക്തമാണ്.

ആധുനികവൈദ്യം പടർന്നുപിടിക്കുന്ന കാലഘട്ടത്തിലാണല്ലോ വൈദ്യരത്നം ആയുർവേദപ്രചാരണവുമായി മുന്നോട്ടുവന്നത്. ആയുർവേദത്തിന്റെ പ്രസക്തിയെക്കുറിച്ച് സംശയാലുക്കളായ സാധാരണക്കാരിൽ ഒരു ദിശാബോധമുണ്ടാക്കാൻ വേണ്ടിയാണ് 'പാശ്ചാത്യവൈദ്യവും പൗരസ്ത്യവൈദ്യവും' എന്ന ലേഖനം എഴുതിയത്. കൊ. വ. 1089-ൽ എഴുതിയ പ്രസ്തുത ലേഖനം 80 വർഷത്തിനു ശേഷവും നമ്മുടെ ശ്രദ്ധ ക്ഷണിക്കുന്നു.

പുണ്ണമായ ആരോഗ്യമോ ആയുസ്സോ സമ്പാദിക്കണമെങ്കിൽ പുണ്ണമായ ഒരു വൈദ്യശാസ്ത്രത്തിലെ സിദ്ധാന്തങ്ങളെ 'അന്യോന്യവിരോധം' കൂടാതെ അനുസരിച്ചു നടക്കുകയാണ് വേണ്ടതെന്ന് ലേഖകൻ നിർദ്ദേശിക്കുന്നു. ഇനി അങ്ങനെയൊന്നില്ലെങ്കിൽ, താരതമ്യേന പുണ്ണതയുള്ള ഒന്നിനെ സ്വീകരിക്കാം. ഈ സ്ഥാനം അദ്ദേഹത്തെസ്സുംബന്ധിച്ചപ്പോഴേക്കും ആയുർവേദത്തിനു തന്നെ.

ഇത്രയും വായിച്ചവരുമ്പോൾ സ്വാഭാവികമായും ഒരു ആയുർവേദവൈദ്യന്റെ അതിരുകവിഞ്ഞ അവകാശവാദമല്ലേ ഇതെന്ന തോന്നലുണ്ടാകാം. എന്നാൽ അങ്ങനെയല്ല. ആയുർവേദത്തിന്റെയോ അലോപ്പതിയുടെയോ പ്രണേതാക്കൾ അന്യമായി തങ്ങളുടെ നിലപാടുകളെ ന്യായീകരിക്കുന്നത് ഇക്കാലത്തും കാണാം. അക്കൂട്ടത്തിൽ പെടുന്ന ഒരാളല്ല വൈദ്യരത്നം പി. എസ്സ്. വാരിയർ. കാലാവസ്ഥ, ഭൂപ്രകൃതി, മനുഷ്യപ്രകൃതി എന്നീ മൂന്നു ഘടകങ്ങളെ അടിസ്ഥാനമാക്കിയാണ് ആയുർവേദം വികസിച്ചുവന്നത് എന്ന വ്യാഖ്യാനത്തിൽ കറയാറ ശാസ്ത്രീയാവബോധവും കണിശമായ നിരൂപണബുദ്ധിയുമുണ്ട്. ഇരുപതാം നൂറ്റാണ്ടിന്റെ ഈ അന്ത്യദശകത്തിൽ പോലും ഈയൊരു വീക്ഷണത്തിൽ നിന്നുകൊണ്ട് ആരോഗ്യരംഗത്തെ വിലയിരുത്താൻ കഴിവുള്ളവർ കുറവാണ്ല്ലോ.

