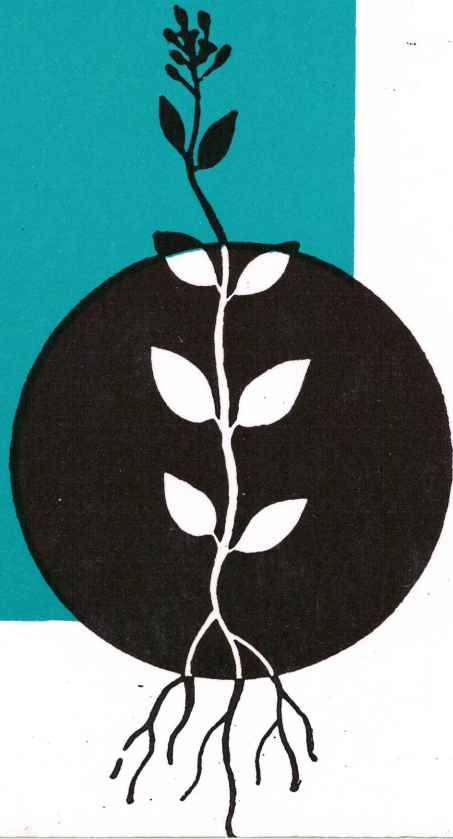


ISSN 0970- 4086

Vol. XI. No. 2

Nov. 1997 - Jan. 1998

āryavaidyaṅ



āryavaidyan

*A Quarterly Journal of the
Arya Vaidya Sala, Kottakkal*

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FROM THE PAGES OF VAGBHATA XLI

Varier, N. V. K.

ABSTRACT

On commenting *Ashtangahridayam*, *Sodhanadiganasamgrahaniyam*, the 15th chapter of *Sutrastana* is dealt here. *Aragvadhadi* and *Asanadi*, the two drug groups are explained in this issue.

XVI Gana Aragvadhadi

आरग्वधेन्द्रयवपाटलिकाकतिक्ता
निम्बाऽमृतामधुरसासुववृक्षपाठाः ।

भूनिम्बसैर्यकपटोलकरञ्जयुग्मं

सप्तच्छदाऽग्निमुषवीफलबाणघोण्टाः ॥

आरग्वधादिर्जयतिच्छर्दिंकुष्ठविषज्वरान् ।

कफं कण्डूं प्रमेहं च दुष्टव्रणविशोधनः ॥

(Aragvadhendrayavapatalikakatikta
nimbaSmrtamadhurasasruvavrksapathah,
Bhunimbasaairyakapatolakaranjayugmam
saptacchadaSgnisusaviphalabanaghontah.
Aragvadhadirjayaticchardikusthavisajvaran
Kapham kandum prameham ca
dustavranavisodhanah)

This group of drugs cures vomiting, dermatoses, ill-effects of poison, fever, *kapha* diseases, pruritis and diabetes. It is also a well known cleaning agent of indolent ulcers.

ARYAVAIDYAN

Aragvadhadi comprises of 20 drugs, some of which are still in controversy when subjected to their identification.

Indrayava

This word is indicated to mean the seeds of *Holarrhena pubescens*. This is already discussed previously (vide III *gana*)

Patali

This is one among the *brhatpancamula* and *Stercospermum colais* is generally considered as its source plant. *S. suaveolens* is also used as *Patali*.

Kakatikta

According to the commentary, *Kakatikta* is equated with *sarngesta* by Arundatta and the identity of

sarngesta still has disputes. According to Hemadri *kakatikta* is *karanjika* and it is considered as certain species of *Pongamia*.

According to Keralite physicians *kakatikta* is identified as *Tricosanthes tricuspidata*, which is depurative, alexipharmic and purgative in action.

Sruvavrksa

Most of the commentators consider it as *vikankata* i.e. *Flacourtia jangomas*. But Pathya commentator opines this as *palasa* i.e. *Butea monosperma*. The word *sruvavrksa* means the wood used to make *sruva*, a material for oblations in *yagna*. Both these plants are being used for the above-mentioned purpose. But usually in Kerala, physicians used to take the roots of *Flacourtia jangomas* for *sruvavrksa*.

Bhunimba

It needs no explorative study for its controversial aspects. According to almost-all works in *Dravyagunavignana* it has no change of opinion. *Kairata* is the equivalent word given for it by Arunadatta which is identified as *Andrographis paniculata* i.e. *yavatikta* or *kalamegha* in other words. This *kirata* has close relations with *kiratatikta* (*Swertia chirata*) but it should not be considered as the proper *kiratatikta*.

Keralite practice shows three drugs in the name of *bhunimba*. *Solanum indicum* or *brhati* is used as

bhunimba mainly. Even the Keralite translatory and lexicographic documents give the meaning of *bhunimba* either as *chunta* or *puttirichunta*, both of these are indicative of *Solanum* species plants. How this *Solanum* species is widely accepted among Keralite physicians is a contemplative fact.

Second choice of the source plant of *bhunimba* in kerala is *Andrographis paniculata*. Two words in the whole word *bhu-nimba* will accurately fit to the word *nilaveppu* of malayalam language i.e. *Andrographis paniculata*.

Third one is the *kirata* itself which is suggested only by few physicians. Regarding this Shri Tayyil Kumaran Krishnan gives suggestions thus:

"The translations of *bhunimba* as *nilaveppu* and *kiryattu* are found appropriate. All the properties attributed to *bhunimba* can be found in the plant so called *kiryattu*. But some works translate *bhunimba* as *puttiriccunta* (*Solanum indicum*). Only a synonym i.e. *kantaki* given in *Sabdavyuha tarangini* may indicative of *puttiriccunta* as it bears thorns.

भूनिम्बो हिमकस्तिकः चिरतिकश्च
कण्टकी ।

किराततिककोऽनार्यं तिककश्चेमे
समर्थकाः ॥

(शब्दव्यूहतरङ्गिणी)

(Bhunimbo himakastiktah ciratiktasca

ARYAVAIDYAN

kantaki

Kiratatiktako Snarya tiktakasceme
samarthakah.

(Sabdavyuhatarangini)

But the so-called *puttiriccunta* either does not possess bitter taste or it does not have similarity with *nimba*. The word *puttiriccunta* may be for the *vanatikta* described among *phalāsaka* materials”.

Sairyaka

Sahacara is the common synonym for it. Saireyaka has been thoroughly studied by Singh and Chunekar with all allied synonyms. They have classified all into 4 varieties such as (i) *kurabaka* (ii) *krishnasaireya* (iii) *svetasaireya* and (iv) *pitasaireya*.

Barleria prionitis is generally taken for *saireya* or *sahacara*. But in Kerala the source plant of *sahacara* is *Nilgiranthus ciliatus*. It is used widely as single drug or in different *kalpana* and in combinations also which all are found much effective. So a comparative study of different drugs used as *sahacara* or *saireya* is one essential endeavour.

Karanjayugma

Putikaranja (ciravilva) (Holoptelia integrifolia) and *karanja (Pongamia pinnata)* are meant by this couple.

Sushavi

Karavi and *karavellakam* are

the equivalent drug names given by Arunadatta and Hemadri respectively. Arundatta adds one more word viz. *Paniyavam* which all bring no conclusive remark. *Calycopteris floribunda* is often used as *sushavi* in Kerala. *Vakyapradeepika* commentary suggests the officinal part of it as the bark. Certain people misinterpreted the meaning of this *sloka* suggesting to use the fruit of *sushavi* having considered the *sushaviphala* as one word. According to them here *phala* is not *madanaphala (Catunaregum spinosa)* but it is the fruit of *sushavi*. Depending upon the practical aspects this can not be taken into account, as the fruit of *C. floribunda* is found very rarely used.

Bana

Hemadri comments it specifically as the blue variety of *sahacara*. *Bana* is indicative of *nilasahacara* as well as *banapunkha*. N.S. Mooss opines that whenever it enters in the composition of a single preparation with *sairyaka* Keralite physicians consider *sarapunka* as *bana* of *aragvadhadi*

Ghonta

Various drugs are being equated with *ghonta* such as *Areca catechu (Vakyapradeepika)*, a variety of *Areca catechu (Sarvangasundara)*, *badari (Hemadri)* *Bridelia stipularis (N.S. Mooss refers to Paramesvara)* and *kushtham (Vakyapradeepika)*. But according to lexicographers like Bhavamisra, Kaiyyadeva etc. *Ghonta* is

one of the synonyms of *badari* i.e. *Ziziphus mauritiana*.

Susruta adds one more drug into these 20 in his *argvadhigana*, i.e. *kutaja*. Susruta's corresponding words like *gopaghonta* for *ghonta*, *dasikurantaka*

for *bana*, *kiratatiktaka* for *bhunimba*, *sarngesta* for *kakatikta* and *kantaki* for *sruvavrksha* are to be pondered well.

Aragvadhadi uses

It is also useful, externally, for

Table 1 Aragvadhadi

Sl. No.	Name of the drug	Scientific Name	Malayalam Name	Official part
1	Aragvadhya	Cassia fistula	Konna	Root bark
2	Indrayava	Holarrhena pubescens	Kutakkappalayari	Seeds
3	Patali	Stereospermum colais	Pooppatiri	Root bark
4	Kakatikta	Trichosanthes tricuspidata	Kakkatondi	Root
5	Nimba	Azadirachta indica	Veppu	Bark
6	Amrta	Tinospora cordifolia	Cittamrtu	Stem
7	Madhurasa	Chonemorpha fragrans	Perunkurumba	Root
8	Sruvavrksha	Flacourtia jangomas	Vayyamkatakku	Root
9	Patha	Cyclea peltata	Patakkizhangu	Root
10	Bhunimba	Andrographis paniculata	Nilaveppu	Whole plant
11	Sairyaka	Nilgirianthus ciliatus	Karimkurunhi	Root
12	Patola	Trichosanthes lobata	Kaippan patolam	Whole plant
13	Karanjayugma	Pongamia pinnata	Ungu	Bark
14		Holoptelia integrifolia	Aval	Bark
15	Saptacchada	Alstonia scholaris	Ezhilampala	Bark
16	Agni	Plumbago indica	Kotuvveli	Root
17	Sushavi	Calycopteris floribunda	Pullani	Tender leaves
18	Phala	Catunaregum spinosa	Malamkara	Fruit
19	Bana	Tephrosia purpurea	Kozhinhil	Root
20	Ghonta	Ziziphus mauritiana	Lantakkuru	Root

washing wounds and ulcers.

XVII Gana – Asanadi

असनतिनिशभूर्जश्वेतवाहप्रकीर्याः
खदिरकदरभण्डीशिशपामेषशृङ्गः ।
त्रिहिमतलपलाशाजोङ्कःशाकसालौ
क्रमुकधवकलिङ्गच्छागकर्णाश्वकर्णाः ॥
असनादिर्विजयते श्वित्रकुष्ठकफक्रिमीन् ।
पाण्डुरोगं प्रमेहं च मेदोदोषनिबर्हणः ॥
(Asanatinisabhurjasvetavahaprakiryah
khadirakadarabhandisimsapamesasrnyah,
Trihimatalapalasajongakahsakasalau
kramukadhavakalingacchagakarnasvakarnah.
Asanadirvijayate svitrushtakaphakrimin,
Pandurogam prameham ca medodosani-
barhanah.)

(This *Asanadigana* annihilates leucoderma, dermatoses, complications due to poisonous affliction, *panduroga*, diabetes and the ailments due to the over deposit of fat.)

This group comprises of 23 drugs. The corresponding *gana* in *Susrutasamhita* is termed as *Salasaradigana*.

Tinisa:

Syandanavrksa is the meaning given by Arunadata, which means the wood of it was used to construct chariots in olden days. N. S. Mooss suggests that the Keralite version for *tinisa* is *timisa* which is also identified as *Ougeinia oojeinensis*. In Malayalam

it is known as *totukara*.

Bhurja

Bhurja is identified as *Betula utilis*, which is known as *bhurjamaram* in Malayalam. But some physicians of Kerala translate *bhurja* as *perumaram*, which is actually another tree known as *Ailanthus excelsa*. (N. S. Mooss opines that as this drug was not available in Kerala it was wholly deleted while preparing *asanadiyoga* in former days.)

Prakirya

According to some commentators it is *karanja*. But Kerala commentators like Pathyakara and Paramesvara equate it with *putikaranja* i.e. *Holoptelia integrifolia*

Kadara

This has been equated with *Acacia polyantha*. The Malayalam names given for this are *venkaringali* and *somarayattoli*.

Bhishagarya, the author of *Abhidhanamanjari* classifies *khadira* into three viz. 1) *Khadira* proper with reddish heartwood, 2) *gaurakhadira* which is assumed to be with white heartwood and 3) *kadara* or *syamasara* i.e. with dark-red heartwood. N. S. Mooss identifies these as *Acacia sundra*, *A. suma* and *A. catechu* respectively.

Simsapa

This is equated with *Dalbergia*

Table II Asanadigana

Sl.No	Sanskrit name	Scientific name	Malayalam name	Officinal part
1.	Asana	Petrocarpus marsupium	Venga	Heartwood
2.	Tinisa	Ougeinia oojeinensis	Totukara	Heartwood
3.	Bhurja	Betula utilis	Bhurjamaram	Bark
4.	Svetavaha	Terminalia arjuna	Nirmarutu	Bark
5.	Prakirya	Holoptelea integrifolia	Nettaval	Bark
6.	Khadira	Acacia catechu	Karingali	Heartwood
7.	Kadara	Acacia polyantha	Venkaringali	Heartwood
8.	Bhandi	Albizia lebbeck	Nenmenivaka	Bark
9.	Simsapa	Dalbergia sissoo	Iruvool / Irool	Heartwood
10.	Meshasrngi	Gymnema sylvestre	Cakkarakkolli	Whole plant
11.	Trihima	Santalum album	Candanam	Heartwood
12.	"	Pterocarpus santalinus	Raktacandanam	Heartwood
13.	"	Coscinium fenestratum (sub)	Maramanjil	Stem
14.	Tala	Borassus flabellifer	Karimpana	Inflorescence
15.	Palasa	Butea monosperma	Plasu	Bark
16.	Jongaka	Aquilaria agallocha	Akil	Heartwood
17.	Saka	Tectona grandis	Tekku	Heartwood
18.	Sala	Shorea robusta	Payan	Heartwood
19.	Kramuka	Areca catechu	Atakka	Fruit
20.	Dhava	Anogeissus latifolia	Vellanava	Bark
21.	Kalinga	Holarrhena pubescens	Kutakappalayari	Seeds
22.	Chagakarna	Terminalia crenulata	Karimarutu	Bark
23.	Asvakarna	Terminalia paniculata	Vellamarutu	Bark

sissoo. Godbole equate it with *D.latifolia*, which is a common tree of Western ghats and is popular for handicraft works.

Kerala commentators translate *simsapa* as *iruvool*. But unfortunately a plant known as *irumullu* (*Xylia xylocarpa*) is being used by some misinterpreting this as the actual *iruvool*.

Meshasrngi

Generally this has been identified as *madhunasini* i.e. *Gymnema sylvestre*. But in Kerala, some commentators equate *meshasrngi* with *Aristolochia bracteolata*, which is known in Malayalam as *attukottappala*. As this *gana* is efficacious in *Madhumeha* i.e. diabetes mellitus it is more appropriate to consider *meshasrngi* as *madhunasini*. Bhashagarya describes small and big varieties of *meshasrngi*, which makes some confusion regarding the identity.

Trihima

Dvicandana or *dvihima* are equated with *candana* and *raktacandana*. When it becomes a triad, which is to be added gives a little confusion. Arunadatta suggests *daruharidra* as the third *candana*. Basing on the Keralite practice, N. S. Mooss opines *Coscinium fenestratum* as the substitute-source-plant of *pitacandana*.

Tala

Instead of this term Paramesvara and *Vakyapradeepika* give *nata* – *Valeriana jatamansi*, which seems inappropriate for this *gana*. *Tala* is

equated with the inflorescence of *Borassus flabellifer*.

Saka

Varadaru is the meaning given by Arunadatta, which is equated with *Cedrus deodara*. But, *Tectona grandis* is usually taken as *saka*.

Sala

Sarja i.e. *Shorea robusta* is considered as *sala* by most of the practitioners. Instead of the *rasa* i.e. resin, the heartwood is suggested here, according to N. S. Mooss. He also opines that *payan* or *perumpayam* is the Malayalam equivalent for *sala* (*Vateria indica*). The resin of *V. indica* is also as good as *sarjarasa*.

Chagakarna – Asvakarana

These words mean any part of the plant that resembles the ears of goat and horse respectively. N. S. Mooss in this context gives good suggestion that these two appear to be two of the oleo-resin yielding trees of Dipterocarpaceae. Because the fruits of these two have five persistent and accrescent calyx lobes of which two become enlarged resembling the ear lobes of goat and horse. Here the analogy of the ear lobes of two animals of comparatively different sizes is made. Malayalam equivalents of these two terms are *karimarutu* and *venmarutu*. These have blackish and whitish heartwood respectively which are equated with *Terminalia crenulata* and *T. paniculata*.

MEDICINAL AND AROMATIC PLANTS: FROM EARLIEST TIMES TO MODERN AGE

Sharma, P.V.*

ABSTRACT

Man from the very beginning has been aware of the problems of life and has been taking care of health through diet and drugs for which plants were used extensively. But it was only in the period of Ayurvedic Samhitas that there was serious attempt in studying about them scientifically. This article deals with the importance of correct identification, proper collection, storage, propagation and also the efforts made by various governmental and non-governmental organisations in the field of scientific study of medicinal plants.

In the course of evolution, consciousness first manifests in plants. Long before Jagdish Chandra Bose demonstrated signs of life in plants by his scientific experiments, the Vedic seers realised it through self-identification. Chhandogya Upanishad (6-11.1) says – “As the plant is possessed by *jivatman* (conscious self) it stands joyfully and if injured in bark, a liquid oozes out which is absent in lifeless (dried) plants’. Man comes last in this ladder of evolution and has been in contact with plants from the very beginning. In excavations of Mohenjodaro and Harappa remnants of trees are found which indicates the use of plants in those days and also the old tradition of tree-worship which is still

continuing in the community. It is not improbable that the primitive man had easy recourse to plants in cases of illness. He used them in various forms as amulets and drugs. In Atharvaveda one finds a number of *manis* (amulets) made of plants such as *asvattha* (*Ficus religiosa* Linn.), *darbha* (*Imperata cylindrica* Beauv.), *varuna* (*Crataeva nurvala* Buch-Ham.), *satavari* (*Asparagus racemosus* Willd.) etc. It is not difficult to imagine that even in Stone Age man used the plants as drug by crushing them on stone and extracting their juice.

Rigveda is the oldest document of Indian culture wherein we find the

* Gurudan Colony, Varanasi - 221 010

osadhisukta (hymn on herbs) classifying them and also describing their morphological characters and actions (Rigveda 10.97.1-23). Perhaps it is the earliest information on the systematic study of plants. A number of medicinal and aromatic plants are found in Rigveda including four miraculous herbs – *asvavati*, *somavati*, *urjayanti* and *udojasa* (Rigveda 10.97.7) which remind the four miraculous herbs – *visalyakarani*, *sandhani*, *mritasanjivani* and *savarnakarani* of Valmiki Ramayanam (6.74.33). In Atharvaveda we find a more developed system with an increased number of medicinal and aromatic plants and their extended use.

Generally Ayurveda is recognised as the *upaveda* of Rigveda or Atharvaveda but, in fact, it is eternal and its stream of knowledge and tradition has been flowing parallel to that of Vedas. Its age is proved by the statement that even *Brahma* (Creator) only recollected Ayurveda and did not create it (Ashtangahridayam, Su. 1.3). The reason is that Ayurveda is the science of life and as such starts with life and would continue with that. Kasyapa goes one step further when he mentions Ayurveda as the fifth Veda superior to all the other four ones. All this suggests that man from the very beginning has been aware of the problems of life and has been taking care of health through diet and drugs for which extensive use was made of plants.

