

# देश के विभिन्न प्रान्तों में विश्व आयुर्वेद परिषद् की गतिविधियाँ













# वाराणसी में विश्व आयुर्वेद परिषद् की गतिविधियाँ













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# तिरूपति, आन्ध्र प्रदेश में राष्ट्रीय संगोष्ठी एवं राष्ट्रीय कार्यकारिणी की बैठक













विश्व आयुर्वेद परिषद् के लिए प्रोफेसर सत्येन्द्र प्रसाद मिश्र, कार्यकारी अध्यक्ष द्वारा नूतन ऑफसेट मुद्रण केन्द्र, संस्कृति भवन, राजेन्द्र नगर, लखनऊ से मुद्रित कराकर, 1/231 विराम खण्ड, गोमती नगर, लखनऊ-226010 से प्रकाशित प्रधान सम्पादक - प्रोफेसर सत्येन्द्र प्रसाद मिश्र विश्व आयुर्वेद पशिषद पत्रिका Journal of Vishwa Ayurved Parishad

अप्रैल - 2017 वैशाख वर्ष - 14, अंक - 4 संरक्षक ः **Contents** डॉ० रमन सिंह **EDITORIAL** 2 1-(मुख्य मंत्री, छत्तीसगढ़) प्रो० योगेश चन्द्र मिश्र 2-'CONCEPT OF DRUG STANDARDIZATION IN AYURVEDA' (राष्ट्रीय संगठन सचिव) - Bhoopendra Mani Tripathi, D.C.Singh प्रधान सम्पादकः **Suresh Chaubey** 3 प्रो० सत्येन्द प्रसाद मिश्र 3-POSTMENOPAUSAL OSTEOPOROSIS: PREVENTION & सम्पादकः डॉ० कमलेश कुमार द्विवेदी MANAGEMENT - AN AYURVEDIC APPROACH सम्पादक मण्डल ः - Shipra 8 डॉ० पुनीत कुमार मिश्र 4-VIDANGADI YOGA CHURNA IN OBESITY MANAGEMENT डॉ० अंजय कुमार पाण्डेय - Praveen Kumar Mishra, डॉ० विजय कुमार राय Girish Lalwani\*\* Ratnesh Kr. Mishra 13 डॉ० मनीष मिश्र डॉ० आशुतोष कुमार पाठक 5-Pramehahara Potential of "Bhunimbadi Churna" - An अक्षर संयोजनः Evidence Based Litarary reviwe बुजेश पटेल - Konica Gera, Nellufar, Baldev Kumar 18 प्रबन्ध सम्पादक ः बालकों के सेरिब्रल पाल्सी रोग में आयूर्वेद एवं 6-जितेन्द्र अग्रवाल आयुर्वेदीय चिकित्सा पद्धतियों कि उपादेयता सम्पादकीय कार्यालय ः – विद्याभूषण पाण्डेय 26 विश्व आयुर्वेद परिषद पत्रिका 1/231, विरामखण्ड, गोमतीनगर 7-KASA IN CHILDREN – A LITERARARY REVIEW लखनऊ - 226010 (उत्तर प्रदेश) - Ingole Suraj Nivrattirao, Upadhyay P.S. 30 लेख सम्पर्क- 09415618097, 09336913142 8-HEALTH BENEFITS AND MEDICINAL USES OF MORINGA E-mail - vapjournal@rediffmail.com OLEIFERA LAM. dwivedikk@rediffmail.com - Poonam Sharma 37 drramteerthsharma@gmail.com Kakmachi 9-सम्पादक मण्डल के सभी सदस्य मानद एवं अवैतनिक है। पत्रिका के लेखों में व्यक्त विचार लेखकों के हैं। सम्पादक - Rajni Rathore, Ramanand 45 एवं प्रकाशक का उससे सहमत होना आवश्यक नहीं है। आपके सुझावों का सदैव स्वागत है। 10- समाचार 46