"....ആര്യവൈദ്യം ഇന്ത്യാനിവാസികളുടെ ദേഹപ്രകൃതി മുതലായതിന്"

അത്യാവശ്യമായ മാറ്റങ്ങളെ എടുത്തിട്ടുള്ള ആയുർവേദമാണെന്നും പറഞ്ഞാൽ തന്നെ ഇന്ത്യാനിവാസികളായ നമുക്ക് ഏത് വൈദ്യമാണ് വേണ്ടതെന്നുള്ള ചോദ്യത്തിന് "ഉത്തരമായി" (പു. 37) എന്ന് വൈദ്യരത്നം പറയുന്നു. പാശ്ചാത്യവൈദ്യത്തിലെ അനുദിനം മാറിവരുന്ന ഗവേഷണഫലങ്ങളുടെ പ്രത്യേകതയും ലേഖകൻ ചൂണ്ടിക്കാട്ടുന്നു: "ഇന്ന് ഒരു മരുന്നുപനിക്കു നന്നെന്ന് ആദ്യം നിശ്ചയിക്കുന്നു. പിന്നെ കുറെ കഴിയുമ്പോൾ അതുതന്നെ പനിക്കു ദോഷമാണെന്നു കാണുന്നു; ഒരിക്കൽ അതിസാരത്തിന് ഇന്നതാണ് കാരണം എന്നു തീർച്ചപ്പെടുത്തുന്നു. പിറ്റേ ദിവസം, ചേർ; അതല്ല, വേറെയാണ് കാരണം എന്ന് കണ്ടുപിടിക്കുന്നു" (പു. 39) ഇന്നലത്തെ ശരി ഇന്നത്തെ തെറ്റായും മറിച്ചും വരുന്നതാണ് പാശ്ചാത്യവൈദ്യത്തിന്റെ അവസ്ഥയെന്നു പറയുന്നതിൽ കുറേയേറെ വാസ്തവമുണ്ട്.

വ്യക്തിഗതഗവേഷണങ്ങളിലൂടെയാണ് പാശ്ചാത്യവൈദ്യം പുരോഗമിച്ചത്. ഗവേഷകരുടെ ഇഷ്ടാനിഷ്ടങ്ങളും അഹംബോധവും മറ്റും ഫലപുണ്ണതകളാക്കുന്നതിൽക്കാതെ ഗവേഷണത്തിന് പുണ്ണവിരാമമിടാൻ അവരെ പ്രേരിപ്പിക്കുന്നു. രാഷ്ട്രീയപരിതസ്ഥിതികളും ഇതിലിടപെടാം. വ്യക്തിഗതനേട്ടങ്ങൾക്ക് പ്രാധാന്യം കൊടുക്കുന്ന ഒരു സമൂഹത്തിൽ ഇത് സംഭവ്യമാണ്. എന്നാൽ സഹസ്രാബ്ദങ്ങളുടെ പാരമ്പര്യത്തെ പുണ്ണമായും മുറിച്ചുനീക്കാത്ത ഭാരതീയസമൂഹത്തിൽ കാര്യങ്ങൾ വ്യത്യസ്തമാണ്. ഇവിടെ ശാസ്ത്രം വൈയക്തികലാഭങ്ങൾക്കുള്ളതല്ല, സമൂഹനന്മയ്ക്കുവേണ്ടിയുള്ളതാണ്. അതുകൊണ്ട് ഒരു തലമുറയുടെ ഗവേഷണം അടുത്ത തലമുറ ഏറ്റെടുക്കുകയേ ചെയ്തിട്ടുള്ളൂ. ഇത് താരതമ്യേന പുണ്ണതയുള്ള ശാസ്ത്രമായി വളരാൻ ആര്യവൈദ്യത്തെ സഹായിച്ചു.

ശാസ്ത്രത്തിന്റെ കാര്യം ഇതാണ്. ഔഷധങ്ങളുടെ കാര്യവും വ്യത്യസ്തമല്ല. തണുപ്പു കൂടുതലുള്ള പാശ്ചാത്യരാജ്യങ്ങളിൽ ഉഷ്ണവീര്യങ്ങളായ ഔഷധങ്ങളാണ്