In ancient days man resided in natural surroundings and was quite intimate with them. They were also

bound together with emotional attachment as we see in the classical literature of Kalidasa and Bhavabhuti. *Devadaru* tree of the Himalayas was proud of being nourished with the breast-milk of Goddess Parvati. On the other hand, plants were shedding tears at the time of farewell of Shakuntala from Kanva's hermitage. Because of such intimacy and closeness to nature, there was no problem of identification of plants. Each and every plant was identified with a name, form and uses. How can any plant remain unknown in such an atmosphere of friendliness? That is why Caraka says that even shepherds identify plants by name and form, the real user of them is he who knows their proper application apart from identification.

In *Vedic* literature there are stray references to medicinal and aromatic plants. It was only in the period of Ayurvedic *samhitas* that there was a serious attempt in studying them systematically and scientifically. In *Carakasamhita* the medicinal plants are classified from various angles. According to the pharmacological action on different systems they are divided into fifty groups known as *mahakasayas*. Susruta has formulated thirty-seven groups according to therapeutic uses. Vagbhata combines both of these and also proposes some new groups. *Vatsakadigana* is Vagbhata's contribution, which is useful in dysentery. The main plant of this group is *kutaja* [*Holarrhena antidysenterica* (Linn.) Wall.] which is popularly known as *kurchi*.

The aromatic plants (*gandhaushadhi*) are included in *agurvadigana* and *eladigana* of Caraka and Sushruta respectively. Some of the important aromatic plants enumerated under these groups are as follows –

1. *Aguru* (*Aquilaria agallocha* Roxb.)
2. *Kushtha* (*Saussurea lappa* C.B. Clarke)
3. *Sthauneyaka* (*Taxus baccata* Linn.)
4. *Coraka* (*Angelica glauca* Edgew)
5. *Sallaki* (*Boswellia serrata* Roxb.)
6. *Devadaru* (*Cedrus deodara* (Roxb.) Loud)
7. *Sarala* (*Pinus roxburgii* Sarg.)
8. *Ela* (*Elettaria cardamomum* Maton.)
9. *Pushkaramula* (*Inula racemosa* Hook.f.)
10. *Sati* (*Hedychium spicatum* Buch-Ham.)

These have been also grouped according to habitat as –

1. *Haimavata* or *Uttarapathaga* (belonging to Himalayas or northern zone such as *sati*, *kushtha*, *mamsi*, *sarala*, *devadaru*, *mura* etc.)
2. *Dakshinapathaga* (belonging to southern zone such as *candana*, *jatiphala*, *lavanga*, *kankola* etc.)

Aromatic plants are used mostly as cosmetic and are also indicated as drug in treatment of various disorders.

The most significant contribution of the period of *samhitas* is the foundation of the basic concepts of pharmaco-dynamics such as *rasa*, *guna*, *virya*, *vipaka* and *prabhava*. In modern medicine the isolated active fraction of the plant is used as drug while in ayurveda due to the holistic approach, they prefer the whole drug and explain the action on the basis of the above concepts. The merit of the active fraction is that it exerts pointed action but its drawback is that it is liable to produce adverse side effects. On the contrary, the whole drug may exert mild and slow action but it is almost free from any risk. *Rasa* is taste of the plant material which indicates its composition and thereby its effect on different systems of the body. For instance, the bitter *nimba* (*Azadirachta indica*) and the sweet *yashtimadhu* (*Glycyrrhiza glabra*) indicate the entire gamut of their effects. *Virya* is potency which is responsible for action right from the point of entry (*nipata*) of the drug till its inactivation. *Vipaka* is biotransformation while *prabhava* is the specific potency exerting specific action due to its composition.

Collection of medicinal plants is an important consideration. Plants should be collected at the proper time in point of maturity so that maximum potency is available. In ancient times, it was a sort of ritual and was done in a ceremonial way with religious fervour. Hymns were recited while collecting with the belief that some divine power is bestowed on them. Potency (*virya*) does not exist

uniformly in all the parts and as such particular parts of plants are collected such as bark of *arjuna*, leaf of senna, flower of *dhataki*, fruit of *haritaki* and root of *bala*. Ayurvedic treatises have prescribed rules about collection of different parts in different seasons. But there may be some modifications according to individual variations. After collection, the plant material should be stored and preserved in a proper way so that they are not damaged and their potency is not affected. They should be kept in good containers and ideal conditions. At present the condition is far from satisfactory. The profession almost solely depends on market where collected material is dumped in rotten containers without any label as to when, how and wherefrom it was collected. There is also no any authoritative agency to control and regulate the marketing of raw materials though there are some provisions in the Drugs and Cosmetic Act. What effectivity can be expected from medicinal plants under such conditions? In order to ensure supply of genuine and potent raw material it is essential that there should be central and state agencies to control the marketing of raw materials. Without this, to expect ideal drugs is like putting the cart before the horse.

Apart from the indigenous plants, new medicinal and aromatic plants were introduced from time to time and, in course of time, were naturalised. The well-known example is the poppy plant which was introduced during the medieval period and became important because of being source of opium,

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which is a very potent drug. Similarly, *svarnakshiri*, the Mexican poppy (*Argemone mexicana* Linr.) which is now naturalised and found everywhere is an exotic plant introduced later on. A number of other plants may be listed under this category.

India is a large country with different geographical and climatic regions having a wide range of biodiversity which formed the source of the traditional remedies of these regions. This would be evident if we compare the flora of the Himalayas with that of Kerala and the flora of Bengal with that of Rajasthan. These variations are more or less reflected in medical books written by the authors of the respective regions. If you go through the *Āikitsasāngraha* of Cakrapanidatta you would find many medicinal plants used traditionally in Bengal. In early days, due to lack of communication, transportation of medicinal plants was difficult so that a Himalayan plant could hardly reach the southern region of the country and vice versa. This gave rise to regional substitutes of a number of plants. For instance, *daruharidra* of north is *Berberis aristata* DC. grown in foot of the Himalayas while that of south is *Coscinium fenestratum* (Gaertn.) Colebr. which grows in the vicinity and Sri Lanka. *Bacopa monnieri* (Linn.) Pennell, a semi-aquatic plant found wild in plenty in Bihar and Bengal, known locally as 'barmi' is *Brahmi* but in west *Centella asiatica* (Linn.) Urban., popularly known as *mandukaparni* is taken as *brahmi* also called as 'Haradvari *brahmi*'. Similarly,

sankhapushpi (*Convolvulus pluricaulis* Chois.) is a common plant in north but in south *Clitorea ternatea* Linn. is used as *sankhapushpi*. *Prasarani* of Bengal and Bihar is *Paedaria foetida* Linn. while in Rajasthan a different plant known as 'khipa' (*Leptadenia pyrotechnica* Forsk-Decne) is used as *prasarani*. A number of other plants also come under this category. These variations in regional traditions created a lot of confusion regarding identification of the genuine plants. Due to the efforts done during the present century by stalwarts like Jaikrishna Indraj, Bhagirath Swami, Rupalal Vaishya, Vaidya Bapalal and Thakur Balwant Singh, many problems have been solved and controversy is narrowed down to the minimum. Now in most cases a universal opinion is agreed upon and the medicinal plant so decided has been adopted in practice. A notable example is of *murva* for which there were a dozen plants claimant but now almost everywhere *Marsdenia tenacissima* W. & A. is taken as *murva*. Similar is the case of *rasna* (*Pluchea lanceolata* C.B. Clarke.)

Medicinal plants formed an important part of the forest wealth, though Department of Forests treats them as minor forest product. Previously physicians collected these plants themselves according to their requirement but later on due to commercialisation the contractors took over the job and operated through untrained casual labourers creating many problems. There was careless exploitation which led to scarcity and subsequent extinction

of many species. There were only a few people who loved medicinal plants and were sincerely making efforts to collect and supply genuine and fresh material to the needy people. On this occasion I remember Shri Shankar Giriji who had his centre in Bakerganj at Patna. He used to move around in forests in search of medicinal plants for six months and in the other half of the year distributed them to the needy people. Perhaps it was the only centre supplying genuine and fresh medicinal plants. It would be in fitness of things that we decide to create some suitable memorial in his name. Another voluntary organisation is the 'Vanaushadhi Abhyasa Mandala' with headquarters at Ahmedabad, which is founded by Vaidya Bapalalji and run by the people interested in medicinal plants. At present it is necessary to create interest towards medicinal plants and to take up their cultivation as far as possible. Ministry of Health & Family Welfare, Govt. of India provides some grants for this purpose.

A number of governmental and non-governmental organisations and institutions are at present engaged in the study of medicinal plants in a scientific way. Notable among them are C.D.R.I..CIMAP, N.B.R.I. (all in Lucknow), and TBGRI (Thiruvananthapuram). Arya Vaidya Sala, Kottakkal is also doing useful work. They have established a good garden of medicinal plants and have composed a beautiful book "*Indian Medicinal Plants, a compendium of 500 species*" in five volumes published by Orient Longman.

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Similarly, Calcutta University brought out a new edition of 'Bharatiya Vanushadhi' by Kalipad Biswas duly edited by Prof. Asima Chatterji. 'Wealth of India' (C.S.I.R.) is also well known work.

There has also been considerable progress in standardisation of raw material and finished products. Ayurvedic pharmacopoea committee set up under the ministry of health has been tackling the problems of standardisation. A separate sub-committee, of which the author happened to be chairman, is dealing with identification and other related matters regarding medicinal plants.

In recent years significant work has been done on ethno-medico-botanical studies not only in India but all over the world. The society of Ethnobotanists with headquarter at Lucknow has been pursuing these studies under the able guidance of Dr. S.K. Jain. The Central Council for Research in Ayurveda and Siddha has also collected folklores which are contained in a publication. The Council, through regional survey units has been able to collect a lot of herbarium specimens which are awaiting further processing. They are also publishing a Bulletin on Ethno-medico-botanical studies.

Medicinal plants as such are being still used in traditional remedies in all parts of the country and abroad. The foundation for Revitalisation of Local Health Traditions (FRLHT) with Headquarter at Bangalore has been

doing valuable work in this field. They have also established medicinal plants garden in different parts in collaboration with forest department. There is a craze all over the world for herbal remedies. In European and other countries one can find herbal shops in every city and countryside. Now herbal cosmetics are also in great demand.

Medicinal plants are used as drugs in Indian system of medicine and Homoeopathy. In ancient Ayurveda the pharmacopoea comprised almost of medicinal plants. The fifty *mahakashayas* of Caraka, except two or three items, consisted of medicinal plants. Later on a particular branch of literature known as *nighantu* was developed in which medicinal plants are described systematically with special reference to their application to various disorders. Every *nighantu* devoted one separate chapter on aromatic plants named as *karpuradi*, *candanadi*, *satapushpadi* etc.

The contribution of *Rauvolfia serpentina* was the beginning. Since then much water has flowed in the *Ganga*. The potentialities of medicinal plants are every day coming to light and new remedies to tackle dreadful diseases are being discovered. Taxol and vincristine have been isolated for treatment of cancer. The source plant of taxol is *Taxus baccata* Linn. which is *sthauneyaka* in ayurveda locally known as *thuner*. Vincristine is obtained from the plant *Vinca rosea* [syn. *Lochnera rosea* (Linn) Reichb.] commonly known as *sadabaha* found

everywhere. This plant is also used in dysentery and diabetes. Among aromatic plants, *guggulu* [*Commiphora mukul* (Hook ex Stocks) Engle.], from time immemorial has been in prevalent use as fumigation but later on was found to be effective in hypercholestromaemia which is confirmed by recent experimental and clinical studies.

Conclusion

Medicinal and aromatic plants have great potentiality in amelioration of suffering in human and other living beings. Therefore, keeping step with a global awareness in the field there should be sustained effort to study, cultivate and propagate these plants.

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PHARMACOGNOSTICAL STUDIES ON *BALIOSPERMUM MONTANUM* (WILLD.) MUELL. - ARG.

*Krishnan Nambiar V.P.
Sabu. T.K., Jayanthi A., Rajendrakumar. K.

ABSTRACT

Baliospermum montanum (Willd.) Muell. - Arg. is one of the important medicinal plants whose roots form the raw drug, required in large quantities in more than 20 ayurvedic formulations. It is found in restricted areas in forests in our state, and is widely cultivated throughout our country. The propagation technology through stems and seeds has been worked out. The stomatal index, palisade ratio and vein-islet number of this plant are very specific and help in its identification. The anatomy of root, stem, leaf and floral parts is also worked out.

INTRODUCTION

Baliospermum montanum belonging to the family Euphorbiaceae is known as danti in English; *nagadanti*, *danti* in Malayalam; *danti* in Sanskrit; *danti* in Hindi and *nakatandi* in Tamil. The officinal parts are roots, leaves and seeds. Among these, roots are widely used in preparations like Kumaryasavam, Chavikasavam, Danthya-rishtam, Prabhanjanavimardanamkuzhampu, Dasamoolapanchakoladi kashayam, Chandraphrabha gudika, Kalyanaka gritham etc. (Iyer. S.R., 1983).

Roots are acrid, thermogenic, purgative anti-inflammatory, anodyne, digestive, anthelmintic, diuretic, diaphoretic, rubefacient, febrifuge and tonic. They are useful in anasarca, dropsy, flatulence, constipation, jaundice, haemorrhoids, leprosy, skin diseases, strangury, vesical calculi, wounds, splenomegaly, anaemia, leucoderma, fever and vitiated conditions of *vata*; the leaves are good for asthma and bronchitis; the seeds are drastic purgative, rubefacient, hydragogue and stimulant and are useful in vitiated conditions of *vata* inflammations and

* IDRC Project, Arya Vaidya Sala, Kottakkal.

flatulence (Warrier et al, 1993). Decoction of roots and fruits are used in oedema and stomach colic (R.C. Srivastava, 1989). In cases of sprains, crushed leaves are fried with a little bit of animal fat and allowed to cool and is applied externally over the affected joints with the help of a loose cotton bandage. Decoction of leaves are used for treating asthma; seeds are purgative, stimulant, rubefacient (Chopra et al, 1956 & Watt.G. 1972) and used for snakebite (Chopra et al, 1956). Chemical components like fatty acid, axillarenic acid etc. have been isolated and characterised from the seed oil (Husain et al, 1980).

Morphological Description

A stout under shrub, 0.9–1.8m in height with numerous erect shoots from the perennial roots. Leaves simple, sinuate, toothed and very variable in shape and size, the upper ones small, 8 - 12 cm long and long petioled. Lower ones large, 10 – 18 cm long, some times palmately 3 - 5 lobed. Flowers numerous, small, unisexual, in axillary racemes with male flowers above and few female flowers below. Perianth in male globose, opening in 4 – 5 membranous, concave, imbricate lobes, in female of 5 – 6 lanceolate toothed lobes some times persistent in fruit, disc in male of 4 – 5 glands, in female annular. Stamens numerous on a central receptacle, filaments slender; free, anthers terminal, the cells adnate to the broad connective. Ovary 3 celled syncarpous, ovule one in each cell. Styles 3, stout, forked with smooth stigmatic surface. Fruit a 3-celled capsule of about 8 – 13 mm long, cells 2 valved; seeds ellipsoid, smooth,

mottled. (Gamble, J. S 1967, Mathew, K.M 1991) (Fig. I a - i)

Materials & Methods

Materials for propagation and pharmacognostical studies were collected from different parts of the state; materials for laboratory studies were fixed in F.A.A. For anatomical work, stained hand sections and macerated materials were observed under light microscope. Numerical values like vein-islet number, stomatal index and palisade ratio were found out using samples treated in KOH solutions of different concentrations. For determining stomatal index ten epidermal peelings of a fresh leaf were taken from lower surface and ten counting were recorded from 10 different areas of each piece (i.e. number of stomata as well as epidermal cells per 1 sq.mm area). Stomatal index value is then calculated by using the formula $\frac{E}{S} \times 100$ where E and S stand for the number of epidermal cells per unit area and the number of stomata respectively (Salisbury, 1928). The values are represented graphically (Fig. V). Palisade ratio was determined by using 5 fresh leaves. From each of these four pieces (i.e. one from base on from apex, one from margin and one from centre) were selected. After cleaning, washing and staining they were mounted in glycerine. From these 100 readings were recorded taking 5 counts from each piece. Average of these is the palisade ratio. The values are represented graphically (Fig. VI). The report that number of palisade cells per unit area increases successively from base to leaf apex, with the ratio always remaining constant (Zornig and Weiss, 1925) holds true in this

species also. The vein-islet number is calculated by counting the minute areas of photosynthetic tissue encircled by the ultimate division of the conducting strands per 1 sq. mm of cleared leaf samples taken from 5 different leaves. The values are represented graphically (Fig. VII). All these numerical values may be considered as a diagnostic constant and will help to identify the plant species (Salisbury, 1928).

Floral Vasculature

Perianth

Each perianth lobe is supplied with a separate vascular strand which produces two branches just below the region of union of the perianth and ultimately gets forked at the tip of the lobe (Fig. II-b)

Stamen

Each stamen is supplied with a stout vascular strand which traverses through the filament producing two branches just below the connective region. Each branch in turn repeatedly produces several branchlets at the connective region which adjoins the two anther lobes (Fig. II a).

Ovary

The ovary is tricarpeal and syncarpous. Each carpel is supplied with a dorsal bundle and a ventral bundle. The dorsal bundle after traversing the wall enters into the style and supplies the stigma branching thrice. The ventral bundle traverses through the axis and supplies the ovule with profuse branchlets (Fig. II-b)

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Anatomy

Stem

The cross section of a mature stem is circular in outline. The epidermis is uniseriate and consists of tabular cells with thick deposit of cuticle. There is a predominant cortex composed of 13 - 15 layers of parenchymatous cells. Many cells contain druses. In the middle portion 3 - 4 layers are collenchymatous which extend towards the periphery at certain points. There are few latex vessels and mucilage ducts. The outer layers of secondary phloem get lignified. Druses are abundant in the secondary phloem tissue. The cambial layers are few and conspicuous. The secondary xylem consists of vessels which are predominantly in linear groups. The xylem fibers are conspicuous. The uniseriate medullary rays are devoid of starch grains and is distinct feature as compared to that of root. The pith is conspicuous and is composed of parenchymatous cells, a few containing druses (Fig. III a & b).

Root

Cross section of a mature root is circular in outline, and has conspicuous cork tissue towards the exterior. Cork cells are tangentially elongated and thick walled. This is followed by phellogen consisting of a few layers. The cortex is predominant, 12-14 layered and is characterised by the presence of starch containing cells, latex vessels, stone cells and cells containing druses. The cambium cuts off secondary phloem externally and secondary xylem internally, some of the phloem cells contain starch grains.