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अतिथि सम्पादकीय

#### Ayurveda at Cross Road

Govt.of India through Niti Ayog has taken initiatives to introduce The National Commission for Indian Systems of Medicine Bill 2017 for making reforms to promote Ancient Indian Wisdom. The Central Council of Indian Medicine (CCIM) came into existence few decades ago with lots of efforts of many scholarly personalities including the Mumbai based eminent physician Late Pandit Shiv Sharma. However this Body became a subject of routine gossips due to increasing role of money power which has severely polluted this Body at all level whether the issue of recognition of colleges after inspec-



tion visit, minimum academic standard required, routine CCIM election and many more such related issues. Frequent court cases and criminalization further eroded the very much objective for which the foundation of this democratically elected organization was laid down. Now enough is enough. Water is flowing above the necks. Govt has to take drastic action to preserve and promote these ancient systems of medicine in larger public interest. There may be lots of pressures from various lobbies who have their own commercial interests. Such players have no love for these Systems of medicine rather only for their vested business interests. Such pressures must be resisted at all cost. Many politicians are running academic institutions related to Ayurveda, Unani, Homoeopathy etc. Such politicians belong to every political party. So Govt will have to be very careful not to come under any political pressure. Such pressures need to be resisted in Parliament too, not to dilute the spirit of Bill in general and present draft of Bill 2017 in particular.

Many ISM practitioners have their own reservations about their right provided under IMCC Act to practice modern conventional medicine in the best clinical interest of the patients depending upon the need of ailing society in the larger public interest. Recent Delhi High Court verdict on this matter has made this issue further controversial. Since health is the State subject, many states have made provision by law to protect this right of ISM practitioners to cater the need of the suffering humanity. Madhya Pradesh Govt. has evolved a mechanism where Ayurvedic graduates have to go through examination and who so ever qualify it, he or she is entitled to prescribe allopathic medicines as per the need of patients. This has been recently given sufficient coverage in the printed media.

It is a fact that Ayurveda is not merely a traditional medicine rather it is a system of medicine based on strong scientific footings. It can't remain aloof from the recent advances in the field of science and technology. Hence it is the need of hour to have integration between tradition and technology. If a patient admitted in Ayurvedic ward for his routine clinical problem suddenly suffers with myocardial infarction, he immediately needs emergency treatment with life saving drugs to protect the precious life. In light of that, the provision is needed to be made under the proposed Bill 2017 to protect the genuine existing rights of ISM practitioners so that man, material and power of Ayurveda can be integrated with main stream of national health programme also.

Cont.....

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# **'CONCEPT OF DRUG STANDARDIZATION IN AYURVEDA'**

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# **ABSTRACT :**

The term Ayurvedic drugs, comprises of herbal, mineral and animal resource substances. When we say broadly the standardization of ayurvedic drugs- first of all, the category of drugs, their method of preparation (which invariably includes their end point determination or in other words, their quality control guidance) was defined. During ancient times, drugs were prepared by the physician himself to cater the need of his patients in small batches. Over the centuries, these practices were changed and resulted in large scale manufacturing and wide distribution of Ayurvedic drugs at national and international levels. This commercialization should always ensure quality of products using proper standardization parameters. Drug has specific role in the treatment of disease for achieving the objectives of healthy human system. Qualities of ideal drug and concepts of drug standardization are described in Avurveda classics, Acharya Charak has mentioned 'Bheshaj Pareeksha' in 'Viman Sthana' 8th chapter as tool for drug standardization and quality control in Ayurveda.

**Key words-** Dravya, Chikitsa Chatuspad, Bheshaj, Standardization, Quality control.

# **INTRODUCTION:**

According to Ayurveda the best Physician who knows the science of administration of drugs with due reference to climate and season and who applies it only after examining each and every patient individually<sup>1</sup>. The importance of drugs is known since ages. The world's oldest available written literature i.e. Vedas glorify the drugs by giving it the status of Brahma<sup>2</sup>. Drug is the second most important piller of Chikitsa Chatuspad (four pillers of the therapeutics) described in Ayurveda<sup>3</sup>.