ആവശ്യമായി വരുന്നത്. നമ്മുടെ ദേശത്താകട്ടെ, ഉഷ്ണാധികൃതങ്ങളുതിനാൽ തണുപ്പുള്ള മരുന്നുകളാണ് യുക്തം. 'എന്നാൽ പിന്നെ ഇന്ത്യയിലെ ശീതോഷ്ണസ്ഥിതിക്കു വേണ്ടത്തക്ക മാറ്റങ്ങൾ ഇംഗ്ലീഷ് വൈദ്യത്തിന് ഉണ്ടാക്കിത്തീർക്കുകയാകുന്നു വേണ്ടത്. നിർഭാഗ്യവശാൽ നമ്മൾ ഇത്ര ദയാർഹരാണെന്ന് അവർ ധരിച്ചിട്ടുണ്ടെന്നും തോന്നുന്നില്ല' (പു. 44) എന്ന് ഗ്രന്ഥകാരൻ പറയുന്നതിനോട് വിരോധിപ്പുള്ളവർ വിരളമായിരിക്കും. പാശ്ചാത്യമായ അഭിരുചികൾ ഭാരതത്തിന്റെ മേൽ അടിച്ചേല്പിക്കാനുള്ള സമകാലിക യൂറോപ്യൻ തന്ത്രങ്ങൾ കൂടുതൽ വെളിച്ചത്തു വന്നുകൊണ്ടിരിക്കുന്ന ഇക്കാലത്ത് ലേഖകന്റെ വാക്കുകൾക്ക് പ്രസക്തി വർദ്ധിക്കുന്നതുമുണ്ട്.

പരമ്യാപരമ്യസങ്കല്പത്തിൽ ഊന്നുന്ന നിബന്ധമാണ് 'അന്നസ്വരൂപം'. മലയാളിയുടെ ഭക്ഷണശീലത്തിൽ വന്നിട്ടുള്ള സൂക്ഷ്മങ്ങളായ വ്യതിയാനങ്ങളെപ്പറ്റി ഒരു ഭിഷഗ്വരനുള്ള അവഗാഹമാണ് ഇതിൽ തെളിയുന്നത്. കപ്പൽമുളക്, ചീനമുളക് തുടങ്ങിയ പുതിയ വ്യഞ്ജനങ്ങൾ പ്രചാരത്തിലായതോടെ ഭക്ഷണശീലത്തിൽ വരുന്ന മാറ്റം രോഗികളെയാണ് കൂടുതൽ ബാധിക്കുന്നതെന്ന് പി. എസ്സ്. വാരിയർ ചൂണ്ടിക്കാട്ടുന്നു. ഇവയുടെയൊന്നും ഗുണദോഷങ്ങൾ വൈദ്യശാസ്ത്രഗ്രന്ഥങ്ങളിൽ ചർച്ച ചെയ്യുതായി കാണുന്നില്ല. 'ഇതുകൊണ്ട് തങ്ങൾക്ക് നിശ്ചയമില്ലാത്ത ഭക്ഷണസാധനങ്ങളെ ഒന്നായി ഇക്കാലത്തെ വൈദ്യന്മാർ അപരമ്യാമാണെന്നു പറഞ്ഞു നിഷേധിക്കുന്നു' (പു. 53). ശാസ്ത്രഗ്രന്ഥങ്ങളുടെ കേവലമായ ചർച്ചിതചർച്ചണമല്ല വൈദ്യവൃത്തിക്കടിസ്ഥാനമെന്നാണ് അദ്ദേഹം സൂചിപ്പിക്കുന്നത്. ഒരു രോഗിക്ക് കടുമാങ്ങ കൂട്ടിയാലാണ് രുചിയോടെ ഭക്ഷിക്കാൻ കഴിയുകയെങ്കിൽ അത് അനുവദിക്കേണ്ടതാണ്. ഈ കാഴ്ചപ്പാട്, ശരീരത്തെയും മനസ്സിനേയും ഭിന്നാസ്തിത്വങ്ങളായി കണ്ടുകൊണ്ടല്ല ചികിത്സിക്കേണ്ടത് എന്ന തത്വാവബോധത്തിന്റെ ഫലമാണ്.