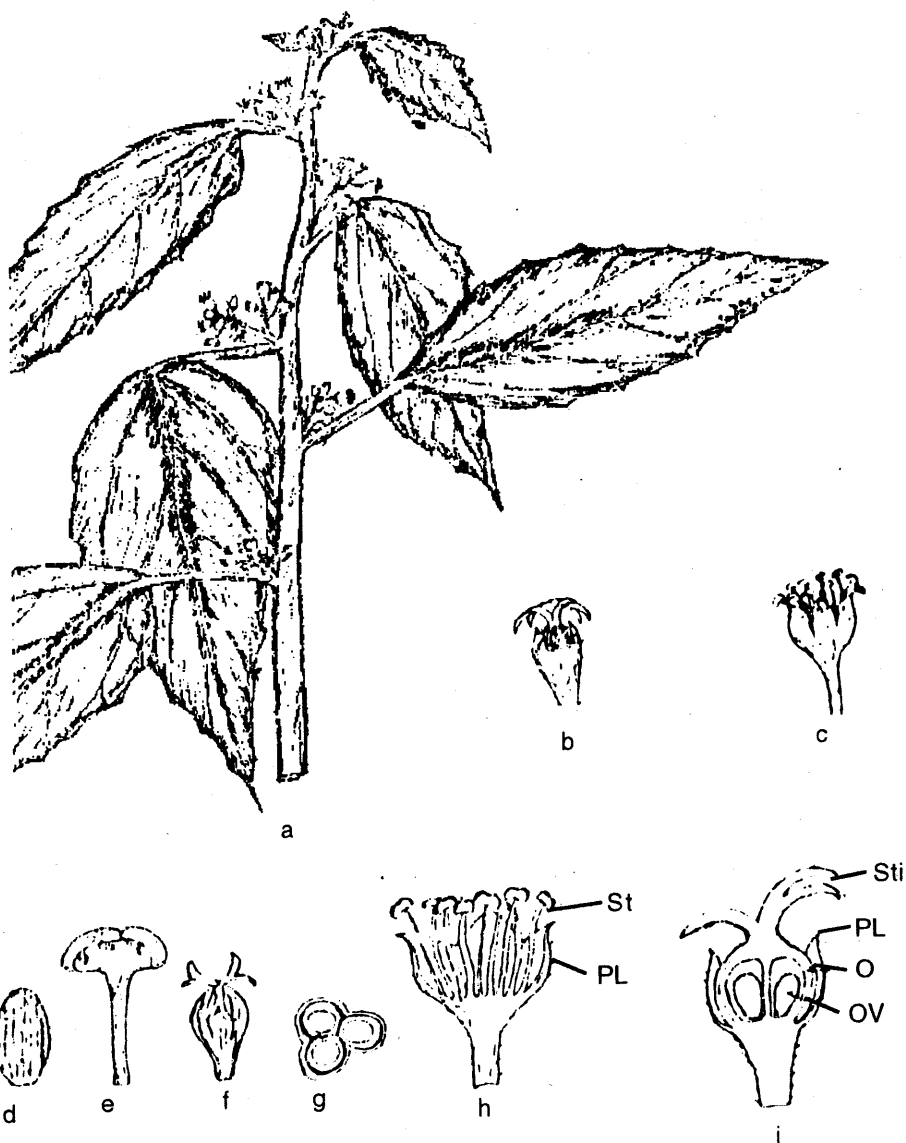


Fig. I a-i *Baliospermum montanum* (Willd.) M. - Arg.
 a) Habit b) Female flower c) Male Flower d) Perianth e) Stamen
 f) Gynoecium g) Ovary C.S. h) Male flower L.S. i) Female flower L.S.

O. Ovary, Ov. Ovule, PL. Perianth lobe, St. Stamen, Sti. Stigma

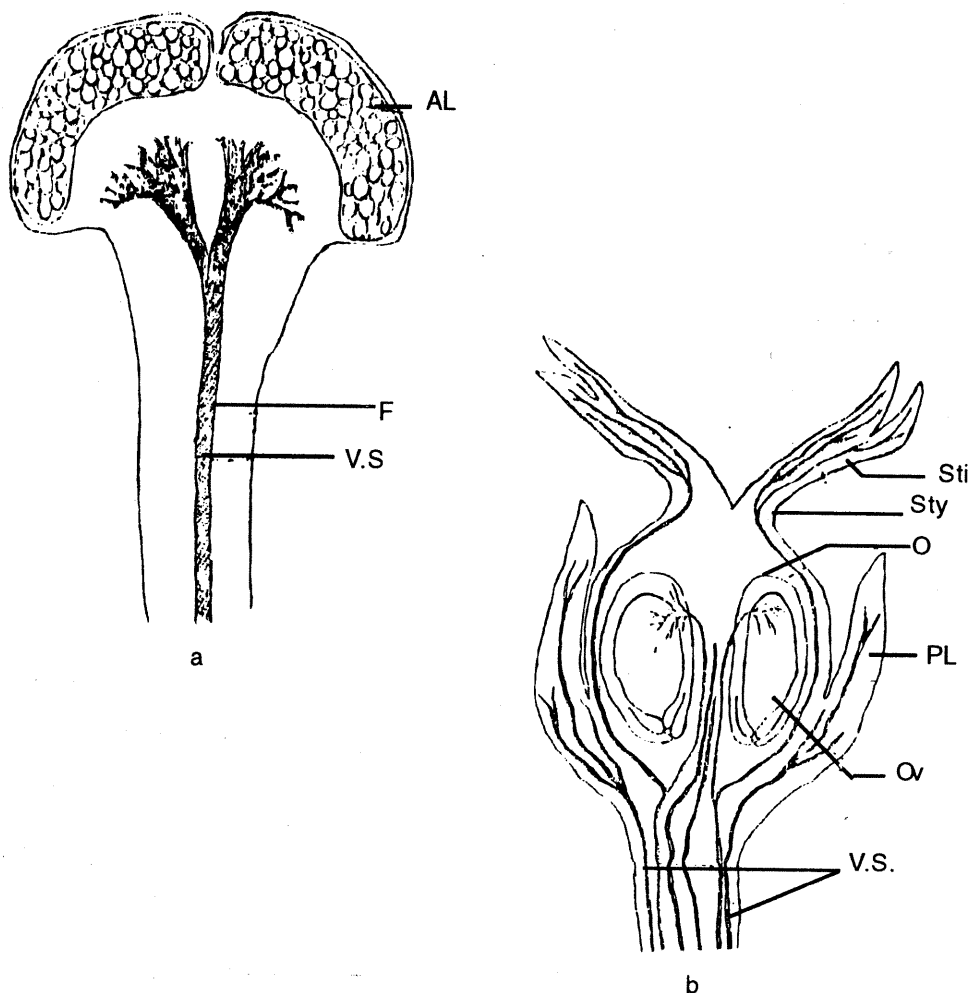


Fig. I a-i *Baliospermum montanum* (Willd.) M. - Arg.
 Floral Vascular Supply a) Stamen (x 115) b) Female flower L.S. (x115)

AL. Anther lobe, F. Filament, O. Ovary, Ov. Ovule, PL. Paerianth lobe, Sti. Stigma,
 Sty. Style, V.S. Vascular supply

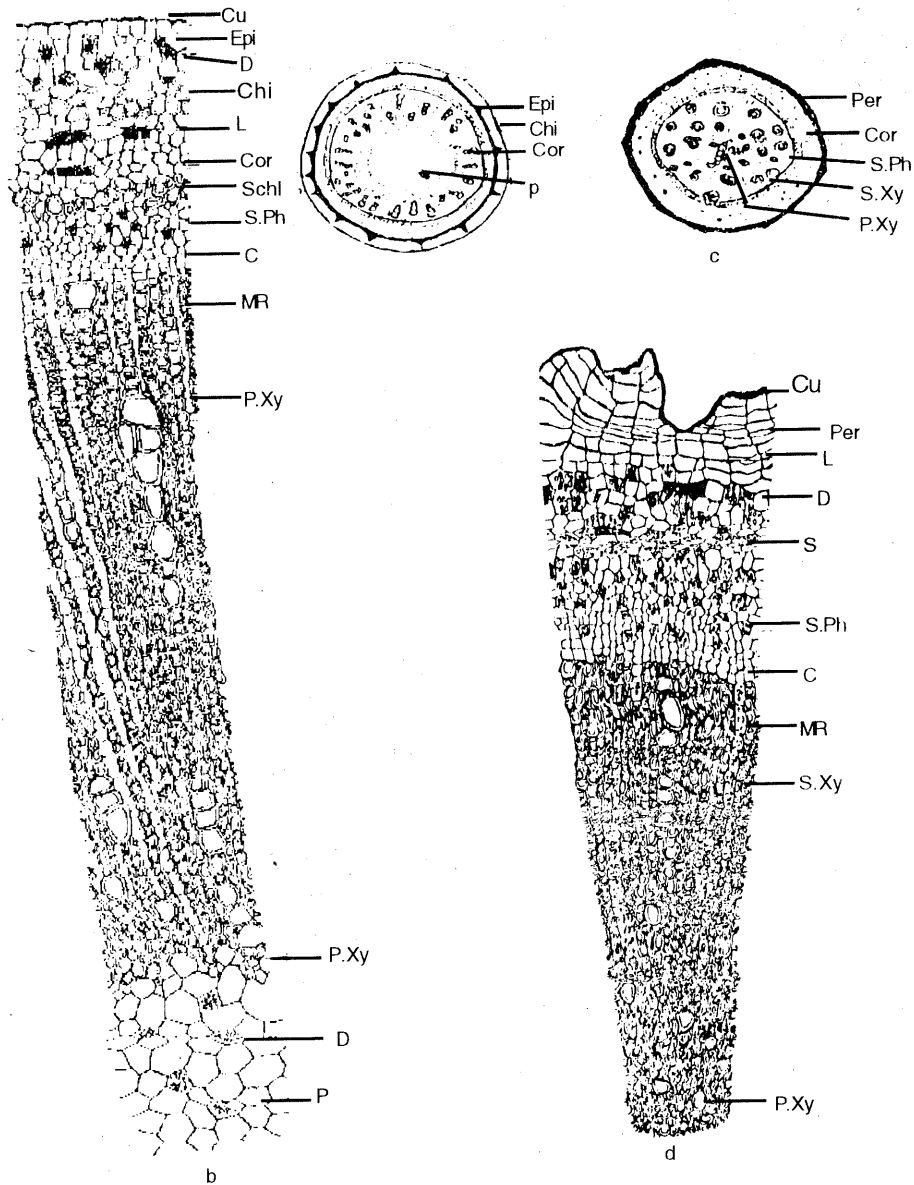


Fig. 1 a-i **Baliospermum montanum (Willd) M. - Arg.**

a) T.S. of stem-Diagrammatic (x50) b) A portion enlarged (x 115)

c) T. S. of Root - Diagrammatic (x 50) d) A portion enlarged (x 115)

C. Cambium, **Chi.** Chlorenchyma, **Cor.** Cortex, **Cu.** Cuticle, **D.** Druses, **Epi.** Epidermis, **L.** Latex Cell, **Mr.** Medullary ray, **P.** Pith, **P.Xy.** Primary xylem, **S.** Starch grain, **Schl.** Schlerenchyma, **S.Ph.** Secondary phloem. **S.Xy.** Secondary xylem.

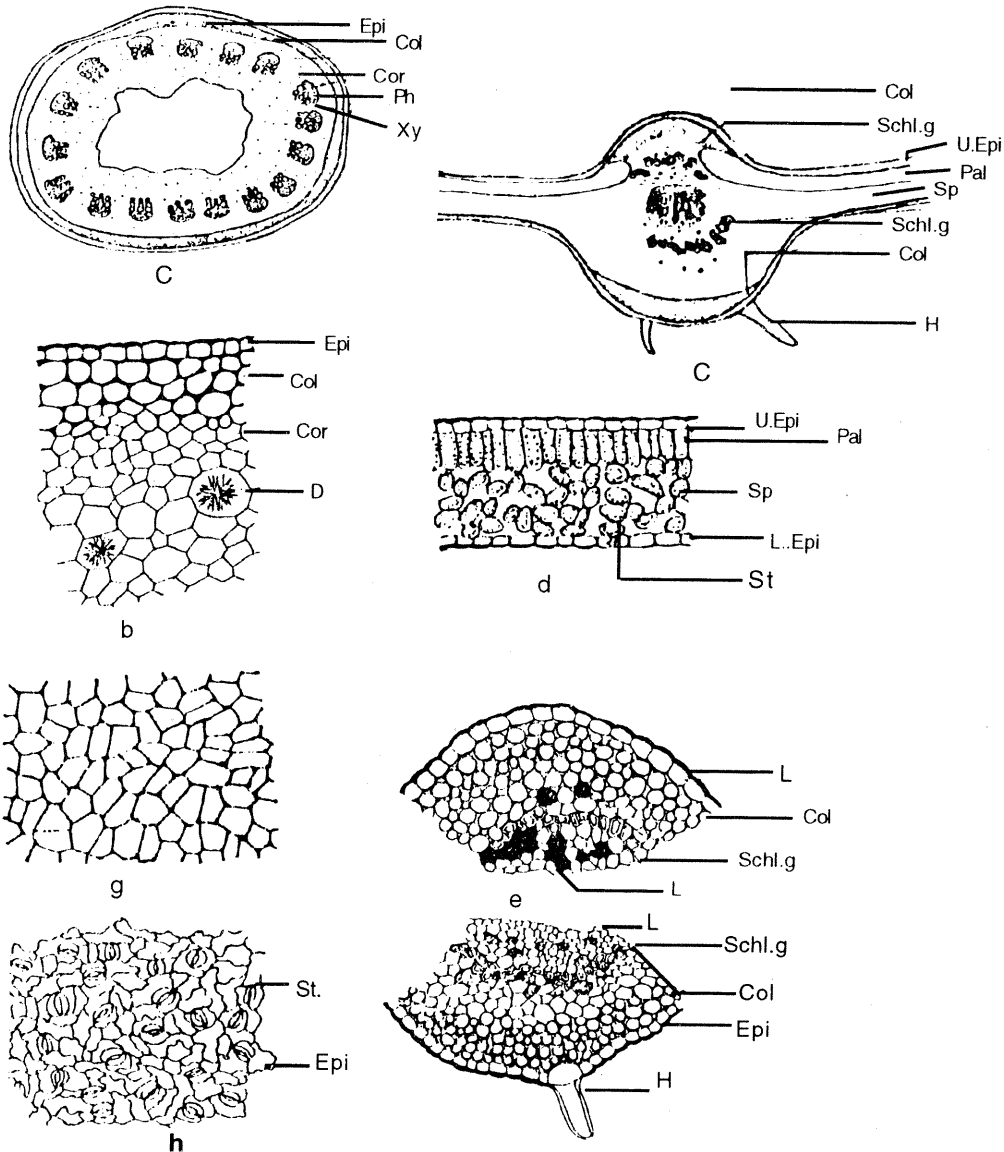
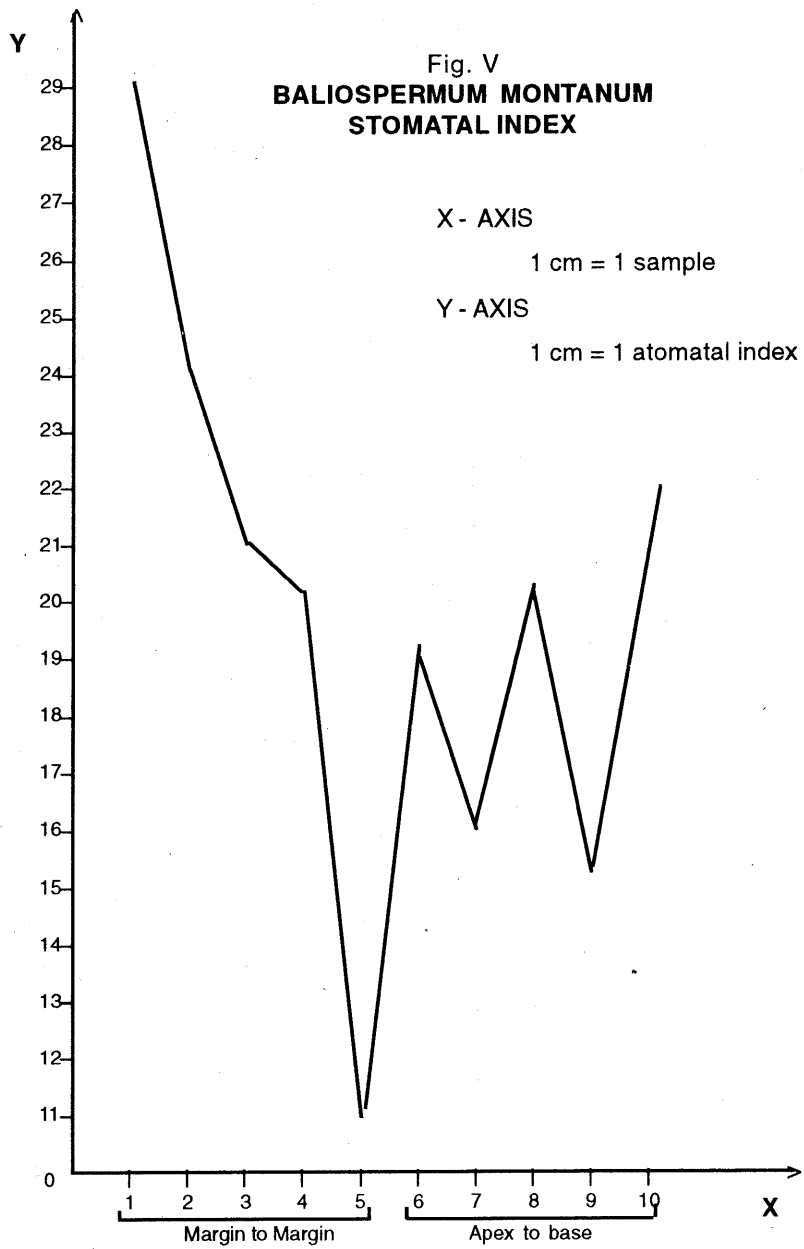


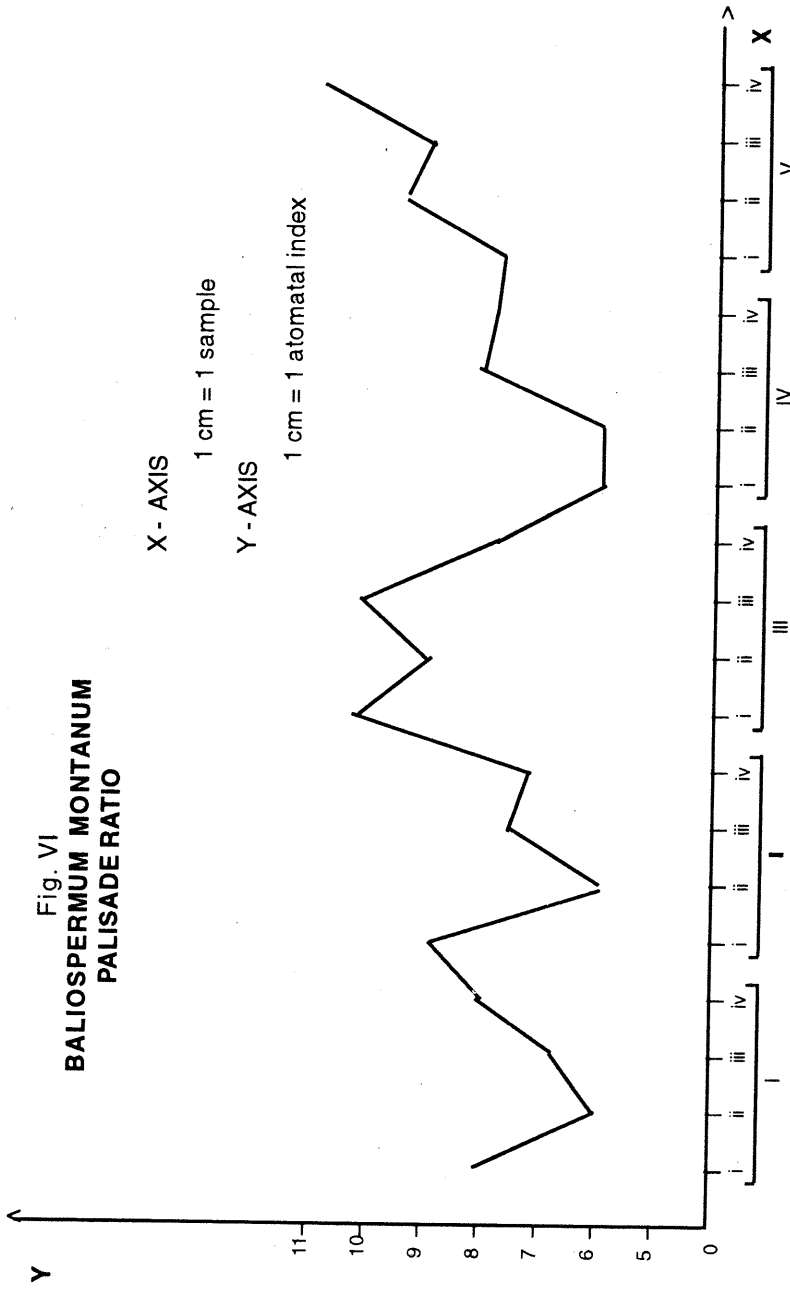
Fig. IV a-h *Baliospermum montanum* (Willd) M.-Arg. a) T. S. of petiole - Diagrammatic (x50) b) A portion of petiole showing epidermis and cortex (x115) c) T.S. of lamina through midrib Diagrammatic (x115) d) Detailed T. S. of lamina (x210) e) Upper portion of midrib enlarged (x450) f) Lower portion of midrib enlarged (x450) g) Surface view of upper epidermis (x210) h) surface view of lower epidermis (x210).