# **QUALITIES OF IDEAL DRUG:**

Abundance, effectivity, various pharmaceutical forms and normal compositionthese are the four qualities of drugs<sup>4</sup>. Acharya Sushruta stated that the high quality drug will be that which is born in fertile land, collected properly, used in appropriate dose, pleasant to mind, possessing pleasant smell-colour-taste, able to destroy the diseases, devoid of side effects and administered as per time schedule, all these qualities will make a drug highly effective<sup>5</sup>.

In other context Acharya Charak quoted that the material which cures a disease or condition and provides health is called as oushadha (medicine)<sup>6</sup>. He is the real knower of them who, after knowing the name and form, has got knowledge of their administration, let alone the one who knows drugs in all aspects<sup>7</sup>. Though the use of many indigenous drugs has been described in classics but still there is a need to find out more effective and safe drug, which not only controls the disease but also tent to cure the complex conditions.



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# Methodology of Drug Standardization in Ancient Literature:

Acharya Charak stated that the drug is examined in respect of nature (natural composition), properties, action, habit, time and mode of collection, storage, processing, dosage, indication for use, the constitution of the patient, and the effects on the disorder, whether eliminates it or pacifies it, any other drug of this type should have the same characters<sup>8</sup>.

- Edam Evum Prakritih (Name and Natural order of the Drug)<sup>9</sup>- It includes nomenclature of a plant and its positioning in Ayurvedic classification of the drug. This explains either nature of the plant, morphology, internal structure, habitat, properties or therapeutic actions.
- Evum Gunam (Physical and chemical properties of the drug)<sup>10</sup>- It can be visualized by Panchendriya Pariksha (Organoleptic examination) -

Roopa - visual property

Rasa – taste of the useful part of the drug (Shad rasas)

Gandha - smell of the drug

Sparsha - touch perception

Shabda – property related to any type of sound

3. Evum Prabhavam (Therapeutic actions of the drug)<sup>11</sup>-

Pharmacodynamic action – Action of drug according to Rasa, Guna, Veerya, Vipaka etc.

Chemotherapeutic action – Action of drug on bacteria, viruses or parasites e.g., Haridra, Guduchi, Pippali, Marich, Vidanga etc.

Pharmacotherapeutic action – Action of drug on a particular disease e.g. Arshoghna, Pleehari, Unmatta, Chakramarda etc.

4. Asmin Dese Jatam (Habitat of the drug)<sup>12</sup>-

Plants grown in a particular type of land like Jangal, Anoopa and Sadharana where Jangal denotes to dry, Anoopa denotes to marshy and Sadharana means temperate land<sup>13</sup>.

S.No.	Habitat	Potent part of the Plant
1.	Jangal (dry)	Roots and bark
2.	Anoopa (marshy)	Fruits, flowers, leaves etc
3.	Sadharana (temperate)	Different useful parts of trees and shrubs

#### Potency of plant part according to habitat<sup>14</sup>:

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S.No.	Season	Potent part of the plant
1.	Varsha and Vasant (rainy & Spring)	Tender leaves and Branches
2.	Grishma (summer) and Shishir (late winters).	Root
3.	Sharad (autumn)	Bark, bulb and latex
4.	Hemant (early winters).	Pith (heart wood)
5.	According to season	Flowers and fruits

5. Asmin Ritau Jatam (Season in which drug grows)<sup>15,16</sup>-

6. Evum Griheetam (Method of collection of the drug)<sup>17</sup>- In Ayurveda texts, specific method of collection of medicinal plants has been prescribed. The ritual of praying to plants before collection of them was useful to create awareness and responsibilities towards plant kingdom. Mode of collection is also important in view of quality of drug. Properly collected drugs give more therapeutic effects rather than improper collected one.

**7. Evum Nihitam** (Method of preservation of the drug)<sup>18</sup>- Collected plant products should be kept in appropriate containers well covered with lids devoid of direct wind but well ventilated and holding them up in a swing of rope, well covered and making them unapproachable for fire, water, humidity, smoke, dust, rats and quadrupeds.