ശീലിച്ചതേ പാലിള്ള എന്നാണല്ലോ പഴമൊഴി. ശീലത്തിന്റെ നിഷേധം മനഃസംഘർഷത്തിനു കാരണമാവുന്നു. അത് രോഗശമനത്തെ മന്ദീഭവിപ്പിക്കും. അതുകൊണ്ട്, രോഗിയുടെ ശീലത്തെ മാറ്റിമറിച്ചുകൊണ്ടുള്ള ചികിത്സാരീതിയെ ലേഖകൻ അംഗീകരിക്കുന്നില്ല. 'രോഗം വന്നാലും പെട്ടെന്ന്, ശീലിച്ചതിനെ ഒന്നിച്ചു മാറ്റുന്നതിൽ വൈദ്യന്മാർ ഗാഢമായി ആലോചിച്ചു പ്രവർത്തിക്കേണ്ടതാകുന്നു' (പു. 54). രോഗികളുടെ മനഃശാസ്ത്രമറിയുന്ന വൈദ്യൻ മാത്രമേ ഇങ്ങനെ ചിന്തിക്കുകയുള്ളൂ. തുടർന്ന് കാളൻ, ഓലൻ, അവീൽ, സാമ്പാർ തുടങ്ങിയവയുടെ ഗുണദോഷങ്ങളെ ആയുർവേദത്തിന്റെ കാഴ്ചപ്പാടിൽ നിന്നുകൊണ്ട് വിശദീകരിക്കുകയും ചെയ്യുന്നു. അടുത്ത കാലം വരെയും, പല ഭിഷഗ്വരന്മാർക്കും ചികിത്സ, പരമ്യാപരണം തുടങ്ങിയവയിലുണ്ടായിരുന്ന മർക്കടമൃഷ്ടി (dognna) വൈദ്യരത്നത്തിനുണ്ടായിരുന്നില്ലെന്ന് ഈ ലേഖനം വ്യക്തമാക്കുന്നു.

'കേരളീയൗഷധങ്ങൾ' എന്ന ലേഖനത്തിൽ 240 ഔഷധങ്ങളുടെ പട്ടിക കൊടുത്തിട്ടുണ്ട്. സസ്യശാസ്ത്രപഠനങ്ങൾ പോലും ദുർലഭമായ കാലത്താണ് ഈ ലേഖനം ധന്വന്തരിയിൽ പ്രസിദ്ധീകരിച്ചത്. ഈ മരുന്നുകളുടെ 'ശരിയായ ഒരു ഗുണപാഠം' ഇനിയും ഉണ്ടാകേണ്ടതാണെന്ന് അദ്ദേഹം വൈദ്യന്മാരെ ഓർമ്മിപ്പിക്കുന്നു. എങ്കിലും ഔഷധങ്ങളുപയോഗിച്ചുള്ള ചികിത്സയെ മാത്രമേ അംഗീകരിച്ചു എന്ന ശാഠ്യമൊന്നും അദ്ദേഹത്തിനുണ്ടായിരുന്നില്ല. ഔഷധം കഴിയുന്നതും കുറച്ച് ദിനചര്യ ക്രമപ്പെടുത്തി രോഗമകറ്റുക എന്ന ആശയം വൈദ്യശാസ്ത്രരംഗത്തു പ്രവർത്തിക്കുന്നവരിലധികവും ഇന്നും വേണ്ടപോലെ മനസ്സിലാക്കിയിട്ടില്ല. ചെറിയൊരു ജലദോഷപ്പനിക്കുപോലും നിർലോഭം മൂന്നും നാലും കൂട്ടം മരുന്നെഴുതുന്ന ചികിത്സകന്മാരുണ്ട്. ആഹാരാദികൾ ക്രമീകരിച്ച്, ഹിതകരമല്ലാത്ത ചുറ്റുപാടുകളിൽ നിന്ന് അകന്നുനിന്നാൽത്തന്നെ കറേയേറെ രോഗങ്ങളെ അകറ്റാൻ കഴിയ

മെന്നതാണ് ആരോഗ്യശാസ്ത്രത്തിന്റെ അടിസ്ഥാനതത്വം. സ്വസ്ഥവൃത്തമെന്ന ഈ ആധാരശിലയെ മുൻനിർത്തി പ്രതികരിക്കുന്ന ലേഖകൻ ചികിത്സാരംഗത്തെ കച്ചവടവൽക്കരണത്തെ ഒരു കാലത്തും അംഗീകരിച്ചിരുന്നില്ല എന്നതിന്റെ സാക്ഷ്യപത്രമാണ് 'അനുഷ്ഠാചികിത്സ' എന്ന ലേഖനം.