Col. Collenchyma, **Cor.** Cortex, **D.** Druses, **Epi.** Epidermis, **H.** Hair, **L.** Latex cell, **L.Epi.** Lower epidermis, **Pal.** Palisade, **Ph.** Phloem, **Schl. g.** Schlerenchyma griddle **Sp.** Spong parenchyma, **St.** Stomata, **U. Epi.** Upper epidermis, **Xy.** Xylem.

Fig. V
BALIOSPERMUM MONTANUM
STOMATAL INDEX



10 SAMPLES FROM SINGLE LEAF



20 SAMPLES FROM 5 DIFFERENT LEAVES

Table I: BALIOSPERMUM MONTANUM-STOMATAL INDEX

	I			II			III			IV			V		
	No. of Epi. cells	No. of Stomatal mata	Stomatal index	No. of Epi. cells	No. of Stomatal mata	Stomatal index	No. of Epi. cells	No. of Stomatal mata	Stomatal index	No. of Epi. cells	No. of Stomatal mata	Stomatal index	No. of Epi. cells	No. of Stomatal mata	Stomatal index
1	11	1	8.3	9	1	10.00	11	1	8.3	10	1	10.1	11	1	8.3
2	7	3	30.00	12	2	14.3	9	2	18.1	13	2	13.3	10	2	16.7
3	10	2	16.6	12	1	7.7	9	2	18.1	9	4	30.8	12	1	7.7
4	11	2	15.38	10	3	23.1	12	3	20.00	8	2	20.0	11	3	21.42
5	9	2	18.1	9	2	18.1	11	3	21.0	8	1	11.1	12	2	14.3
6	9	2	18.1	11	2	15.38	10	2	16.7	12	2	14.3	10	1	10.1
7	11	2	15.38	11	2	15.38	8	2	20.00	12	3	20.0	10	2	16.7
8	6	1	11.1	10	3	23.1	7	3	30.00	12	1	7.7	11	2	15.38
9	9	3	25.00	11	1	8.1	9	2	18.1	12	1	7.7	8	1	11.1
10	10	4	28.5	9	2	18.2	10	3	23.1	12	2	14.3	8	1	11.1
Average Stomatal Index			18.65			15.35			19.34			14.93			21.28

	VI			VII			VIII			IX			X		
	No. of Epi. cells	No. of Stomatal mata	Stomatal index	No. of Epi. cells	No. of Stomatal mata	Stomatal index	No. of Epi. cells	No. of Stomatal mata	Stomatal index	No. of Epi. cells	No. of Stomatal mata	Stomatal index	No. of Epi. cells	No. of Stomatal mata	Stomatal index
1	6	1	14.29	10	2	16.7	10	1	90.1	12	0	0	8	1	11.1
2	9	1	10.00	11	3	21.42	9	1	10.00	10	1	90.1	12	1	7.7
3	9	3	25.00	10	1	90.1	11	1	8.3	13	2	13.3	13	2	13.3
4	12	2	14.3	11	2	15.38	11	2	15.38	11	1	8.3	11	2	15.36
5	10	1	90.1	13	2	13.3	10	2	16.7	12	3	14.3	12	1	7.7
6	10	2	14.7	11	2	15.38	10	3	23.1	12	1	7.7	9	2	18.1
7	10	1	90.1	8	1	11.1	11	0	0	14	2	12.5	10	2	16.7
8	10	2	16.7	8	2	20.00	8	1	11.10	9	2	18.1	7	0	0
9	12	2	14.3	8	1	11.1	11	2	15.38	12	3	20.0	14	1	6.7
10	7	0	0	11	3	21.00	8	2	20.00	9	2	18.1	12	2	14.3
Average Stomatal Index			29.15			23.55			21.01			10.24			11.09

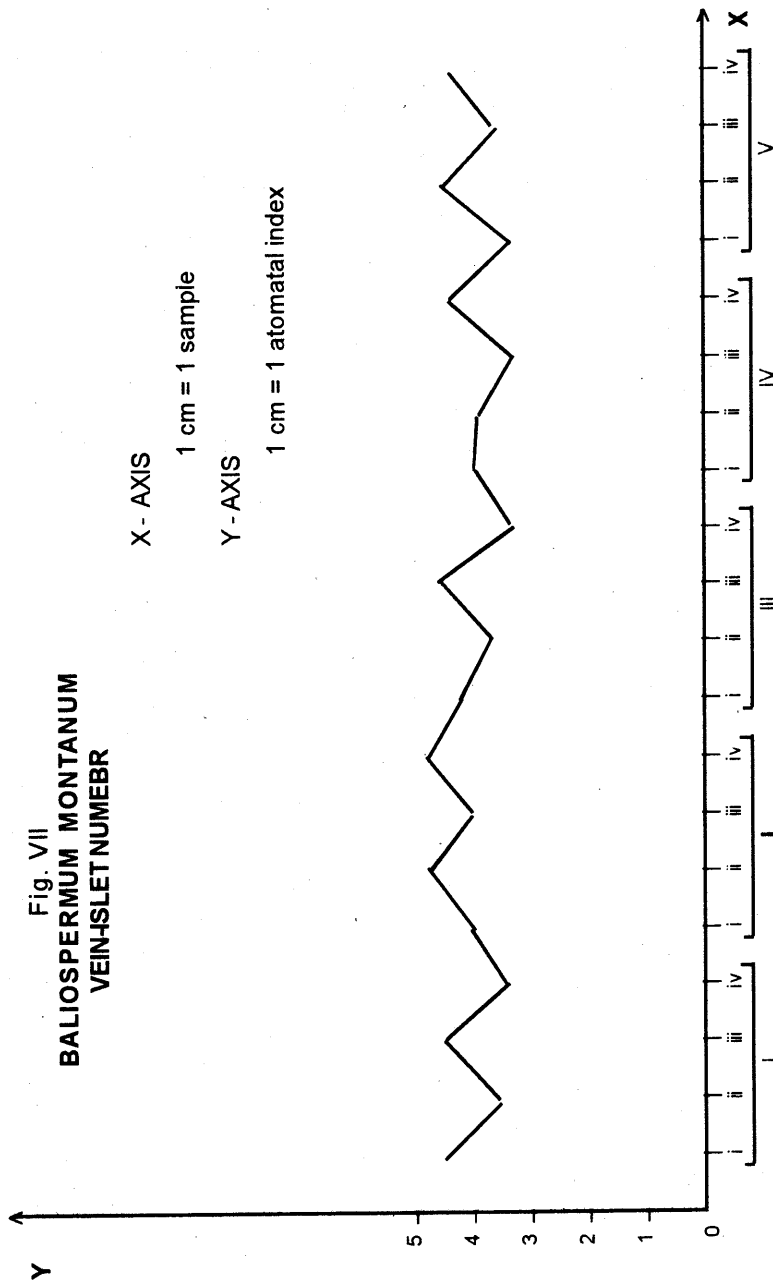
Range: 11.09 - 29.15 Mean: 19.46 Standard deviation: 20.07

Table II BALIOSPERMUM MONTANUM - Palisade Ratio

Leaf No.	II				III				IV				V							
	i	ii	iii	iv	i	ii	iii	iv	i	ii	iii	iv	i	ii	iii	iv				
No. of pieces	6	4	7	6	13	5	9	5	9	10	12	6	6	7	8	6	9	16	9	9
Readings	7	7	7	11	10	7	9	7	9	11	9	8	7	6	6	7	5	9	6	10
	7	6	4	9	8	6	5	7	11	11	8	8	8	7	7	5	7	7	7	12
	9	5	8	6	6	5	7	8	10	7	9	10	5	5	8	12	7	6	13	11
	6	6	6	8	8	7	10	8	8	7	10	7	5	5	10	8	10	10	12	12
Average	7	5.6	6.4	8	9	6	7.6	7.4	9.8	8.8	9.6	7.8	6.2	6	9.8	7.6	7.6	9.6	9.4	10.8
Total Average	6.8				7.5				9				6.9				9.3			
Range: 6.8 - 9.3					Mean: 7.9								Standard deviation: 2.36							

Table III BALIOSPERMUM MONTANUM - Vein-islet Number

Leaf No.	II				III				IV				V							
	i	ii	iii	iv	i	ii	iii	iv	i	ii	iii	iv	i	ii	iii	iv				
No. of pieces	5	4	5	3	5	5	4	4	5	3	4	5	4	5	3	3	3	5	4	3
	4	4	4	3	4	4	4	3	4	3	4	3	4	3	4	7	3	3	3	7
	5	3	5	4	5	5	4	5	4	4	4	4	4	5	4	3	4	5	4	3
	4	4	4	4	3	3	3	4	5	3	5	3	5	4	3	4	4	4	3	4
	4	4	4	3	3	5	4	5	4	4	4	4	4	4	4	4	4	3	5	4
Average	4.4	3.8	4.4	3.4	4	4.4	3.8	4.4	4.2	3.8	4.4	3.6	4.2	4	3.6	4.2	3.4	4.4	3.6	4.2
Total Average	4				4.15				4				4				3.9			
Range: 3.9 - 4.15					Mean: 4.01								Standard deviation: 0.83							



20 SAMPLES FROM 5 DIFFERENT LEAVES

The medullary rays are often uniseriate or biseriate containing starch grains in their cells. The xylem vessels are comparatively few in number. The primary xylem is tetrarch (Fig. III c & d).

Petiole

Cross section of the petiole is oval in outline. Epidermis is single layered with thick deposit of cuticle. Below the epidermis 3 - 5 layers of collenchyma are conspicuous. Beneath this collenchymatous layers, cells are large and parenchymatous. Some of the cells contain druses. Vascular bundles are numerous and arranged in a ring. There is a large cavity in the centre (Fig. IV a & b).

Leaf

T. S. of leaf shows common dicotyledonous characters. The epidermis is single with thick cuticle. Mesophyll tissue consists of compactly arranged single layered palisade and loosely arranged, multilayered spongy tissue. In the midrib region just beneath the upper and lower epidermis 3 - 5 layers are collenchymatous. Bicollateral vascular bundle, is bounded both on upper and lower sides by sclerenchymatous girdles. In the midrib region latex cells are very conspicuous. Lower epidermis possesses unicellular trichomes. Stomata are of Rubiaceous type (Fig. IV c-h)

Propagation

The seeds of *Baliospermum* were sown on beds, 3 m x 1.2 x 0.3m. Seeds were covered with pure sand and regularly watered. The germination commenced on the 6th

day and was completed on the 12th day. On an average, the percentage of germination was found to be 50.6. One month old seedlings were used for out-planting.

The plants were raised from stem cuttings also. This vegetative mode of multiplication was found to be more effective. The pencil size stem cutting were treated with IBA, NAA & Boric acid of 1000 ppm, 500 ppm, 250ppm m & 100 ppm. The treatments were for duration of 10 minutes, 20 minutes and 12 hours. In IBA & NAA treatments, 100% sprouting were observed whereas in boric acid, it varied from 80 to 100. In all these, controls had the percentage of sprouting varying from 40 to 90. It was found that IBA & NAA treated cuttings (of varying duration & concentration) all sprouted and established.

Result & Discussion

Our field observations and germplasm studies reveal that plants from lower elevation show good growth rate and yield, when compared to that of other elevations. It is also observed that stem cuttings are best suited for large-scale propagation and cultivation. The stomatal index value of *B. montanum* is 19.46 (Table I), Palisade ratio is 7.9 (Table II) and vein-islet number is 4.01 (Table III)

Acknowledgements

We are grateful to Dr. P.K. Warriar, the Managing Trustee & Chief Physician (Project Leader), for providing the necessary facilities for carrying out the work. We thank Sri K.K. Nair, I.F.S (Retd.), local consultant of the project, Dr. C. Ramankutty, Editor,

Publication Department, Dr. Indira Balachandran, Research Officer, Herbal Garden and Dr. G.P. Mukundan, Manager, Herbal Garden, Kanhirappuzha for their valuable guidance and help for conducting the study. Thanks are due to Mr. V.K. Uthaman, Stenographer who did the typing work.

Our grateful thanks are due to the International Development Research Centre, Ottawa, Canada for the financial assistance provided for the work.

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A LOOK INTO DHATUPOSANA NYAYAS

Sreenivasa Prasad, B*

ABSTRACT

The process of digestion, circulation of the absorbed essence (*ahararasa*) and selective utilisation of the essential constituents have been described in ayurveda under three *nyayas* (theories). *Ksiradadhi nyaya* represents the formation of respective end products (*ahararasa*) during digestion; *kedarakulya nyaya*, the mechanism of transportation of *ahararasa* throughout the body and *khale kapota nyaya* denotes the selective utilisation of components of *ahararasa* by different *dhatu*s (tissues).

INTRODUCTION

The *dhatu*s (tissues) need continuous nourishment in order to grow and to perform their functions. In Ayurveda three *nyayas* (theories) have been postulated to explain the mode of nourishment of these *dhatu*s. The three *nyayas* are:

1. *Ksiradadhi nyaya*
2. *Kedarakulya nyaya*
3. *Khalekopta nyaya*

It seems that, these three theories collectively represent the process of digestion, circulation of absorbed essence of digestion and selective utilisation of essential constituents by different

*dhatu*s (tissues). Let us consider each theory in detail.

KSIRADADHI NYAYA

(Theory of Transformation)

The food, which we ingest, contains the derivatives of: *sthavara* (herbal), *jangama* (animal), *sendriya* (organic), *nirindriya* (inorganic) etc. (Caraka. Sutra. 25 / 35) which are larger in size and complex in form, and which cannot be absorbed as such through the gastro-intestinal tract. So, there is a need of conversion of such substances into simple and suitable form for absorption and assimilation. This mechanism of transformation of food materials has been explained under *ksiradadhi nyaya*.

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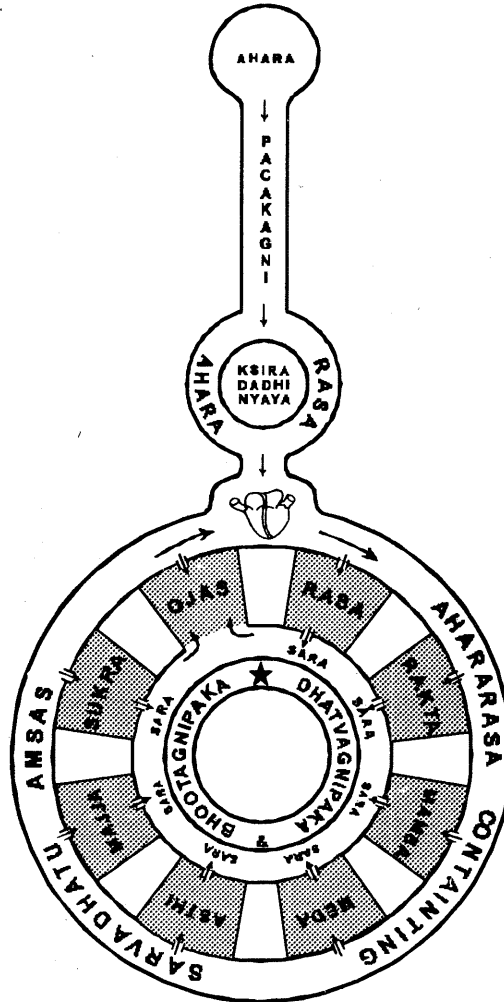
According to this theory, the substances are transformed in the manner of curd obtained from milk. It is noticeable from the process of curd formation that, by the addition of some amount of curd / buttermilk, the whole milk is converted into curd. In the same manner by the action of digestive enzymes the food materials

are converted into the end products.

addition of curd / butter milk
Milk → Curd

action of digestive enzymes
Food → Ahararasa

DHATU POSANA



SCHEMATIC REPRESENTATION OF THREE DAHTUPOSANA NYAYAS

Further, in the above said theory conversion is possible into the form of curd, but not any thing else. In the same manner, in the process of digestion also, the end products are formed in respect to the constituents, the food contained. For e.g. monosaccharides from carbohydrates, amino acids from proteins and fatty acids from fats ... etc.

In this way *ksiradadhi nyaya* explains the transformation of complex materials into simpler form or in other words formation of respective end products of food during the process of digestion.

KEDARAKULYA NYAYA (Theory of Transportation)

It is understood that, *dhatu*s (tissues) are spread throughout the body. So there is a need of transportation of the absorbed essence of the food (*ahararasa*) to the nearest and distant *dhatu*s in order to meet their needs. This mechanism of transportation has been explained in ayurveda under *kedarakulya nyaya*.

This theory states that, the water is supplied through channels to the different fields of cultivation. It may be noted from the theory that, though fields are plenty a common channel runs along the way, unless and until the fields are situated in entirely different direction to the water source.

Let us apply this theory to the present context. Considering *hrdaya* as the source (pumping house), different blood vessels carrying *ahararasa* run in different directions from the heart and thus nourish all the *dhatu*s

situated at different places and throughout the body. This theory explains the mechanism of transportation only.

KHALEKAPOTA NYAYA (Theory of selectivity)

It is well known that, though the basic composition of all the *dhatu*s is same, the configuration differs from *dhatu* to *dhatu*. Further each and every *dhatu* also differs functionally. So, as a rule, the needs of each and every *dhatu* also differ. This is to say that, though the composition of *ahararasa* is same, utilisation varies from *dhatu* to *dhatu*. This selective utilisation of components of *ahararasa* by the *dhatu* has been explained under the theory of *khalekapota nyaya*.

According to this theory, the *dhatu*s selectively utilise the components of *ahararasa* in the manner; pigeons selectively consume the food from a heap of food grains. It may be noticed from the above example that, the heap of food grains is common to all pigeons, but pigeons are free to select and consume the food grains according to their choice. Applying this to the present context, it may be said that, though the *ahararasa* is supplied in common to all the *dhatu*s they utilise the components of *ahararasa* selectively i.e. in accordance to their needs, which varies from *dhatu* to *dhatu*. This type of selective utilisation of components of *ahararasa* by *dhatu*s has been explained as *khalekapota nyaya*.

On the whole, *ksiradadhi nyaya* represents the formation of respective end products during digestion: *kedarakulya nyaya*, the mechanism of

transportation of the essence of digestion throughout the body, while *khalekapota nyaya* denotes the selective utilisation of components of *ahararasa* by different *dhatu*s.

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AYURVEDIC THESIS COMPETITION 1998

Kottakkal Arya Vaidya Sala invites thesis for the award of two categories of "**Vaidyaratnam P. S. Varier Prizes**", (1998) constituted since 1967, for promoting research and thesis works in Ayurveda. **The first prize is Rs. 25,000/- and the second prize is Rs. 15,000/-.** Topic for this year's competition is "**Different Techniques of Raktamoksha and its practical applications**". The last date for receipt of the entries is 30th September '98. Rules and regulations for the competitions can be had from the Managing Trustee, Arya Vaidya Sala, Kottakkal, Malappuram Dist., Kerala - 676 503.