**8. Evum Upaskritam:** (Pharmaceutical processing of drugs)<sup>19</sup>- Preparation of drug formulations depend on disease and strength of the patients20. Drug's morphology play an important role in formulations of the drugs. The potency and morphology of the drug is also determine the formulation of drug. So before going to prepare any such formulations one should also kept in mind that in which form the potency or active principle of drug remains maximum.

**9.** Anaya Cha Maatra Yuktam (Dosage)<sup>21</sup>-Dose of drug is the most important factor for desired result of treatment.

**10. Asmin Vyadhau** (Clinical trials and results)<sup>22</sup>- That very medicine may be taken as properly administered which is capable to bring about disease free condition and that very physician as the best one who could relieve (the patient) of the disorders<sup>23</sup>.

**11.Evum Vidhasya Purushasya-** (Trials on healthy volunteers and patients)<sup>24</sup>- Trials on healthy volunteers and patients with due regards to their temperament and constitution is necessary<sup>25</sup>.

**12. Etavantam Dosham Apkarshayati Upasamayati Va:** (Action of drug on a particular Dosha and disease)<sup>26</sup>- Some drugs are pacifier of dosas, some vitiates dhatus and some are responsible for maintainance of normal health<sup>27</sup>.

Concepts and guidelines regarding the preservation and storage of raw drug materials and prepared formulations-

There are no guidelines for proper storage of raw materials till date, traditional text is very clear about shelf life of Ayurvedic medicines. In Sharangdhar Samhita it is clearly mentioned about shelf life of the different ayurvedic preperations like- collected herbs, Churnas, Vati, Avleha,

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Ghrita, Taila, Asava- Arishta (fermented preperations) and Rasaushadhis (minerals and metallic) preperations.

According to Acharya Sharangdhar raw herbs losses the potency after one year of collection, after two months powder losses the potency, after one year vati (tablet) and avleha losses their potency, ghrita and tail (oil) losses their properties after 16 months, immature drugs deteriorate after one year, old asava and ras aushadhi are the best<sup>28</sup>.

### **DISCUSSION:**

Ayurvedic drugs are used throughout the developed and developing world as home remedies, in over-the-counter (OTC) products, as raw material for the pharmaceutical industry and they represent a substantial proportion of the global drug market. Therefore it is essential to establish internationally recognised guidelines for assessing their quality. Certain herbs have become popular over the years, but the general public, medical practioners and media still have a poor understanding of safe and effective use of some of these herbs. In most of the situations the truth lies hidden under the media hype, poorly understood science, an exaggerated claim. The concepts of drug standardization and quality control have been already described in Ayurvedic classics with scientific significance.

# **CONCLUSION:**

We are facing many challenges in scientific and technological development for herbal drugs, particularly in the establishment of standards for herbal raw material. Scientific verification of efficacy, discovery and development of new drug and compliance with international practice guidelines for R&D of new drugs as well as production of pharmaceuticals. We have been hearing invariably, that there are no standards of Ayurvedic drugs. I do not think that this general statement is true. Because, when everything is written in the textbook and if it is not followed by some unauthorized and unqualified manufacturers, how can we blame the Ayurvedic drugs and its science along with its philosophy.

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# POSTMENOPAUSAL OSTEOPOROSIS: PREVENTION & MANAGEMENT - AN AYURVEDIC APPROACH

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# **ABSTRACT** :

During the past decade, osteoporosis perceived as serious disabling disease needs a substantial involvement of all medical sciences to develop and assess potential treatment. In osteoporosis, symptoms are normally seen at their later stage. Due to continuous loss of bone tissues and bone mass, bone become fragile and there is chance of fracture. According to WHO, every third women has risk of osteoporosis after menopause. Majority of women do not know the risk of osteoporosis, so BMD and other related diagnostic test should be done after menopause. Calcium rich diet, medicated hot fomentation, calcium supplementation, phytoestrogens may be helpful for this.

Key words: Menopause, Osteoporosis.

# **INTRODUCTION**

World Health Organisation defines osteoporosis as a "progressive systemic skeletal disease characterized by low bone mass and micro architectural deterioration of bone tissue, with a consequent increase in bone fragility and susceptibility to fracture".