സ്വേഷലൈസേഷൻ പ്രവണത പാശ്ചാത്യവൈദ്യത്തിൽ മാത്രമല്ല ഭാരതീയ ചികിത്സാപദ്ധതിയിലും വ്യാപകമാവാൻ തുടങ്ങിയതിന്റെ പശ്ചാത്തലത്തിലെഴുതിയതാണ് 'പ്രത്യേകവൈദ്യന്മാർ' എന്ന ലേഖനം. സ്വയം ബാലചികിത്സകരും നേത്രചികിത്സകരും മറ്റുമായി ചമയുന്നവരാണ് ഇതിൽ വിമർശിക്കുന്നത്. ആര്യവൈദ്യത്തിലായാലും അലോപ്പതിയിലായാലും ആദ്യമായി സാമാന്യജ്ഞാനം നേടേണ്ടതുണ്ട്. അതിനു ശേഷം മാത്രമേ വിശേഷജ്ഞാനം നേടാനാവൂ. എന്നാൽ, നമ്മുടെ വൈദ്യന്മാർ പൊതുവെ ആ വഴിക്ക് ചിന്തിക്കുന്നതായി കാണുന്നില്ല. അത്യന്തം അപ

കടകരമായ ഈ പ്രവണതയെ നിശിതമായി വിമർശിക്കാൻ വൈദ്യരത്നം മടിക്കുന്നില്ല.

ആയുർവേദതത്വങ്ങൾ, ത്രിദോഷങ്ങൾ തുടങ്ങി ഏതാനും ലേഖനങ്ങൾ കൂടിയുണ്ട് ഈ സമാഹാരത്തിൽ. വൈദ്യശാസ്ത്രം കൂടുതൽ കൂടുതൽ കച്ചവടവൽക്കരിക്കപ്പെടുകയും വൈദ്യന്മാർ പലരും തങ്ങൾ അതിമാനുഷരാണെന്ന നാട്യത്തിൽ പെരുമാറുകയും ചെയ്യുന്ന ഇക്കാലത്ത് സംശുദ്ധമായ മനസ്സിനും തുറന്ന സമീപനത്തിനും പ്രസക്തി നഷ്ടപ്പെടുകയാവാം. Life is a frantic race after wealth and status എന്ന അവസ്ഥയിലെത്തിയ ഒരു സമൂഹാന്തരീക്ഷത്തിൽ, വൈദ്യരത്നം പി. എസ്സ്. വാരിയരെപ്പോലൊരാളുടെ ചിന്തകൾ വഴികാട്ടാനുണ്ടാവുന്നത് ആശ്വാസം തന്നെ. ആരോഗ്യരംഗത്തു പ്രവർത്തിക്കുന്ന സർവ്വരും അവശ്യം അനുധ്യാനം ചെയ്യേണ്ടതാണ് ഈ സമാഹാരത്തിലെ ലേഖനങ്ങൾ. ധന്വന്തരിയുടെ പഴയ താളുകളിൽ നിന്ന് ഈ മൊഴിമുത്തുകൾ മുങ്ങിയെടുത്ത 'ഭിഷകി'ന് അഭിനന്ദനങ്ങൾ. ●

**തായ്‌വേദുകൾ**

വൈദ്യരത്നം പി. എസ്സ്. വാരിയർ,  
 പ്രസാ. ഭിഷക്, പ്രസിദ്ധീകരണ  
 വിഭാഗം കേരള ആയുർവേദിക് സ്റ്റഡീസ്  
 & റിസർച്ച് സൊസൈറ്റി, കോട്ടക്കൽ,  
 1993. വില 40 രൂപ, 189 പേജ്.