STUDIES ON KUPOSHANA (MALNUTRITION) IN SCHOOL CHILDREN AND ITS TREATMENT WITH BALAPOSHAKA CHURNA

Sridhar, B.N. *

ABSTRACT

In the recent years the concept of health has found expression in the historic Alma-Declaration of 'Health for all by 2000 AD' and primary health care has been the key for achieving that goal. Malnutrition is one of the major problems of a poor country like India. Studies have shown that malnutrition in the form of deficiency of vitamins, proteins, calcium etc. is very frequently encountered among the school children. Ten confirmed cases of malnutrition were treated with an Ayurvedic compound preparation *Balaposhakachurna* containing the powders of *amalaki*, *satavari* and *asvagandha* with positive results.

INTRODUCTION

Health is a fundamental right of all human beings. Nutrition may be defined as the end result of food taken bestowing positive health. It is concerned primarily with the part played by the nutrients in body preserving and promoting physical and mental well being. The word nutrient or food factor is used to specify the constituents of diet such as proteins, vitamins, fats, minerals etc. Dietetics as the practical application of the principles of nutrition, includes

the planning of food for both healthy and the sick. Good nutrition means maintaining a nutritional status that promotes healthy growth of both body and mind which is the basis of positive health.

Malnutrition is a condition which occurs when the body does not get proper kind of food both in terms of quality and quantity needed for maintaining health. Malnutrition can occur at any age but most frequently it occurs in children since their nutritional requirement will be high

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owing to the growth phenomena which will be more active in them. Children between the age of 5 and 15 years form a sizeable and very important section of the population in any country and in India they form nearly 1/3 of the total population. Studies have shown that protein calorie deficiency and deficiency of vitamins are frequent among school children.

For achieving the target 'Health for all by 2000 AD' at the national level there is an urgent need for focusing of our efforts, especially on the poor people of rural areas. For this the immunisation plans and milk distribution or mid-day meal to the school children alone will not be sufficient. Therefore, indigenous systems of medicine especially Ayurveda can play a major role in providing health care to the rural people, in order to achieve the target of health for all. Moreover, the Ayurvedic herbs in general are cheap, readily available and easily acceptable to the populace.

MATERIALS AND METHODS

A project on *kuposhana* (malnutrition) was taken up to study the effect of *amalaki* (*Phyllanthus emblica*), *satavari* (*Asparagus racemosus*) and *asvagandha* (*Withania somnifera*) as a compound herbal powder. The drugs were cleaned, shade dried, powdered then mixed together in equal quantity. This formulation was supplied by Regional Research Institute for Ayurveda, Calcutta. The preparation is named as *Balaposhaka churna*. The study was conducted in 2 primary schools lo-

cated in Maralakunte and Naganayakanahalli villages about 35 Kms away from Bangalore City. Children belonging to the group of 5 to 13 years were examined and ten children of either sex, who fulfilled more than 50% of the criteria fixed, were selected for study. Criteria fixed for selection were:

- (i) lack of sub cutaneous fat
- (ii) wrinkling of skin on light stroking
- (iii) bad muscle tone
- (iv) pale appearance
- (v) rough skin
- (vi) haemorrhage
- (vii) bad posture
- (viii) nasal blackhead and whitehead
- (ix) sore at angles of mouth
- (x) rapid heart
- (xi) red tongue
- (xii) Vincent angina
- (xiii) serious dental abnormalities
- (xiv) corneal and conjunctival changes
- (xv) apparent wasting and
- (xvi) anorexia.

The study was single blind. For establishment of diagnosis the following factors were considered.

- (i) poor muscular developments
- (ii) skin infolds and loss of subcutaneous fat

- (iii) wasting of mid arm
- (iv) facial pallor
- (v) restlessness with facial expression of fatigue and
- (vi) loss of appetite.

Assessment of treatment was made on the basis of improvement in body weight, skin-fold thickness, mid arm circumference, haemoglobin, serum cholesterol and serum total proteins. No supporting therapy or special diet was given, 5 gm of the medicine twice a day with water was given in the class room itself. Duration of the treatment was three

weeks. All relevant records are preserved at O.P.D. of R.R.C., Bangalore.

OBSERVATIONS AND DISCUSSIONS

All the cases were kept under strict observation. Final assessment was carried out after giving gap of 15 days after the completion of the treatment. Details of data collected having direct bearing on diagnosis and prognosis are given separately. Table I shows the effect of *Balaposhaka churna* on body weight, mid arm circumference and skin-fold thickness of both arms. Details of the effect on

EFFECT OF BALAPOSHAKA CHURNA ON DIFFERENT PARAMETERS STUDIED

TABLE - I
Effect on Body Parameters

Parameters	Mean Value		Average % increases	Paired 't' test		Values	
	AT	BT		Sd	+Se	t	p
Body weight (kg)	16.75	16.05	4.36	0.48	0.15	4.6	< 0.01
Mid arm circumference (cm) Rt.	15.28	14.75	3.59	0.25	0.079	6.7	< 0.01
Mid arm circumference (cm) Lt.	15.18	14.61	3.90	0.39	0.0125	4.56	< 0.01
Skin-fold Thickness (cm) Rt.	1.18	1.06	11.32	0.113	0.035	3.42	< 0.01
Skin-fold Thickness (cm) Lt.	1.15	1.01	13.86	0.096	0.030	4.66	< 0.01

bio-chemical parameters like haemoglobin, serum cholesterol and protein are given in table II. Effect on blood picture is provided in table III.

It was noted that the mid arm circumference increased considerably with an average of 3.59%. Increase in skin-fold thickness in both arms was observed. However, the increase in left

arm was more in comparison with right arm. Marked rise was noted in haemoglobin level and serum protein, whereas no significant change was observed in serum cholesterol. Values of blood picture after treatment show that there was an overall improvement. Non-significant decrease was seen in lymphocyte and monocyte. The increase in eosinophil count though significant

TABLE - II
Effect on Bio-chemical parameters

Parameters	Mean Value		Average % increases	Paired 't' test		Values	
	AT	BT		Sd	+Se +-	t	p
Haemoglobin (gm %)	10.3	9.38	9.80	0.687	0.217	4.2	< 0.01
Serum Cholesterol (mg/dl)	194.7	187.8	3.6	20.08	6.35	1.08	> 0.50
Serum Protein (mg / dl)	6.92	6.02	14.9	0.939	0.297	3.03	< 0.01

TABLE III
Effect on blood picture

Parameters	Mean Value		Average % increases * decrease	Paired 't' test		Values	
	AT	BT		Sd+-	Se+-	t	p
W.B.C./cu.mm	85.80	80.50	6.58	10.70	338.64	1.56	<0.05
Polymorphs (%)	55.00	48.40	13.63	7.48	2.36	2.83	<0.02
Lymphocyte (%)	41.10	47.60	13.65*	7.51	2.37	2.74	<0.05
Eosinophil (%)	3.20	2.50	21.87	1.49	0.472	1.48	<0.20
Monocytes (%)	0.9	1.2	25*	0.67	0.21	1.40	<0.50

was within the normal range.

CONCLUSION

The results of the study show that the response was faster with overall excellent improvement in all parameters. The ingredients are comparatively cheap, readily available and well tolerated.

ACKNOWLEDGEMENT

Authors are grateful to the Director, C.C.R.A.S., New Delhi for permission to carry out this study. Valuable guidance from Late Dr. V.S. Togunashi, Ex. Asst. Director I/c is also gratefully remembered. Thanks are also due to the staff of R.R.C, Bangalore and Maralakunte, Naganayakanahalli Primary Schools for their full-hearted co-operation.

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RASAVAISESHIKA - XIV Chapter - II

Raghavan Thirumulpad, K. *

ABSTRACT

The discussion is whether *veerya* is the effect of a particular combination of *Rasa* and *guna*. *Vipaka*, *Karma* and *Panchabhoota* also feature in this issue.

30. रसगुणमात्रं वीर्यमित्येके

एके आचार्याः रसगुणमात्रं वीर्यं
इति मन्यन्ते

(Some preceptors consider *veerya* as the effect of *rasa* and *guna*)

Veerya is that with which a drug acts, ie. its potency. Particular *rasa* (taste) with particular *guna* (quality) produces its *veerya* (potency) is the opinion of certain teachers.

31. The opinion is refuted

न, तुल्यरसगुणेषु विशेषभावात्

न, तुल्यरसगुणेषु विशेषभावात्

(It is not so as difference in *veerya* is experienced in similar combinations of *rasa* and *guna* found in some *dravyas*)

If the opinion has to be valid the same kind of *veerya* should be experienced in all the *dravyas* with the same *rasa* and *guna* combination. As it is not so, *veerya* cannot be the effect of a particular combination of *rasa* and *guna*. For instance, *yasti* which is *madhura* and *snigdha* heals wounds but milk with same taste and *guna* produces oozing in the wounds.

32. मात्राविशेषात्
मात्राविशेषात्

(the same effect is produced in certain *dravyas* only when the dose is different)

Hence, *veerya* cannot be the effect of the combination of *rasa* and *guna* alone

* Raghava Ayurvedics, Chalakkudy.

33. तद्व्यतिरिक्तस्य तदाश्रयत्वात्
तद्व्यतिरिक्तस्य तदाश्रयत्वात्

(As in the case of certain *dravyas*, the potency is experienced without reference to its *rasa* and *guna*)

Veerya cannot be the effect of the combination.

34. वीर्यविषये चानधिकारात् तेषाम्
वीर्यविषये तेषां अनधिकारात्

(in the aspect of *veerya* - as the *rasas* and *gunas* alone are not efficient - it cannot be said that *rasa* - *guna* combination produces *veerya*.)

By mere sight and by mere smell certain things produces their *veerya*, as in the experience of certain drugs effecting cure in the treatment of poison. The sound produced by beating drums smeared with the paste of certain drugs, when heard is seen to cure poison. Here the *veerya* is effected by *śabda*, the sound. So *rasa* and *guna* combined together alone do not produce *veerya*.

35. रसगुणव्यतिरेकेणोपलब्धेः
कर्मणस्तस्य
रसगुणव्यतिरेकेण तस्य कर्मणः
उपलब्धेः

(as the action produced by the *veerya* is experienced without particular reference to *rasa* and *guna*)

Veerya is ascertained by action. By chanting hymns and by praying etc., cure of disease is experienced. Here the action has no reference to

rasa and *guna*, as hymns and prayers do not have any *rasa* and *guna*. So *veerya* does not necessarily depend on *rasa* and *guna*.

36. सत्सु तेषु तस्मिन् तस्यैवाकरणात् कर्मणः
सति सम्यक् प्रयोगे

तेषु सत्सु अपि सम्यक् प्रयोगे सति
अपि तस्य कर्मणः अकरणात्

(as the effect is not produced even though *rasas* and *gunas* exist and even though the application is perfect)

Even if the drug is not deficient in *rasa* and *guna* and application perfect, sometimes the desired effect is not produced. So it has to be conjunctured that *veerya* is something particular existing in the *dravya*, drug. There is argument that *veerya* is *guna* efficient to effect a desired result. So *guna* has to be of two kinds, with *veerya* (potential) and without *veerya* (non-potential). Such a classification itself clearly vouches that, *veerya* is something else other than *guna*. So it is more logical to consider *veerya* separately apart from *guna*, *rasa* etc.

30. द्रव्यरसगुणवीर्याणां विपाकः
द्रव्यरसगुणवीर्याणां विपाकः भवति

(there has to be *vipaka* for *dravya*, *rasa*, *guna* and *veerya*).

The effect of a *dravya* with its *rasa*, *guna*, and *veerya*, as food or medicine is produced only when it is properly digested. It is the digestion that is dealt with as *vipaka* - so *vipaka* has to be studied as a separate *padartha*, subject of study.

38. कर्म सर्वेषाम्

सर्वेषां कर्म भवति

(There has to be *karma* for *dravya, rasa, guna, veerya* and *vipaka*)

Here *karma* means application. प्रयोगलक्षणं कर्म (*karma* denotes application). Without proper application *dravya* with its properties cannot be properly studied and their benefits obtained. So *karma* has to be considered separately. The word *karma* is used in the text in another sense also, the action produced by the application of the drug in the system. (वीर्यलक्षणं कर्म)

39. तत्र पृथिव्यादीनि मूलद्रव्याणि

तत्र पृथिव्यादीनि मूलद्रव्याणि

(Among the six *padarthas* that are the subjects of discussion, *Prithivi* like matters are termed as *mooladravya* i.e. the basic matters.)

Basic elements, *mooladravyas* are those with which all experiensable things are produced. *Prithivi, ap, tejas, vayu* and *akasa* are the five basic materials in the sense that their various kinds of combinations produce the numerous objects in the Universe.

The *mooladravyas* are also called *karana dravyas*. The objects formed of *karanadravyas* are called *karya dravyas* in two senses, as resultant of the *karanadravyas*, and as *dravyas* that have to be used for various purposes.

40. गन्धरसरूपस्पर्शशब्दाः गुणाः
पृथिव्यप्तेजोवाय्वाकाशानां, पूर्वः पूर्वोऽपकृष्यते

गन्धरसरूपस्पर्शशब्दाः पृथिव्यप्तेजो
वाय्वाकाशानां गुणाः पूर्वः पूर्वः अपकृष्यते

(*gandha, rasa, roopa, sparsa* and *sabda* are the *gunas* of *prithivi, ap, tejus, vayu* and *akasa*)

(there is decrease of the former, former *guna*)

Each of the five senses, experiences a particular *guna*. Ear experiences *sabda* (sound), skin experiences *sparsa* (touch), eye experiences *roopa* (colour), tongue experiences *rasa* (taste) and the nose experiences *gandha* (smell).

Here the words ear etc do not mean the particular organ but the particular sense centre in the organ. As *guna* cannot exist without its proper base, a matter is conceived as the primary base of each *guna*, and it is called the *bhoota*. The *bhoota* is defined thus – बाह्येन्द्रियग्रहविशेष - गुणवत्त्वं भूतत्वं

(a *bhoota* is something which has a particular *guna* that can be experienced by the external sense). Ear etc is considered as the external sense. Mind (*manas*) is considered as the internal sense without the association of which the external sense cannot work. The particular *guna*, experienced by the ear is *sabda* and it is of *akasa*. The particular *guna* experienced by the skin is *sparsa* which is of *vayu*. The particular *guna* experienced by eye is *roopa* (colour) and that is of *agni*, the particular *guna* experienced by the tongue is *rasa*, and is of *jala* and the particular *guna* experienced by the nose is *gandha*, which is of *bhoomi*.

In addition to the particular *guna*, the *bhootas* possess the *guna* or *gunas* of the previous *bhootas* also. Thus *akasa* has *sabda*. In addition to its particular *guna*, ie. *sparsa* *vayu* has *sabda* and *akasa*. In addition to *roopa*, *agni* has *sparsa* and *sabda* also. In addition to *rasa*, *jala* (*ap*) has *roopa*, *sparsa* and *sabda* also. In addition to *gandha*, *bhoomi* has *rasa*, *roopa*, *sparsa* and *sabda*. This is meant by "*ekagunavrddhanvaya*" (increase of one *guna*) beginning from *akasa*. If we think in terms of decrease, *bhoomibhoota* possesses the five *gunas*, *jala bhoota* possesses four, *agni* three, *vayu* two and *akasa* one *guna*. This is meant by पूर्वः पूर्वः अपकृत्यते - पूर्वपूर्वापकर्षः

41. घृतिसंग्रहपक्तिव्यूहावका-
शदानैरूपाकार एभिः
एभिः उपकारः घृतिसंग्रहप-
क्तिव्यूहावकाशदानैः

(the benefit in creation with these *bhootas* is *dhruiti*, *sangraha*, *pakti*, *vyooha* and *avakasadana*)

The five *bhootas* join to produce a *davya*. In the making of the *dravya*, *bhoomi* forms the base in which the other *bhootas* work. *Dhruiti* is the aspect of being the base consolidation.

The synonyms *dhara*, *dharitri*, *dhatri* etc denote the idea. *Jala* acts as something which binds together. *Sangraha* is binding, holding together. *Pakti* is cooking or baking, *agni* cooks or bakes (so to say by producing heat) the *bhootas* to become the *dravya*. The function of *vayu* is arrangement, and *akasa* determine the space.

42. तस्मात् तन्मयं द्रव्यं

तस्मात् द्रव्यं तन्मयं भवति

(the *dravya* is of five *bhootas* because in this way, the five *bhootas* together co-operate for the formation and existence of the *dravya*)

The five *bhootas* together assist each other for the *dravya* to form and it exists as long as their combined assistance exists. So the *dravya* is said to be *pancabhootamaya*, *pancabhautika*. *Dravya* thus formed is known as *karyadravya*, as the *bhootas* are *karanadravyas*, the causative materials. The *karyadravya* is so termed as it is for some purpose as food, medicine etc. The *bhootas* are in the *samavayasambanda* (inherent relationship) as when the relationship is broken the five *bhootas* disintegrate and the *dravya* ceases to exist.

EXCERPTS FROM CHIKITSAMANJARI - XXIII

Unnikrishnan, P. *

ABSTRACT

In continuation to the descriptions of medicines for *arsoroga* here, in this issue, certain *kashaya* and *khala* preparations are mentioned. *Kalka* drugs to be mixed with buttermilk, certain powders etc. are detailed. *Dusparsakadi kashayam*, *Ciravilvadi kashayam*, *Hutabhogadi Curnam* are some of the popular medicines out of these.

TREATMENT OF ARSA (Contd.)

Milk medicated with crushed or finely powdered *koduveli* (*Plumbago indica*), which is tied in small bundle of cloth termed *kizhi*, is used for the preparation of butter. Rock salt, mixed with this butter shall be consumed with rice. Ghee prepared from this butter shall also be taken with food for the cure of *arsa*.

26. *Patha*, (*Cyclea peltata*) when combined with any one of the following drugs cures pain arising from *arsa*. The usual preparation is in the form of *kashaya*, where all the drugs are taken in equal parts.

Dusparsaka (*Tragia involucrata*)

Vilva (*Aegle marmelos*)

Yavaneer (*Cuminum cyminum*)

Nagara (*Zingiber officinale*)

prepared using drugs in the following proportion and consumed.

Dusparsa (*Tragia involucrata*) 10 gm

Vilva (*Aegle marmelos*) 10 gm

Yavaneer (*Cuminum cyminum*) 10 gm

Nagara (*Zingiber officinale*) 10gm

Patha (*Cyclea peltata*) 20gm

The following modification shall also be made

Dusparsa 20 gm

Vilva 20 gm

Yavaneer 20 gm

Nagara 20 gm

Patha 20 gm

Cherukatalati (*Cyathula prostrata*)

20 gm

The same *kashaya* shall be

27. The following *kashaya* cures

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arsa, *bhagandara* (fisluta-in-ano) and *gulma* (flatulence). It also promotes *agni* thereby increasing the appetite.

<i>Ciravilva</i>	<i>Holoptelia integrifolia</i>
<i>Punarnava</i>	<i>Boerhaavia diffusa</i>
<i>Vahni</i> (purified)	<i>Plumbago indica</i>
<i>Abhaya</i>	<i>Terminalia chebula</i>
<i>Kana</i>	<i>Piper longum</i>
<i>Nagara</i>	<i>Zingiber officinale</i>
<i>Saindhava</i>	<i>Sodii chloridum</i>

The above *kashaya* termed *ciravilvadi* is widely used in Kerala

28. *Abhaya Terminalia chebula*

<i>Kana</i>	<i>Piper longum</i>
<i>Kalasaka</i>	<i>Murraya koenigii</i>
<i>Dantee</i> (purified)	<i>Baliospermum montanum</i>
<i>Trivrit</i>	<i>Operculina turpethum</i>
<i>Eranda</i>	<i>Ricinus communis</i>
<i>Punarnavamghri</i>	<i>Boerhaavia diffusa</i> (Root)
<i>Vilva</i>	<i>Aegle marmelos</i>

Each 7 gm should be used to prepare a *kashaya* to which the following should be mixed in sufficient quantity and consumed for the smooth and unobstructed passage of *vayu*. 1) *Guda* (jaggery) 2) *Hingu* (asafoetida) 3) *Patu* (rock salt). *Gandharvahastadi kashaya*, detailed below shall be consumed for the *anulomana* (free passage) of *vayu*, the increase in

digestion, the promotion of appetite and the relief of constipation.