In women, bone mass is maintained by the influence of oestrogen. In postmenopausal women there is cessation of ovarian function, due to this oestrogen level get reduced. Loss of bone mass normally beings in the fourth decade, with the rate of loss accelerating during the seventh decade. These losses come also due to changes in bone remodelling and change in calcium metabolism that occurs with age. With aging, there is a decrease in absorption of calcium from the gut and an increase in calcium loss by kidney and skin. This decreased absorption, combined with increased losses, means a greater demand on the reserves of calcium stored in the bone; ultimately leading to bone loss.

Women who are at greater risk for osteoporosis are those who:

- Experience early menopause, before age 45 years,
- Go a long time without having a menstrual period,
- Have very irregular periods, indicating that they are not ovulating regularly.

Ayurveda describe Rajonivriti is naturally occurring condition under the influence of Kala and Swabhava. It is a kshayjanya avastha (declining stage) of all dhatus and updhatus, where there is pre-dominancy of Vata dosha. Provoked Vata causes dhatu kshaya, concerning asthi dhatu also in women. When loss of asthi dhatu exceeded its formation, asthi become porous, consequently bone become weak and manifest as fractures.

Ahara, Vihar and Aushadhies described in our ancient science of life –Ayurveda, play an important role to balance all the seven dhatus

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(concerning asthi dhatu also) to assist women in journey towards better health in the latter stage of her life.

## DISCUSSION

#### **Metabolism of Bone:**

# 1. A/C to Medical Science:

Calcium is important for numerous life sustaining processes including enzymatic reactions, mitochondrial function, cell membrane maintenance, intercellular communication, interneuronal transmission, neuromuscular transmission, muscular contraction and blood clotting.

The National Research Council and the National Academy of Sciences has established recommended dietary allowances of calcium for all age groups. The demand for calcium increases with age. The recommended values of calcium reflect the average amount of calcium needed to maintain a neutral calcium balance and prevent the body from drawing on the mineral stores banked in the bone. For young adults, the recommended allowance is 750 to 1,000mg per day. But, unfortunately, average women consume less than 600 mg of calcium daily.

This calcium deficiency in the diet, makes the body utilize calcium from its skeletal reserve for needs, by increasing secretion of PTH and 1,25(OH)2D –Vitamin D.

Factors influencing calcium absorption are life styles, exercise, dietary intake and pH balance of the gastrointestinal tract. If stomach produces too little of hydrochloric acid, calcium remains insoluble and cannot be ionized which is necessary for it to be assimilated in the intestine. Studies show that HCl secretion decreases with age. About 40 % of postmenopausal women may be severely deficient of hydrochloric acid. Also, Vitamin D dependent absorption of calcium from the upper gastrointestinal tract becomes less with age. Thus, elderly persons need more calcium to maintain a neutral calcium balance.

Healthy premenopausal women over age 30 need as much as 1,000 mg of calcium a day. For those over age 50, the recommended daily allowance increases to 1,500 mg / day.

#### 2. A/C to Ayurvedic Literature:

Human body is a constitution of dosha, dhatu and mala. The maintenance of these constituents is done by intake of proper food that is digested and assimilated with the help of 13 types of agni in the body (Jatharagni, 7 dhatvagni and 5 bhutagni). The food, after entering annahava srotas, loses its physical and chemical characteristics, and is transformed suitably to be incorporated in the dhatus for their nourishment. These processes are known as ahara pachana and dhatu poshana/parinamana.

Nourishment to all dhatus is provided in two ways :

(A) One is posaka amsa from the ahara rasa for particular dhatu directly goes for nourishment of that particular dhatu. In case of asthi dhatu, nutrients essential for its poshana i.e. asthi poshaka amsa are directly absorbed from ahara rasa in amashaya with the help of jatharagni. Here asthi posaka amsa are substances which have similar panchabhautika composition as that of ashti dhatu. Calcium and other ions like phosphorus, magnesium, copper etc that form the solid mineral phase of bones; can be considered as asthi posaka amsa.