# \* ഇൻഡ്യയിലെ (പ്രാചീനശസ്ത്രക്രിയ

ജി. കെ. പിള്ള

ഔഷധങ്ങളുടെ ക്രിയാശക്തികളെ പൂർണ്ണമായി നിർണ്ണയിക്കുന്നതിനുവേണ്ടി തന്നെ ശസ്ത്രക്രിയയിൽ നമ്മുടെ പൂർവ്വികന്മാർ അനിതരസാധാരണമായ പാണ്ഡിത്യം ഉണ്ടായിരുന്നു എന്നതിനു അനേകലക്ഷ്യങ്ങൾ ഉണ്ട്. മുറികൾ തുണിക്കെട്ടുക, മുറിഞ്ഞ രക്തക്കുഴലുകളെ കെട്ടുക, ഒടിഞ്ഞുപോയ കൈകാലുകൾക്കു തടി (Splints) വെച്ചുകെട്ടുക മുതലായ സാധാരണക്രിയകൾ പ്രാചീനകാലത്ത് ധാരാളം പരിചയിച്ചിരുന്നു എന്ന് പുരാതനവൈദ്യശാസ്ത്രചരിത്രത്തിന്റെ ആദിമഘട്ടങ്ങൾകൊണ്ടുതന്നെ മനസ്സിലാക്കാം. അലക്സാണ്ടർ ഇൻഡ്യയെ ആക്രമിച്ച സമയം ഇൻഡ്യക്കാരുടെ ചികിത്സയേയും ശസ്ത്രക്രിയകളേയും കണ്ടു വളരെ സന്തോഷിച്ചതായി ആരിയൻ, സ്രാബോ മുതലായവരുടെ പുസ്തകങ്ങളിൽ രേഖപ്പെടുത്തിയിട്ടുണ്ട്....

പ്രാചീനസർജനാർ നടത്തിവരാറുള്ള ലിത്തോട്ടോമി (Lithotomy) അല്ലെങ്കിൽ അശുര്യഹരണം, റൈനോപ്പ്ലാസ്റ്റി

(Rhinoplasty) അല്ലെങ്കിൽ കൃത്രിമനാസാ നിർമ്മാണം എന്നീ രണ്ടു പ്രധാന ശസ്ത്രക്രിയകളെക്കുറിച്ച് ഇവിടെ സ്വല്പം പ്രസ്താവിക്കാം. മുത്രസഞ്ചിയെ കീറി, അതിനകത്തുള്ള മുത്രക്കല്ല (അശുരി)കളെ എടുത്തുകളയുന്നതിനാണ് 'ലിത്തോട്ടോമി' (Lithotomy) എന്നു പറഞ്ഞുവരുന്നത്. വൈരൂപ്യം വന്നിട്ടുള്ള മുക്കിനെ മാംസം അറ്റത്തുവെച്ച് അറകുറം തീർത്തു ഭംഗിയാക്കുന്ന ക്രിയയ്ക്ക് റൈനോപ്പ്ലാസ്റ്റി (Rhinoplasty) എന്നു പറയാം. ഇവയിൽ ആദ്യത്തെ ശസ്ത്രക്രിയ രാജസമ്മതം വാങ്ങിയതിനുശേഷമേ ചെയ്യാൻ പാടുണ്ടായിരുന്നുള്ളൂ....

രണ്ടാമത്തെ ക്രിയയായ മുക്കുറുത്തു വയ്ക്കൽ ഇൻഡ്യക്കാരിൽനിന്നും കിട്ടിയിട്ടുള്ളതാണെന്നു വലിയ ഇംഗ്ലീഷ് സർജൻമാരും സമ്മതിച്ചിട്ടുണ്ട്. കാലാനുസരണമായ ജ്ഞാനാഭിവർദ്ധനയോടും പുതിയ കരുക്കളുടെ ആവിർഭാവത്തോടുംകൂടി ഈ ശസ്ത്രക്രിയകളുടെ ചടങ്ങുകൾ ഇപ്പോൾ വളരെ ലഘൂകരിക്കപ്പെട്ടിട്ടുണ്ട്.....

\* ഭാഷാന്തരം ചെയ്തത്.

ധന്യന്തരി, പുസ്തകം ൧൨, നമ്പർ ൭, ൧൦൯൦ കുംഭം ൧-൦-൩.

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