<i>Gandharvahasta</i>	<i>Ricinus communis</i>
<i>Ciravilva</i>	<i>Holoptelia integrifolia</i>
<i>Hutasa</i>	<i>Plumbago indica</i>
<i>Visva</i>	<i>Zingiber officinale</i>
<i>Pathya</i>	<i>Terminalia chebula</i>
<i>Punarnava</i>	<i>Boerhaavia diffusa</i>
<i>Yavashaka</i>	<i>Tragia involucrata</i>
<i>Bhoomitala</i>	<i>Curculigo orchioides</i>

A small quantity of rock salt and *guda* (jaggery) should be added to the *kashaya* just before consumption.

The two *kashayas* detailed above (*Gandharvahastadi* and *Abhayakanadi*) are effective where the cause of constipation is the blockade precipitated by *arsa*.

29. <i>Kutaja</i>	<i>Holarrhena pubescens</i>
<i>Ciravilva</i>	<i>Holoptelia integrifolia</i>
<i>Citraka</i>	<i>Plumbago indica</i>
<i>Mahoushadha</i>	<i>Zingiber officinale</i>
<i>Prativisha</i>	<i>Aconitum heterophyllum</i>
<i>Vaca</i>	<i>Acorus calamus</i>
<i>Cavika</i>	<i>Piper brachystachyum</i>
<i>Dhanvayavasha</i>	<i>Tragia involucrata</i>
<i>Pathya</i>	<i>Terminalia chebula</i>
<i>Daruharidra</i>	<i>Coscinium fenestratum</i>

The drugs given above form a *gana*

(group) termed *arsoghna* (capable of terminating *arsa*)

30. *Avilttol* - *Holoptelia integrifolia* (bark)

Ayamodakam - *Trachyspermum roxburghianum*

Vanakana - *Piper longum* (wild var.)

Cavyam - *Piper brachystachyum*
one part each

Tee (purified) - *Plumbago indica*

Cukku - *Zingiber officinale*

Kurumulaku - *Piper nigrum*

Tippali - *Piper longum*

Patu - rock salt four parts

The drugs given above, finely powdered and mixed with buttermilk, prepared from cow's milk, should be consumed early in the morning. Enlarged *arsa* will be reduced in size by the above *mukkuti* (*khala*) preparation.

Rock salt mixed with butter shall be consumed with supper.

31. *Katukka* - *Terminalia chebula*

Kayam - *Ferula asafoetida*

Induppu - *Sodii chloridum*

Kana - *Piper longum*

The above drugs ground into a paste should be taken with warm water for the cure of *arsa*.

32. A fine powder of the following drugs mixed with warm buttermilk consumed in the morning gives relief from *arsa*.

Koovalattila - *Aegle marmelos* (leaves)

Nagaram - *Zingiber officinale*

Oshnam - *Piper nigrum*

Deeipyakam - *Trachyspermum roxburghianum*

33. A *kashaya* prepared from the following cures *arsa*, *arocaka* (anorexia) *gulma*, *soola* (colic) and *pleeha* (splenomegaly) and promotes digestion.

Duralabha - *Tragia involucrata*

Nagara - *Zingiber officinale*

Vilva - *Aegle marmelos*

Pathya - *Terminalia chebula*

Kana - *Piper longum*

Vilanga - *Embelia ribes*

Agni - *Plumbago indica*

Yavanika - *Cuminum cyminum*

34 A *khala* prepared from any one, two, three or all of the following wins over *durnama*.

Patha - *Cyclea peltata*

Sooranakandam - *Amorphophallus campanulatus*

Carngeri - *Oxalis corniculata*

Cavyam - *Piper brachystachyum*

Citoraka - *Plumbago indica*

Yavasha - *Tragia involucrata*

Deeipy - *Trachyspermum roxburghianum*

Vaikuntha - *Leucas aspera*

Vrisceeva - *Boerhaavia diffusa*

Grandhika - Piper longum (wild var.)

35. A *mukkuti* prepared from the following is also effective.

Inci - Zingiber officinale (fresh)

Tavizhama - Boerhaavia diffusa

Cavyam - Piper brachystachyum

Ellu - Sesamum indicum

Katalati - Achyranthes aspera

Tumbanakku - Leucas aspera

Alternatively the following *mukkuti* (*khala*) shall also be used.

Ellu - Sesamum indicum

Tumbakkutam - Leucas aspera

Karkokilari - Psoralea corylifolia

36. A *mukkuti* with the following drugs and a small quantity of rock salt is cathartic and promotes digestion.

Avilkurunnu - Holoptelea integrifolia

Ayamodakam - Trachyspermum roxburghianum

Katukka - Terminalia chebula

37. *Hutabhug - Plumbago indica*

Ajamoja-Trachyspermum roxburghianum

Saindhava-Sodii chloridum

Nagara-Zingiber officinale

Marica-Piper nigrum

The above medicines should be finely powdered, mixed with sour buttermilk and taken for the cure of

pandu, arsa, vahnimandya (indigestion) and *soola* (colic)

38. The following *mukkuti* preparation relieves the discomforts arising from the *arsa*.

Marica-Piper nigrum 1 part

Nagara-Zingiber officinale 2 parts

Citraka-Plumbago indica 3 parts

Soorana-Amorphophallus campanulatus 4 parts

39. A *kashaya* should be prepared from the following to which milk is to be added and reduced. Consumption of this milk or buttermilk prepared from it relieves the intense pain caused by *arsa* on the anal region. It also relieves pain caused by protruding pile.

Varshabhoo Boerhaavia diffusa

Sigru Moringa oleifera

Koduveli Plumbago indica

40. A medicated ghee prepared with the following drugs as *kalka* and *moru* (buttermilk) as *drava* is effective in *arsa*.

Kattutippali Piper longum (wild var.)

Varahee Curculigo orchoides

Toova Tragia involucrata

Pachamanhal Curcuma longa (fresh)

Inci Zingiber officinale (fresh)

41. Medicated ghee prepared with the *kashaya* of *vanasoorana* as *drava* and *pancakolacurna* as *kalka* cures *arsa*.

42. A medicated ghee prepared from the following as *kalka*, buttermilk as *drava*, when consumed with rock salt relieves *arsa*.

Kattucena - *Amorphophallus campanulatus*
(wild var.)

Kanal - *Plumbago indica*

Thottuchempu (whole plant) *Alocasia* sp.

Pata - *Cyclea peltata*

Toova - *Tragia involucrata*

Piraku - *Clerodendrum viscosum*

Vizhalari - *Embelia ribes*

Khapura - *Cyperus esculentus*

Elam - *Elettaria cardamomum*

43. Medicated ghee prepared with the following as *kalka* and *cangeree rasa* (juice of *Oxalis corniculata*), *apamargarasa* (juice of *Achyranthes aspera*) and *takra* (buttermilk) as *drava* relieves *arsa*.

Patha - *Cyclea peltata*

Dusparsa - *Tragia involucrata*

Deepyaka - *Trachyspermum*
roxburghianum

Krishnamoola *Piper longum* (wild var.)

Ardraka - *Zingiber officinale* (fresh)

44. A fine powder of the following drugs taken along with the first bolus of rice improves digestion and relieves

vata gulma (flatulence).

Cukku - *Zingiber officinale*

Kurumulaku - *Piper nigrum*

Tippali - *Piper longum*

Ajamojam - *Trachyspermum*
roxburghianum

Saindhavam - *Sodii chloridum*

Jeerakam - *Cuminum cyminum*

Karinjeerakam - *Nigella sativa*

Hingu - *Ferula asafoetida*

This recipe is the famous *Ashtacurna* or *Hinguashtakam* of *Ashtangahridayam*

45. The following drugs finely powdered shall be consumed with sour buttermilk.

Hutbhug - *Plumbago indica* 1 part

Ajamoja - *Trachyspermum roxburghianum*
1 part

Saindhava - *Sodii chloridum* 1 part

Magadha - *Piper longum* 1 part

Maricam - *Piper nigrum* 1 part

Pathya - *Terminalia chebula* 5 parts

This preparation is effective in *gulma* (flatulence), *arsa*, *agnimandya* (poor digestion) and *soola* (colic). This is also famous as '*Hutabhugadi curna*'.

CLINICAL OBSERVATION MANAGEMENT OF A VATARAKTA CASE

Murali, K*, Warriar, P.K**.

ABSTRACT

Modification of life style and diet, seeing the patient in totality and due consideration of the co-existing complaints has a significant role in striking the disease at its source. This article presents the management of a *Vatarakta* case in this perspective.

The efficacy of Ayurvedic treatment in dealing with arthritis cases has never been in doubt. In this article we are trying to convey across an observation that appears to be relevant and worth-considering in the treatment profile of arthritis. This observation underlines the need of seeing the patient in totality, in much the same way as the significance of duly considering the co-existent complaints that might be felt less important in the cause and cure of arthritis. The following case history categorically speaks of yet another fact that the modification of life-style and diet is a prerequisite for being able to strike the disease at its source.

A Keralite, 29 years old female, school teacher by profession, approached us at the out-patient department of our Nursing Home on 2-11-1996 mainly with the complaints of multiple joints pain, swelling, morning stiffness and malaise. Additionally she had whitish/yellowish vaginal discharge and recurrent bouts of sinusitis since last few years. Her menstruation was rather irregular, bleeding often scanty and with clots. She was anaemic. Hunger and appetite for food were rather poor. She had an emaciated appearance and she liked to confine herself to chair / bed most of the time though the nature of her job demanded to be on her feet for 4 to 5 hours a day.

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The systemic review of the case did not reveal any other findings of relevance. She was married, living with her husband and two children.

As regards her dietary habit she was vegetarian and she had special liking towards spicy / oily food. Her dietary schedule was:

- 6.00 a.m - one cup of tea
- 9.00 a.m - breakfast
- 11.00 a.m - tea
- 1.00 a.m - lunch
- 4.00 p.m - tea with snacks
- 8.00 p.m - dinner
- 9.00 p.m - milk

There was no room for diagnostic confusion as the clinical picture and the investigation reports were in favour of a confirmed diagnosis of rheumatoid arthritis.

In purely ayurvedic terms a case of *vatasonitam*. Since the very onset of the disease she was treated by the allopathic doctors, who were in fact family members closely related to her. As always in the case of arthritis, allopathic drugs provided her with short-term moderate symptomatic relief. Upon the advice of the doctors who attended her, she switched over to ayurvedic treatment in the hope of getting a permanent cure. Ayurvedic medicines that she tried included a variety of standard anti-arthritis preparations like:

Rasnairandadi kwatham
Balaguduchyadi kwatham
Gugguluthiktham kashayam

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Yogaraja churnam

Amritharishtam

Dasamulahareethaki leham

Pinda thailam

Kottamchukkadi thailam and

Sarshapadi churnam

According to her, none of these medicines helped her much.

On reviewing the situation we could understand that little is left to try on her case in the routinely adopted line of treatment of arthritis. To make a beginning, she was advised to try the following medicines at her residence reporting the progress every fortnight.

- 1) *Nimbamrithadipanchathiktham kashayam* - 10 ml., 6.00 a.m. - 6.00 p.m. diluted with 40 ml. of boiled-cooled water.
- 2) *Mandooravatakam* one each (powdered), twice daily after food, mixed with butter milk.
- 3) *Pushyanuga churnam* - 10 gm mixed with honey just before the morning dose of *Nimbamrithadipanchathiktham kashayam*.
- 4) *Dasamoolahareethaki leham* - 10 gm at bed time.
- 5) *Ardrakaksheeram* 100 ml. at bed time.
- 6) Vaginal varthi using *Sathadhouta ghritham*.
- 7) Gingelly oil medicated with pepper for external application before bath. No application of oil on the head.

ARYAVAIDYAN

Head bath to be restricted to once / twice in a week.

Diet: Non-spicy, non-oily, vegetarian diet

6.00 a.m. A cup of weak tea / diluted milk
9.30 a.m. Lunch
1.00 p.m. Fruits / Milk
4.00 p.m. Fruit juice
7.00 p.m. Dinner

Avoid exposure to dust, mist and cold atmosphere. Physical exertion to be restricted, especially standing for hours together.

The changes reported / observed during the subsequent visits are as follows:

20.11.96: Considerable relief for all the complaints including vaginal discharge. But of late, there is tendency to develop cold and throat irritation.

Advice given: Continue the treatment with restrictions in diet and activities as suggested before. Additionally, use *Marichadi tailam* on the head before bath.

Prescribed *Hingula Bhasmam* 400 mg. to be taken daily along with *Dasamoolahareethaki leham*. Boiled-cooled water to be used for head-bath.

5.12.96: Good improvement in every aspect. Patient very prone to upper respiratory infection.

Advice given: Replace *Dasamoolahareethaki leham* with *Chyavanaprasam* (Dosage 10-15 gm)

30.12.96: Absolutely no complaints. Patient is able to attend to her normal routine without any difficulty.

Advice given: Continue the medication for a period of one more month.

18.01.97: Patient was apparently well until one week ago. But following some physical exertion, she developed pain and swelling in knee and ankle joints, which subsided on taking rest, without warranting any other medication.

Advice given: Continue *Chyavanaprasam* and *Hingula bhasmam*. Come for review after three months (if needed earlier).

13.05.97 Patient keeping fairly good health. No complaints related to arthritis. Periods – normal. No white discharge. She liked to have some medication as a preventive measure, lest the complaints aggravate during the rainy season.

Advice given: Continue *Chyavanaprasam* alone on a regular basis. Restrict the diet as per the directions given earlier.

Discussion

Since the routinely followed anti-arthritis treatment was found rather ineffective we had to shift the attention to other unattended, nay not duly

considered concomitant ailments. It is to be remembered that according to ayurveda, the *vata* vitiation is an important basic cause of all uterine/ vaginal disease.

न हि वातादृते योनिः वनितानां
प्रदुष्यति ।
अतो जित्वा तमन्यस्य कुर्याद्दोषस्य
भेषजम् ॥

(A.H. Uttarastanam; Guhyaogarpratishe-
dham)

It seems that this radical shift in approach influenced the out come of the treatment remarkably. Equally important was the modification made in the diet and life style.

Notes:

Vaginal vartti: A piece of cloth rolled to the size of thumb and soaked well with *Sathadhoutha ghritham* is inserted into vagina before going to bed and kept overnight. This is removed next day morning.

Ardrakasheeram: Milk medicated with 'Ardrakam' (*Zingiber officinale*)

Process: *Ksheerapaka vidhi*

द्रव्यादष्टगुणं क्षीरं क्षीरात्रीरं
चतुर्गुणं ।

क्षीरावशेषः कर्त्तव्यः क्षीरपाके
त्वयं विधिः॥

The wise one is not born, nor dies,

This one has not come from any where, has
not become anyone,

Unborn, constant, eternal, primeval, this one,

Is not slain when the body is slain

Kathopanisat.

स्वास्थ्य - परिवार और समाज के संदर्भ में

वि। ज। ठाकर*

Abstract

Man has always been on the look out for better health-physical as well as mental. The role of the individual, family and the society in achieving this goal is very important. Here the author is throwing light on the dos and do nots for a better and longer life as described in ayurvedic texts taking into account the realities and compulsions of modern life.

प्राणैषणा अर्थात् जीवन की अधिककाल तक सुरक्षा, रोग और मृत्यु से बचना (Self preservation instinct) यह कामना प्राणीमात्र में नैसर्गिक ही होती है। प्राणी केवल जीवित रहना ही नहीं चाहता किन्तु वह सुखपूर्ण जीवन भी चाहता है। रोग, श्रम, कष्ट, पीडा, चिन्ता, भय, शोक आदी से मुक्त प्रसन्न जीवन हो यह उसकी अभिलाषा रहती है। इस लक्ष्यकी पूर्ति के लिए हि अन्यप्राणियों से अधिक बुद्धिसम्पन्न मानव प्राणी की प्रवृत्तियां विविध प्रकार की होती रहती हैं। आहार, विहार, निद्रा, व्यायाम, वस्त्र, परिधान, घर-गृहस्थी, सन्तान प्राप्ति, विद्योपार्जन आदि को उपदेश, दिनचर्या ऋतुचर्या सद्वृत्त का उपदेश, अयोग-अतियोग-मिथ्यायोग से वाक-मन और कार्य प्रवृत्ति को परिहार करना इत्यादि का उपदेश सुखार्जन तथा प्रसन्नात्म व्यक्ति बने इसी लक्ष्य से दिया

गया है।

इस प्रकार के जीवन निर्माण का प्रधानसाधन धन होने से अर्थाजन के लिये धनैषणा का समावेश भी किया है। किन्तु, धनार्जन के मार्ग गर्हित भी हो (सकते हैं और) अगर्हित भी हो ते। इस लिये सद्वृत्त में स्तेय, परपीडा आदि गर्हित मार्ग जो समाज स्वास्थ्य को कलुषित करते हैं, उनका त्याग भी बताया है तथा धनेषणा को वृत्युपाय कह कर जीवन निर्वाह के लिये आवश्यक मानकर विविध प्रकार से अर्थोपार्जन के मार्ग-व्यवसाय के लिये उद्यम करना भी सामाजिक स्वास्थ्य का अंग माना गया है। अर्थ के लिये भले बुरे तरीकों का विवेक कर के असतमार्ग को दूर से ही छोड़ना चाहिये। धनहीनता ही सभी सामाजिक दूषणों की जड़ हैं।

* निवृत्त प्रोफसर, गुजरात आयुर्वेद यूनिवर्सिटी, जामनगर।

मानव को केवल इस जन्म के सुख की प्राप्ति तो अर्थ-काम के साधनों द्वारा हो जाती है किन्तु, मानव मन को इससे ही सन्तोष नहीं है। वह मरणोत्तर भी पुनर्जन्म होने पर परलोक के सुख को भी चिन्ता करता है। पर लोक में भी सुख ही प्राप्त हो, दुख न मिले इसलिये भी विचार करता है। अतः धर्म, कर्म फल, पुनः पुनः मरण तथा अपुनर्भव मोक्ष के उपाय आदि के सिद्धान्त का स्वीकार करके सद्वृत्त धर्म अधर्म, परलोक तथा मोक्षनिर्वाण का क्या मार्ग है इस लिये "परलोकैषेणा" का भी स्थान आयुर्वेद में व्यक्ति और समाज को संयमपूर्ण, धर्मपारायण जीवन आचार रसायन द्वारा पतन करने वाले दूषणों से बचकर व्यक्ति और समाज को अधिक स्वस्थ रखने के लिये अवश्यक बताया है।

आयुर्वेद में मानव प्राणी को सम्पूर्णमानव बनाने का उपाय दर्शाया है। अर्थात् देह-इन्द्रिय-मन और आत्मा सभी के विकास का उपदेश है (Totalistic holistic view)। उभय लोक के लिये हितकर धर्म अर्थ काम और मोक्ष के साधनभूत जीवित देहधारी (Integrated personality) मानव के सम्पूर्ण स्वास्थ्य के प्रसन्नात्मेन्द्रियमना बनने के उपाय दर्शाये हैं। व्यक्ति और समाज में राग, द्वेष, लोभ, ईर्ष्या, असूया, परिग्रह, वंचना और दासत्व तथा प्रभुत्व की भावनायें सहज हैं। अतः प्रजापराधमूलक अहंता, स्व-परभावजन्य दुर्व्यवहार ही सभी रोगों का मूल है यद्वा आयुर्वेद का निष्कर्ष है। अतः इनसे बचने के लिये सत्व की उदारता और प्रजा का विशो धन ही सर्वरोग का प्रतिबन्धक उपाय है। WHO भी इसी निष्कर्ष पर पहुँचा है कि मानव सृष्टि में परस्पर संघर्ष और भीषणतम युद्ध का उद्गमस्थान