(B) Second way of nourishment is through preceeding dhatu. In case of asthi, preceeding dhatu is meda. When meda dhatvagni acts on meda, subtle asthi posaka amsa is derived from

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the sara part. In modern context, Vitamin D which is derived from sterols (a part of meda) is essential for absorption of calcium. It also has potent effect on bone deposition and bone re-absorption.

Now, the asthi posaka amsa (asthayi asthi dhatu) is transported to asthi dhatu by vyana vayu through asthivaha srotas where asthidhatvagni acts and sthayi ashti dhatu is formed.

By the action of asthyagni, posaka asthi dhatu is converted into sara and kitta. Sara part forms sthayi ashti dhatu, and posaka amsa for majja dhatu, whereas kitta part nourishes kesha and nakha (mala of ashti dhatu).

# Causes and Pathogenesis of Increased Kshaya of Asthi Dhatu:

Vata prakopa is the main hetu of dhatukshaya. In jarawastha, due to dominating

vata dosha, there is degeneration of all dhatus, this again leads to vata prakopa. Provoked vata causes more dhatu kshaya, especially asthi dhatu kshaya, because asthi is a place of vata. This vicious cycle continues and bones become weaker and weaker.

In later stage, when the vyaya (loss) of asthi dhatu exceeds its purana (formation), asthi dhatu becomes sushira (porous) because of this the bone becomes weak and brittle and manifests as anga bhanga (fractures). Due to uttar dhatu i.e. majja kshaya also leads to kshaya sushira.

Hence, sets of symptoms of asthi majja kshaya, asthigata vata are manifested in this disease.

Dosha	Vata prakopa , Kapha kshaya
Dushya	Asthi, but kshaya of all dhatu in later stage
Srotas	Asthivah Srotas
Agni	Jatharagni vaishamya leads to poor dhatuvagni and bhutagni
Roga marga	Bahya roga marga, in later stage Madhyam roga marga

# Samprapti Ghataka of Postmenopausal Osteoporosis:

Postmenopausa	Osteoporosis	Lakshana	(Symptoms):
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1. Asthi toda, bheda (Bony pain)	6. Kesha patina (Hair loss)
2. Anga bhanga (Fractures)	7. Vinamana (Forward bending of spine)
3. Srama (Extreme fatigue)	8. Bala kshaya (Weakness)
4. Sandhishoola (Joint pain)	9. Asthi saushirya (Brittle and soft bones)
5. Danta bhanga (Peridontal disease)	10. Sandhisaithilya (Difficulty in walking).
, , , , , , , , , , , , , , , , , ,	

**Upadrava (Complications) :** Excessive asthi dhatu kshaya without purana (fulfilment) of asthi will lead to fractures with or without trauma leading to prolonged immobility. Also symptoms of uttarottar dhatu kshaya i.e. shukra kshaya and oja kshaya may be observed.





**Sadhyasadhyata (Curablity):** Asthi is gambhira dhatu i.e. deeply situated. The disease of gambhira dhatu are said to be yapya or kashta sadhya. (Ch. Chi. 28 / 73-74)

# **DIAGNOSIS:**

#### 1. In Ayurveda -

Samhanan pariksha is described.

### 2. In medical science -

- a) BONE DENSITOMETRY (For quantifying bone mineral density, non invasively),
- b) X-ray (radiographic and invasive technique),
- c) Measurement of urine calcium / creatinine ratio.

### Chikitsa Sutra of Asthi Saushirya (Postmenopausal Osteoporosis):

The principle of treatment for kshaya of all dhatus is described as -

तत्र स्वयोनिवर्धनान्येव प्रतीकारः

- (Su. Su. 15/12)

तदेव तस्मात् भेषजं सम्यगवचार्यमाणं युगपन्न्यूनातिरिक्ताना धातूनां साम्यकर भवतिं अधिकमपकर्षति न्यूनमाप्याययति

- (Ch. Sa. 6 /6)

The dravyas (substances) which have same mahabhuta predominance (svayoni), or which are similar in properties of that particular dhatu are used for vriddhi of that dhatu.