मानव मन ही है, वहाँ से ही उनका उन्मूलन होना चाहिए। प्रश्न और ज्ञान से ही यह संभव है।

स्वास्थ्य रक्षा का अल्प तम बिन्दु (छोटासा केन्द्र) परिवार है और विशालतम अथवा बृहत्तम विस्तार समग्रलोक-जड चेतन, स्थावर जंगम जगत् या समाज है। दोनों में कहीं भी विकृति प्रारंभ होने पर परस्पर प्रभाव पड़ता ही है, स्वास्थ्य बिगड़ता है। अतः दोनों के विकृत होने के पहले ही प्रतिबन्धक उपाय-अनागत बाधाप्रतिषेध (Preventive steps) कर लेने से ही स्वास्थ्य की रक्षा संभव है। विकार हो जाने पर उससे मुक्ति के प्रयत्न घर जलने पर आग बुझाने के प्रयत्न जैसे होते हैं।

परिवार स्वास्थ्य रक्षा

इस में परिवार के सभी सदस्यों के व्यक्तिगत स्वास्थ्य की रक्षा का लक्ष्य है। इसका आधार प्रत्येक व्यक्ति की प्रकृति के अनुसूप दिनचर्या, ऋतुचर्या, आहार, निद्रा, ब्रह्मचर्या, व्यायाम, अग्निबल, देहबल के अनुसार आहार और श्रम की मात्रा, कामसेवन, मद्यसेवन, धार्य-अधार्यवेग, वाक-मन और शरीर की हिताहित प्रवृत्ति, सामाजिक तथा शासनिक नीति नियमों का यथावत् पालन और अयोग - अतियोग- मिथ्यायोग से बचना इनका समावेश होता है।

सामाजिक स्वास्थ्य रक्षा

इसका आधार सामूहिक जीवन के नीति-नियम पर है।

वायु की दुष्टिः- धूलि, धूम, रज, गन्ध,

शीतोष्ण, रूक्ष से होती है।

जल की दृष्टि:- वर्षाजन्य कर्दम-शैवाल, अन्य मलोत्सर्ग, पशुपक्षियों के द्वारा कलुषित जल, शीतोष्ण प्रभाव से दूषण, पूरोत्पीड, वृष्टि भूमिगत जलका अभाव-अतिवृष्टि आना।

देश की दृष्टि:- कीटकों का उपद्रव-मच्छर, मक्कुण, मक्षिका, मूषक, सर्प, वृश्चिक, पिपीलिक आदि से-ऊषर भूमि, भूमिगत क्षार, भूस्खलन, भूकम्प, श्मशान भूमि, आनूप, मरुदेश, निवासभूमि में-रथ्या, पंथा, चत्वर, चतुष्पद, ग्राम, नगर, निगम, जनपदमण्डल आदि स्थानों में-जन समाज में वर्ग-विग्रह, विभिन्न संमुदायों में भड़काये गये परस्पर अविश्वास, शंकाशीलता, असहिष्णुता, असन्तोष और परस्पर विद्वेष। विभिन्न जातियों में वैचारिक तथा आचारगत विरोधाभास, हीन-श्रेष्ठ का मिथ्याभिमान आदि प्रेरक बल होते हैं।

अग्नि की दृष्टि:- दवाग्नि, अतिभास्वर, अत्युच्च, अत्युग्रध्वनि, विद्युत्-अशनि-निपात।

आकाश की दृष्टि:- अति उच्च, अति उग्रध्वनि, निधात-निरहृद के शब्द घन घोर तिमिर, सूर्य, चन्द्र, ग्रह, नक्षत्र, तारा की विषम गति। भूताभिर्षंग, रक्षोगण आदि सूक्ष्म अमानुषोपसर्ग इत्यादि अनपेक्षित आपदायें जो आधिभौतिक तथा आधिदैविक भावों में अकस्मात् उत्पन्न होती हैं, अथवा मानव कृत होती हैं। इनसे एक व्यक्ति के लिये ही नहीं, समग्र क्षेत्र के विभिन्न आहार-आचार तथा आयु के व्यक्तियों में एक समय में एक साथ हो जाये उनकी सामाजिक अस्वास्थ्य के हेतु माना गया है।

ARYAVAIIDYAN

उनका प्रतिबन्धन वायु, जल, भूमि आदि की शुद्धि की सावधानी, इनके प्रदूषण की रोकथाम, शासन तथा सामुदायिक सहयोग से, सामूहिक प्रयत्न से ही सध्य होता है। इस के लिये शिक्षा, प्रसार, उदार विचार से जडता का निरास करने से, स्थिर और सबल शासन द्वारा नियम पालन का आग्रह रखने से और समाज की सम्पन्नता होने पर दरिद्रता हटने से ही हो सकता है। शासन द्वारा समय समय पर रोग प्रतीकारक सूचीवेध (टीका) लगाने से, कीटकों के उन्मूलन केलिये जन्तुनाशक धूपन छिडकने से, खाद्यपदार्थों की सुरक्षा तथा निवास स्थानों तथा पूरी बस्ति में स्वच्छता के प्रति जागरूकता लाने पर हो सकता है।

समाज, परिवारों के समुदाय से बनता है, और परिवार, व्यक्तियों के सह अस्तित्व पर निर्भर है। अतः समाज और परिवार के स्वास्थ्य का मूलाधार व्यक्ति का स्वास्थ्य ही है। शारीरिक तथा मानसिक दृष्टि से स्वस्थ व्यक्तियों से बना समाज और परिवार स्वस्थ होता ही है। और देह तथा मन की विकृतिवाले व्यक्ति अधिक होने पर परिवार तथा समाज का स्वास्थ्य विषम हो जाना स्वाभाविक है। अतः व्यक्तिगत स्वास्थ्य का अतिमहत्व है, जो व्यक्ति के देह की वाणी की तथा विचारों की प्रवृत्ति द्वारा अभिव्यक्त होता है।

व्यक्तिगत स्वास्थ्य का विचार वय की दृष्टि से- बाल, युवा और वृद्ध अवस्थाओं के अनुसार भिन्न होता है। और लिङ्ग के अनुसार- स्त्री और पुरुष की देह रचना और क्रिया भेद के अनुसार कुछ बातों में विशेषता रखता है।

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बालक की स्वास्थ्य रक्षा

बाल्यावस्था की मर्यादा जन्म से 16 वर्ष तक की मानी गई है। देह बल के विकास की दृष्टि से इसके भी दो भेद है परतन्त्रवृत्ति तथा स्वतन्त्रवृत्ति। पोषण की दृष्टि से तीन भेद-क्षीराद- 1 वर्ष, क्षीरान्नाद 2 वर्ष और अन्नाद 3 वर्ष ऊपर- किये गये हैं। बाल्यावस्था का सम्पूर्ण समय-देह वृद्धि के साथ ही बौद्धिक विकास का भी समय है। किन्तु यह विकास समयबद्ध क्रम से शनैः शनैः होता है। निश्चित समय पर जो विकास चिह्न होने चाहिए वह न हो तो विकार की आशंका अवश्य होती है। अतः शिशु की स्वास्थ्य रक्षा किन बातों पर निर्भर है यह जान लेना चाहिए।

नवजात शिशु जन्म से ही रोना चाहिए। यह उसके श्वासमार्ग खुलने पर और हृदय से रक्त प्रवाह फुफ्फुस के द्वारा प्रवाहित होने का सूचक है। अतः जातकर्म-प्रथम कर्तव्य संस्कार है। नासा, मुख, तालु, कंठ से कफ पोछ लेना, उल्ब का अपनयन, गर्भादक का वमन, मलद्वार का परीक्षण, देह के स्नेह को हटाकर स्नान, नालछेदन आदि क्रियायें तत्काल करनी चाहिए। इससे नवजात के खण्डोष्ठ, तालुभेद, सदन्तजन्म, सन्निरुद्धगुद, निरुद्धप्रकश, उपशीर्षक आदि रोग का पता लग जाता है। मलप्रवृत्ति के लिए-मधुसर्पिः चटाया या गुडोदक पिलाया जाता है।

नालकर्तन तथा बन्धन में सावधानी रखने से नाभिपाक, उत्तुण्डितानाभि जैसे उपद्रव से बचा जाता है।

माता का दक्षिण स्तनपान प्रथम क्षीर को पीयूष कहा जाता है। उसको थोड़ा बहाकर बाद

में पिलाना चाहिये। इससे मल प्रवृत्ति को उत्तेजन मिलता है। स्तनपान प्रथम दिन अथवा तीसरा दिन कराया जाता है।

बालक का रक्षाविधान में विशेष सावधानी रखनी चाहिए। परिवार जन षष्टि निशा में जागरण करते हो धूप-दीप का क्रम रात भर चलाने चाहिये ताकि उससे रक्षोभय निवारण होता है।

नामकरण 10 दिन के बाद, माता के स्नान के बाद पिता करता है।

पाँचवी, षष्ठी और साथवी मासों में यथाक्रम धरण्यामुपवेशनम् (धरणी पर बैठाना), अन्नप्राशन (अन्न खिलाना), बहिर्निष्क्रामणम् (घर के बाहर लगा) आदि कराना चाहिए।

दन्त जन्म:- दन्तों का उद्भव 6 से 8 वी मासों में होना प्राकृत माना जाता है। सदन्तजन्म प्राग् ऊर्ध्व दन्त जन्म औत्पातिक माना गया है। अधोभाग में ही प्रथम राजदन्त और बाद में बस्त इत्यादि दन्त निकलते हैं। उसी प्रकार ऊर्ध्वदन्तजन्म भी होते हैं।

पाणिजानुगमन उत्थान, पादाभ्यां गमन और वाक् उच्चारण क्रमशः 8-12 मास में होना प्राकृत है। (पादाभ्यां यो न गच्छति स फक्कः।)

श्रवणेन्द्रिय वागिन्द्रिय का प्रेरक सम्बन्ध:- अतः बालक मूक-यदि बोलना प्रारंभ न करे तो उसके कान में बधिरता का दोष नहीं है यह परीक्षा करनी चाहिए।

प्रथम वर्ष में सिद्धसर्पि (सुवर्णप्राशमधुक, वचा, पिप्पलि, कुष्ठ, चित्रक, त्रिफला) का पान करने से आरोग्य बल, मेध और आयु की वृद्धि होती है। स्मृति बढती है प्रसन्न रहता है।

कुमारागार को गौरसर्षप, निम्ब आदि रक्षोधन धूपनों से रक्षा करना चाहिये।

शय्या, आस्थरण और प्रावरण, सुखद, धूपित, शुद्ध और मृदु होनि चाहिए।

कुमारपरिचर्या:

रक्षाविधानम्, बालं गात्रसुखं गृहणीयात्, न च एनं तर्जयेत्, न च उत्क्षिपेत्, न च एनं वित्रासयेत्।

स्तन्यापनयनम्: स्तनपान सर्वथा बंद करना (अन्नाहार बहाना)। "अपस्तन्यस्य शिशोः प्रीणनो मोदकः कर्त्तव्यः" "घृतमुत्थापने हितं, वाङ्मेधा स्मृतिकृत् हविः"

व्याक्तिशः प्रतिबन्धक उपाय

शिशुबाल्यावस्था के रोगः (1) सहज- (बीजदोषज तथा माता के अपचारजन्य रोग) कर्णेन्द्रिय-जन्मबधिर, चक्षुगत-जन्मान्ध, पिङ्गाक्षः विकृताक्ष जिह्वा के मूक, मिन्मिन, गद्गद, देह विकास के कुब्ज, वामन, कुणि, पङ्गु, श्वित्री, नर-नारी षंड, द्विरेता, विकृताकृति, पाण्डु, खलति आदि, त्वचा तथा केश के वर्ण दोष आदि है। इनके प्रतिबन्धन के लिये गर्भाधान से पूर्व तथा प्रारंभ से ही मातापिता में शुक्ल शोणित शुद्धि के तथा आहार विहार के नियमों का पालन, दौहद की प्रति अपथ्यों का परिहार, संयम और सावधानी के साथ

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करना चाहिए।

(2) जन्मोत्तर होने वाले बालरोगः- प्रायः क्षीर दोष से, पोषण में हीनता से, तथा कफवृद्धि की अवस्था होने से और अग्नि की मन्दता से होते हैं। यथा क्षीरालसक, फक्क, अहिपूतना, कुकूणक, दन्तोद्भेद कालीन विविध रोग, अजगल्लिका, स्कन्दापस्मार (बालपक्षाघात) जैसे, बालग्रह-रोहिणी आदि हैं।

(3) उपसर्गजन्य बालरोगः- मसूरिका, रोमान्तिका, शीतला, घोरकास, बालशोष, रोहिणी आदि मुख्य है।

इन सब में भी यथा सम्भव अनागतबाधा प्रतिषेध के उपाय रोगारम्भ काल से पूर्व ही कर लेने से इनका प्रतिबन्ध शक्य है। क्षीराद अवस्था में- "मातृरेव पिबेत् स्तन्यं तत्परं देहवृद्धदे स्तन्याभावे पयच्छागं, गव्यं वा तत्गुणं पिबेत्" यहां मातृ दूध का, गाय के दूध का तथा बकरी के दूध का महत्व दर्शाया है। माता का दूध सर्वोत्तम है। शुद्ध ही होता है तथा सीधा बालक के शरीर में जाता है। गाय और बकरी के दूध भी तद्गुणीकरण संस्कार करके देने से माता के दूध की श्रेणि में ही आते है। क्षीराद अवस्था में फिर भी माता के दूध की क्षीरदोष के लिये परीक्षा कर के दुष्ट हो तो क्षीर शोधन औषध और अल्प हो तो स्तन्यजनन औषध को माता में प्रयोग करना चाहिए। संक्रामक तथा औपसर्गिक रोगों के प्रतिबन्ध के लिये संक्रमण के मार्ग-सहशय्या सहभोजन, गात्रसंस्पर्श, निःश्वास का आदान प्रदान, दूषित वस्त्र, पात्रादि साधनों का बालक के लिये उपयोग-इनका परित्याग ही आवश्यक है। पूर्वोक्त धूपन से-रक्षोघ्न, सर्षप, निम्ब गुग्गुलु आदि से-रक्षा विधान भी प्रतिबन्धक होता

है। तथा जन्म से ही सुवर्णयुक्तलेह तथा कफघ्न, अग्निदीपन औषध-गुडूची, शतपुष्पा, इन्द्रयव, बाल चातुर्भद्र, विडंग, हरिद्रा, पिप्पली, सौवर्चल आदि का-गुड-घृत-मधु से लेह रूप में प्रयोग करना चाहिए। तथा "पूर्वा वाऽहित सेवनम्" तथा "ओकसात्म्य" के सिद्धान्त पर आधारित आधुनिक सिद्ध प्रतिबन्धक उपाय Vaccination बी। सी। जी, ट्रिप्ल वेक्सीन, पोलियो का खुराक आदि टीके का उपयोग कर लेना आवश्यक ही है।

विद्यारम्भ:- 5 से 15 साल तक की अवस्था संस्कार काल है। इस कोमल शरीर, निर्मल मन और विकासोन्मुख कुतूहल पूर्ण बुद्धि की अवस्था में जो जो संस्कार पडते हैं वे स्थायी बनते हैं, भावि यौवनावस्था में भी लुप्त नहीं होते, जीवन भर काम देते हैं। अतः यह विद्या-कलार्जन का सुयोग्य समय है। अतः अपने जाति और कुल के अनुरूप जिस किसी विद्या की ओर बालकला झुकाव होता है उसे वह शीघ्र आत्मसात् कर लेता है, और शीघ्र आत्मनिर्भर बन जाता है। पारिवारिक विद्या के अतिरिक्त शिष्ट नागरिक और व्यवहार दक्ष बने उस प्रकार का विनय जीवनोपयोगी सामान्य ज्ञान भी इसी आयु में मिल जाना चाहिए। जिससे वह अपनी फूर्ज (धर्म-कर्तव्य -अकर्तव्य) का विवेक समझ सके और शिष्टाचार भी सीख ले, प्रलोभनों से स्वयं को बचा सके, अपने इष्ट मार्ग से विचलित न हो जाय। इस काल में विहित "उपनयन संस्कार" का इस उद्देश से अतिमहत्व है। विद्यार्जन के लिये गुरुकुलवास, शास्त्राध्ययन के साथ- सेवा सदगती तथा श्रम पूर्ण, स्वाश्रयी, अनुशासन पूर्ण, समूह जीवन से जो पक्की नींव बनती है उस पर 16 साल के बाद होने वाले उन्माद पूर्ण प्रलोभनों का दूष्प्रभाव कम

पडता है। बाल्यावस्था को (5 साल तक की) आकरजमणि (कच्चा मलयुक्त खनिज का टुकड़ा) कहा है। 5-16 तक के काल को शाणोल्लीडमणि (निकष पर घिस कर पहलदार बना हुआ) कहा जाता है। अतः इस काल में संस्कार द्वारा नवीनगुणों का संचरण शिष्य में किया जाता है।

कफप्रधान बाल्यावस्था सुकुमार अवस्था है। देह, बुद्धि, बल अल्प होते हैं। तथा मन चंचल होता है। किन्तु यह विवर्धमानावस्था भी है। इस में धातुओं में विकास की बल वृद्धि की, मन और बुद्धि के स्थिर और पक्व होने की संभावना भरी रहती है। गर्भधान और प्रसव से लेकर पूरी बाल्यावस्था में जो विकास प्रारंभ हुआ है वह शनैः शनैः अधिक विकसित होता रहता है। अतः पूर्व वर्णित बालचर्या का पालन यथासमय होता रहे तो वह निरोग, पुष्ट, दीर्घायु, सबल और शरीर तथा ज्ञान-विज्ञान में यथेच्छ विकास प्राप्त कर लेता है। रूप, बल, धैर्य, विनय से सम्पन्न होकर पिता को गौरव देने वाला सत्पुत्र बनता है; कुलांगार-दुरपत्य नहीं बनता। देह-बुद्धि का पूर्ण विकास के लिये अत एव पोषक आहार, व्यायाम और विश्राम, शौर्य और संयम की आवश्यकता है। पतन करने वाले प्रलोभनों तथा दुःसाहस से बचने की तथा विद्या तथा व्यावहारोपयोगी कला कौशल दक्षता प्राप्त करने के इस काल का अपव्यय नहीं होना चाहिए।

मध्यमावस्था:- चरक मत से 16 से 60 तक और सुश्रुत मत से 16 से 70 तक का यह काल है। पूर्ण विकास का यह काल है। वाग्भट ने 20 तक, सुश्रुत ने 25 तक और चरक ने 30 साल तक विकास की उच्च अवधि बताई

है। देह विकास, बुद्धि, बल, रूप, यौवन सभी का विकास पूर्ण होकर रुक जाता है। स्त्रियों में इसकी सीमा 16 वर्ष तक मानी गई है और उच्चतम 50 वर्ष तक स्थिर रहता है। इस अवस्था को वयःपरिणाम काल भी कहा जाता है। बाल्यावस्था में जिनका विकास सुप्त (अव्यक्त) रहा था वह यौवन प्राप्ति के साथ सहसा विकसित हो कर अपनी क्रिया प्रकट कर देते हैं। पुरुष में श्मश्रु प्रादुर्भाव, देह प्रमाण, संहनन, बल, वर्ण में वृद्धि, स्वर में परिवर्तन, शुक्र प्रादुर्भाव, अहंभाव तथा साहस-शक्ति प्रकटन की प्रवृत्ति प्रारंभ होती है। स्त्रियों में-स्तन, गर्भाशय-योनि की वृद्धि और देह विकास, रजोदर्शन तथा श्रृंगारप्रियता, लज्जाशीलता, गाम्भीर्य प्रकट होते हैं। इस काल में स्वास्थ्य रक्षा के सामान्य नियम दिनचर्या, ऋतुचर्या में कहे गये सामान्य नियमों का पालन उभय के लिये उपयोगी है। अतः संक्षेप में यहां पर स्त्रीपुरुष में स्वास्थ्य रक्षा के सामान्य नियम-आहार में हिताशी, मिताशी, कालभोजी बनना, विहार में-व्यायाम, निद्रा, स्नान, अभ्यंग आदि के नियम भी समान है। अतः जितेन्द्रिय, समीक्ष्यकारी, साहसवर्जी, प्राक् श्रमादव्यायामवर्जी, विषयेषु असक्त, तथा शरीरसंस्कार तत्पर बनना ये भी समान है। स्त्री तथा पुरुष के लिये जो विशेष है उनका पृथक् विवेचन नीचे दिया है।

पुरुष स्वास्थ्य:- इस अवस्था का प्रमुख संस्कार "विवाह संस्कार" है। उपनयन में लगाये गये दृढ अनुशासन से मुक्ति मिलती है तो साथ में ही गृहस्थ जीवन का प्रारंभ होता है। अतः अन्य नये बन्धनों से जकड़ा जाता है। सामाजिक संबंध बढते है, कुटुम्बपालन के लिये अर्थाज्जन एक कर्तव्य बन जाता है। अतः इस अवस्था में धर्म,

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अर्थ और काम तीनों का निर्वाह करने में बुद्धि की कसौटी तथा देह और मन की शक्ति का व्यय समझपूर्वक करना चाहिए।

विवाह के लिये पुरुष की वयमर्यादा 20 से 25 तक योग्य मानी जाती है क्योंकि इस काल में दैहिक-मानसिक विकास तथा बल बुद्धि पूर्ण हो चुके होते हैं। विवाह योग्य स्त्री-अतुल्यगोत्रा, यवीयसी (उम्र में छोटी), असंचारी, रोगकुलो त्पन्ना, सुक्षेत्रा और अनन्यकामा तथा गम्या हो यह जान लेना आवश्यक है। वह रजस्वला हो तथा वर्णवृद्धा, वयोवृद्धा, योनिरोगिणी, दीर्घरोगिणी, अन्य क्षेत्रा, अन्यकामा, लिङ्गिणी (भिक्षुणी) हो तो समागम के लिये वर्ज्य समझी गई है।

ऋतुचर्या में:- रात्रीचर्या प्रत्येक ऋतु के लिये भिन्न दर्शायी है। निद्रा और मैथुन के उन नियमों का पालन ही स्वास्थ्य रक्षा के हित में है। अन्यथा अतियोग मिथ्यायोग जन्य विकार की संभावना है।

कालकी दृष्टि से:- निशा काल-मध्यरात्री ही शास्त्र सम्मत है। दिवाकाल, सन्ध्या काल, पर्वकाल, एकादशी, अनुतुकाल, रजस्वलाकाल निषिद्ध है।

स्थान विचार:- "रहः, विजने गृहे" इस प्रकार बाह्यविक्षेप रहित स्थान ही अभीष्ट है। स्वगृह को छोडकर देवालय, चैत्य, चत्वर, श्मशान निषिद्ध है।

देह स्थिति:- शुक्र शुद्धि और आर्तवशुद्धि का अतिमहत्व है। रजोदर्शन के बाद- क्षेत्र शुद्धि

हो जाने पर शुद्ध स्नाता हो जाय यह आवश्यक है। इस से देह तथा योनि गर्भाशय शुद्ध हो जाने पर क्षेत्रशुद्धि होती है। सुक्षेत्र ही बीजरोपण योग्य (Fertile) होता है। अतः स्त्री सुक्षेत्र होनी चाहिए वन्ध्या नहीं होनी चाहिए। पुरुष में अष्टौ शुक्रदोष न होनी चाहिए, शुक्रशुद्ध तथा बीजयुक्त होना चाहिए। इन्द्रिय प्रहर्ष युक्त और देह वेग बल से अप्रतिहत होना चाहिए। क्लीबता तथा षण्डता का दोष नहीं होना चाहिए।

मनः स्थितिः- प्रहर्षयुक्त, अन्योन्याभिकाम तथा संकल्प प्रेरित होना चाहिए।

पुरुष में मध्य आयु में होने वाले विशिष्ट विकार-

अतिविषय सेवन से तथा संयम का त्याग करने से उत्पन्नरोग-धातुक्षयजन्य राजयक्ष्मा, व्ययाम शोष, जरासंभव, क्लैब्य, बीजोपघातज, क्लैब्य, ध्वजभंग, अप्रहर्ष और वन्ध्यत्व है। शुक्रदोष से उपदंश, फिरंग रोगी संपर्क से फिरंग का संक्रमण, पूयमेही के सम्पर्क से पूयमेह, उष्णवात, रजस्वला गमन से उत्पन्न ओजक्षय, दृष्टिहानि, आयुक्षय इसी प्रकार के अन्यहेतु-अचौक्ष्यसलिल धावन, मूर्धावरण उपस्थित, वै विधारण, अन्यथाकाम, अगम्यगमन, तिर्यग योनिगमन, अयोनिगमन आदि विकृत आचरण से भी शुक्रदोष, इन्द्रियघात, तथा पत्नी और सन्तति में भी विकार संचार का संभावना रहती है।

इनका प्रतिबन्ध-वृष्य-वाजीकारण का नित्य सेवन के साथ साथ भोग प्रसंग में संयम और स्वस्त्री का उपभोग भी ऋतुकाल में ही और सन्तानार्थ होकर करने का नियम पालन से ही

संभव है। वर्तमान काल में विश्वव्यापी AIDS का कारण यही घोषित हुआ है और इसके प्रसार को रोकने में असफलता का कारण भी अन्यथा काम में खुले आम प्रवृत्त होने की युवाओं की लोलुपता ही है। निरोध आदि साधन रक्षक होने के साथ लोलुपता भोग लालसी बढाने वाले है।

जरावस्था:- पुरुष में 60 से 70 तक वर्ष से ऊपर की आयु जरा या वार्धक्य है। इस अवस्था में शरीर में कालक्रम से जो परिवर्तन होते है इससे धातुओं की शुष्कता तथा परिपक्वता होती है (Maturity-senility)। जैसे वृक्ष के पत्तों में सूखने की प्रक्रिया होती है, पत्ते पीले पडकर निःसार शिथिल होकर गिर जाये यह स्वाभाविक क्रिया है वैसे ही, देह में जराजन्य पाक से अग्नि की उष्णता और दहन क्रिया से शरीर के धातुओं में खरता, शुष्कता, लघुता, स्नेहक्षय होकर धातुओं में शोष-कार्श्य-रौक्ष्य होने लगता है। तर्पण कम होता है। क्षपण अधिक होता है। अतः जराशोष, जराकास, वलीपलित, त्वचा में रूक्षता, बलहास आदि वातवृद्धि सूचक और कार्श्य, मांसक्षय, भारक्षय आहार से तर्पण बृंहण का अभाव आदि अग्नि मन्दता के लक्षण तथा जराजन्य बीजोपघात, ध्वजोपघात, क्लैब्य आदि-शुक्र एवं ओजक्षय के लक्षण क्रमशः उत्पन्न होते है। परिणामतः बलनाश तथा वातवृद्धि की प्रधानता होती है। इस स्थिति का संक्षेप में वर्णन शुष्क काष्ठ अथवा ग्रीष्म मे सूख रहे तालाब की उपमा द्वारा किया गया है।

सुश्रुत के मत से जराजन्य परिवर्तन 40 साल की आयु के बाद ही सूक्ष्म रूप में प्रारंभ हो जाते है। अतः 40 से-60 के मध्यवर्ती काल को "परिहाणि" कहा गया है। इस काल में 40 तक

हुए उपचय के स्थान में अपचय का प्रारंभ अतिसूक्ष्म रूप में शुरू हो जाता है। और 60 या 70 के बाद, जरा जन्म पक्वता के लक्षण प्रकट होते हैं जिस से धातुक्षय, स्नेहक्षय, बलक्षय, स्वयं व्यक्ति और अन्य लोग भी अनुभव करते हैं। जराशोष के ये लक्षण-देह-इन्द्रिय-मन-बुद्धि-बल सभी में प्रकट हो जाते हैं। 80 के बाद तो यह हास अधिक तीव्र और अधिक शीघ्र होने लगता है।

इस प्राकृतिक प्रक्रिया - जरा पक्वता का प्रतिबन्ध रसायन औषध से तथा आचार रसायन से किया जाये तो शक्य है क्योंकि रसायन, वाजीकरण ऊर्जस्कर चिकित्सा है। नये प्रशस्त रसरक्तादि का निर्माण हो यह इसका लक्ष्य है। किन्तु उसका उपयोग, युवावास्था के प्रारम्भ से ही अथवा मध्यावस्था में ही प्रारंभ कर देना चाहिए, तो वह जरानाशन, वयःस्थापन तथा ऊर्जस्कर प्रभाव उत्पन्न कर सकता है। देह और मन दोनों की शुद्धि के बाद ही इसका नियत पथ के साथ-कुटी प्रावेशिक, वातातपिक, द्रोणीप्रावेशिक आदि विशेष प्रयोग विधि से ही करने पर लाभ की आशा रखी जाती है। यह जराप्रतिबन्धन, ऊर्जस्कर- रसायन आयुर्वेद का विशिष्ट प्रदान है।

नारीस्वास्थ्य-मध्य आयु में:-

नारी में यौवन का आरंभ और पूर्णविकास पुरुष की अपेक्षा शीघ्र होता है। 12 से 16 साल तक यौवन का पूर्ण विकास और 50 तक इसकी स्थिरता की ऊर्ध्व अवधि है।

वयः परिणाम से नारी देह में बाल्यावस्था में जो अंग और कर्म अविकसित, अव्यक्त और निष्क्रिय, सुप्त से रहते थे, स्तन, योनि, गर्भाशय,

लोम आदि, वे यौवनारंभ होते ही वृद्धि को प्राप्त करके कार्यारंभ कर देते हैं। जो उसके स्त्रीभाव, पत्नी और माता बनने योग्य, विकास के सूचक है क्योंकि नारी देह की रचना क्षेत्र के धर्म को निभाने के उद्देश से ही बनी है। बीज को धारण करना, उसकी पूर्ण वृद्धि कर के सन्तान रूप में जन्म देना उसका विशिष्ट कर्म है। रजस्वला बनने से यह प्रारंभ होता है और 50 वर्ष की आयु में रजो निवृत्ति होने पर यह कर्म समाप्त हो जाता है। जन्म के बाद भी सन्तान जब तक स्वतन्त्र वृत्ति न बने तब तक 1 से 2 साल तक क्षीराद, क्षीरान्नाद अवस्था तक स्तनपान कराके बालक की देह वृद्धि का भार भी माता को ही निभाना है। इस प्रकार मातृत्व का विकट कर्म 12 से 50 साल के मध्य में केवल माता ही निभाती है।

12 से 16 साल तक वह बाला कही जाती है। 16 से 32 तक वह तरुणी अवस्था में है। 32 से 40 तक वह प्रौढा अथवा अतिरूढा है और 40 से 50 होते वह वृद्धा कही जाती है। यह सब विभाग और नाम उसके देह और मन के विकास तथा परिपक्वता के सूचक है क्योंकि विवाह संस्कार के बाद वह गृहिणी बनती है माता बनती है कुटुम्बिनी बनती है। सभी अवस्था में उसके भिन्न भिन्न रूप और कर्म प्रकट होते हैं।

प्रतिमास रजोदर्शन होने से उस के देह की और क्षेत्र की शुद्धि होती है। रजःस्त्राव से 16 दिन तक का समय ऋतुकाल होता है जिसमें कमल मुख का विकास और बाद में संकोच होता है। पुष्प का विकास होने पर जैसे उस में बाहर से परागकण का निक्षेप होने से फल का विकास शक्य बनता है उसी प्रकार गर्भाशय मुख का

विकास ऋतुकाल में होने से पुरुष बीज का निषेक क्षेत्र में होने पर गर्भाधान रूप फलप्राप्ति होती है। सामान्यतया पुष्य दर्शन से 16 दिन तक का काल गर्भाधान योग्य होने से "ऋतुकाल" कहा जाता है। तथापि अपवाद रूप में 30 दिन तक भी ऋतुकाल किसी में और बिना रजोदर्शन हुए भी किसी किसी में ऋतुकाल अवश्य होता है यह मत भी मान्य रखा गया है।

स्त्रीयों के विकार:- ज्वरादि रोग स्त्री पुरुष उभय में सामान्य हैं। स्त्रीयों में विशिष्ट रोग- योनिव्यापत्, स्तनरोग, स्तन्यरोग, गर्भिणीरोग, गर्भरोग, मूढगर्भ, गर्भस्त्राव, गर्भपात, मृतगर्भ, लीनगर्भ, अकाल प्रसव, सूतिका रोग, असृग्दर, रक्तगुल्म आदि हैं जो इस के प्रजनन अवयव से विशिष्ट संबंध रखते हैं।

आर्तवसंबन्धि विकार:- अनार्तव, अल्पार्तव, अत्यार्तव, कृच्छ्रार्तव, रक्तप्रदर, रक्तयोनि, रक्तगुल्म, ग्रन्थीभूत आर्तव, दुर्गन्धी- पूययुक्त आर्तव।

अवयवसंबन्धि विकार:- सूचीमुखी, अन्तर्मुखी, कर्णिनी, महायोनि, स्थान भ्रष्टा (योनिभ्रंश), षंठीयोनि

सावसंबन्धि विकार:- पिच्छला, शुष्का, श्लेष्मला, श्वेतप्रदर, वामिनी

मैथुनसंबन्धि विकार:- अचरणा, अत्यानन्दा, अतिचरणा, विप्लुता, वन्ध्या

गर्भावस्था के विकार:- अरुचि, छर्दि, गन्धोद्रेग, विबंध, किक्किस्, शूल, गर्भस्त्राव, गर्भपात, अकाल प्रसव, मृतगर्भ, मूढगर्भ, मक्कल।

सूतिकावस्था के विकार:- विलंबित प्रसव,

आवीक्लेश, योनिस्वरण, शूल, मक्कल, परिघ आदि मूढगर्भ, युग्मगर्भ, रक्तातिस्त्राव, अपरा अनागमन

प्रसवोत्तर विकार:- सूतिका मक्कल, मक्कल विद्रधि, गर्भाशयभ्रंश, ज्वर, पांडु, शोथ आदि। स्तनविद्रधि, स्तन्यनाश, दुष्टक्षीर, अष्टौ क्षीरदोष।

इनका प्रतिबन्धन:- गर्भिणि परिचर्या- मासानुमासिक का सेवन, गर्भोपघातकर भावों का परिहार, वातानुलोमन रुचिकर पथ्य, श्रम, व्यायाम, उष्णतीक्ष्ण का परित्याग, सूतिका की उचित परिचर्या, मूढगर्भ का यथा शक्य अंग परिवर्तन, प्रसव के बाद क्षीण बल सूतिका में वात का प्रकोपन हो इस दृष्टि से स्निग्ध, उष्ण, लघु, पंचकोलयुक्त यवागु पान, अभ्यंग, स्वेद, उष्णोदक तथा हरिद्रा, विडंग, शतपुष्पा युक्त लघु पथ्य भोजन- इनसे प्रतिबन्धक उपाय किये जाते हैं।

नारी में जरावस्था:- रजोनिवृत्ति के साथ जरावस्था का प्रारंभ माना गया है। यह युवावस्था के प्रारंभ होने पर प्रकट होने वाली क्रियाओं की समाप्ति के अतिरिक्त अन्य कायिक, मानसिक परिवर्तनों का भी प्रारंभ करता है। जिसमें किसी में मेदोवृद्धि, किसी में काश्य, श्रमज श्वास, हृदघट्टन, दाह, धूमायन, स्वेदाधिक्य, निद्राल्पता, स्वभाव परिवर्तन, ग्लानि, उद्रेग, अव्यक्त भय चिन्ता, उत्साहहानि, पाचनयन्त्र के विकार, नेत्रादि इन्द्रियों में कर्म हानि आदि है। जो प्रायः पुरुषों की अपेक्षा अधिक त्रास देते हैं। क्यों कि स्त्रियों का सत्व बल अल्प होता है। प्रजनन अंगों में अपचय के साथ ये अभिव्यक्त होने लगते हैं।

इनका प्रतिबन्धन:- मन की प्रफुल्लता बढाना और आहार आचार-चेष्टा के परिवर्तन

विशिष्ट अवस्था में विशिष्ट प्रकार से करने से होता है। यथा युवतियों में रजस्वलाव्रत तथा पञ्चकर्म से शोधन, तथा वातशमक स्नेहस्वेदचिकित्सा। गर्भिणी में-गर्भिणी परिवर्त्या तथा गर्भापघातकर तत्वों का परिहार। मासानुमासिक चिकित्सा-आहार-औषध, शोधन का सेवन। सूतिकावस्था में-अपतर्पण तथा अतितर्पण से बचना, मिथ्याचार का त्याग। स्वेदन तथा अभ्यंग का नित्य सेवन। अग्निदीपन, पाचन और वातशमन आहार औषध में उपयोग श्लिग्घ, पथ्य, अल्प, लघु, सुपाच्य बल्य भोजन। तथा विशुद्धि का सभी प्रकार से ख्याल आवश्यक है। स्तनपान के पूर्व तथा पश्चात् स्तनों का प्रक्षालन करके स्तनपान कराना, योनिधूपन तथा सूतिका काल समाप्ति पर्यन्त श्रम, व्यायाम, व्यवाय का वर्जन अथवा पुनरार्तव दर्शन

तक इन नियमों का पालन करना। इससे स्वास्थ्य की रक्षा तथा उपेक्षाजन्य रोगों का प्रतिबन्ध होता है। जरा का प्रतिबंध पुरुष के समान रसायन औषध तथा आचार रसायन से ही शक्य है।

इस प्रकार परिवार में युवा-पति पत्नी, बाल सन्तान और वृद्ध माता पिता सभी अवस्था के स्त्री पुरुषों के स्वास्थ्य की सुरक्षा और आगन्तु प्रज्यापराध जन्य व्याधियों का प्रतिबन्धन स्वास्थ्य के नियमों का यथा संभव परिपालन करने से साध्य होता है। प्रत्येक परिवार में इसका अनुष्ठान होता रहे तो व्यक्तिगत तथा सामुदायिक स्वास्थ्य बढाया जाये तथा आगन्तु व्याधियों का प्रतिबन्ध हो जाये यह शक्य है।

While people with an easy-going kind of logic, believe that fast transport and instantaneous communications open up a new dimension of freedom (which they do in some rather trivial respects), they overlook, the fact that these achievements also tend to destroy freedom, by making everything extremely vulnerable and extremely insecure

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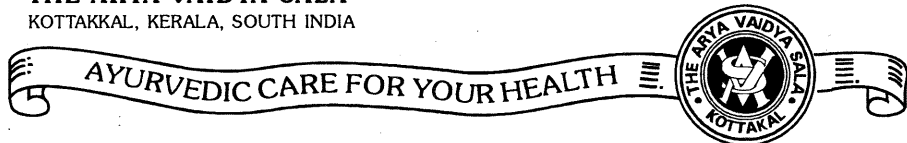
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*Printed at the Mathrubhumi M.M.Press and published by Aryavaidyan P.K.Warrier, Managing Trustee
Arya Vaidya Sala, Kottakkal for and on behalf of Arya Vaidya Sala, Kottakkal.*

Chief Editor: Aryavaidyan N.V.K. Varier, M.A.

Type Setters: a2z DTP Centre, Kottakkal

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