## Samanya theory describes -

(1) Dravya samanya,

(2) Guna samanya,

(3) Karma samanya

For asthi dhatu, asthi tarunasthi is mentioned as dravya samanya. (Ch. Sa. 6/6)

While describing management of asthi kshaya, Acharya Vagbhatta quoted that basti

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containing kshira, ghrita and tikta rasa should be given. (A. H. Su. 11/31).

### **MANAGEMENT:**

#### General preventive measures:-

1. Ensuring adequate dietary calcium and vitamin D intake is one of the mainstay of preventing bone loss. Recommended daily calcium intake in postmenopausal women for maintaining skeletal integrity is 1000 - 1200 mg/ day. These needs may be met either thorough diet rich calcium (milk, dairy products, fruit juices) or by use of calcium supplements.

Adequate vitamin D supplementation should be prescribed whenever there is suspicion of inadequate intake and particularly in elderly patients. (About 800 IU per day is considered adequate).

2. Phytoestrogens include a variety of plant products that exert oestrogenic and/or antioestrogenic effects either inherently or after conversion by intestinal flora. Iso-flavonoids found in soya beans are the most potent phytoestrogens eg. high intake of soy products, Sowa (Anthem sowa), Shatavari (Aspragus recemosus), Tila (Sesamum indicum) seed, Methi (Trigonella foenum), Yastimadhu (licorice) root, red clover (Trifolium pratense), Ratalu (Pueraria mirifica),etc.

3. External and internal Snehana (oleation), medicated hot fomentation with Vatashamaka dravyas.

4. Ghrita should be used, medicated with vatashamaka dravyas.

5. Use of Niruha basti, Anuvasan basti and Uttarbasti.

6. Regular weight bearing exercise promotes flexibility and strength, possibly preventing falls.





# Treatment of Asthikshaya:

## 1. Abhyantara Chikitsha (Oral Drugs):

Name of	Name of Yoga
preparations	
Kwath	Dashmoola Kwath
Churna	1) Panchakola churna, 2) Triphala churna,
	3) Shatavari churna, 4) Yashtimadhu churna
Vati	1) Mahayogaraja gugulu, 2) Agnitundi Vati
Rasa	Vatakulantaka Rasa
Ghrita	Triphala Ghrita

#### 2. Sthanika Chikitsha:

Procedure	Name of Yoga
Abhyanga	Mahanarayana taila
Basti	<ol> <li>Shatavaryadi Anuvasan Basti</li> <li>Taila of Jivaniyadigana dravya Uttarbasti</li> </ol>

# **CONCLUSION:**

Acharya Sushruta has given example of trees, which are supported by hard core inside their trunks while mentioning the importance of ashti dhatu. In the same way the firm bones support body. Since bones forms the sara (pith) of the human body, it has great importance for life without any deformity and disability.

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# VIDANGADI YOGA CHURNA IN OBESITY MANAGEMENT

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## **ABSTRACT :**

Growing prevalence of obesity worldwide is an increasing concern surrounding the rising rates of Diabetes, Coronary and Cerebrovascular disease with the consequent health and financial implications for the population. Atisthaulya (obesity) is considered as one of the eight despicable conditions as described by Acharya Charaka. A person in whom there is excessive accumulation of Meda and Mamsa dhatu leading to flabbiness of hips, abdomen and breasts has been categorized as Atisthula. Medas is body tissue predominant in Prithvi and Ap Mahabhutas similar to Kapha Dosha. Obesity and Hyperlipidemia being the most common problems in adolescents as well as older age groups, there is a necessity to combat them with drugs mentioned in classics which may be useful to address the associated conditions of Medodushti. In this regard, an attempt has been made to critically review the Medohara and Lekhaniya drugs mentioned in Ganas of Ayurvedic classical texts which may abet our understanding of prevention and management of conditions like and its Dyslipidemia complications. Administration of drugs possessing Tikta Rasa, Ushna Veerya, Laghu and Ruksha Guna, Katu Vipaka and Vata Kaphahara actions were noted during the analysis.

Thirty obese subjects were randomized into single group. Ayurvedic drug treatment-Vidangadi

Yoga Churna was given for two months. Physical, clinical and pathological investigations were carried out at regular intervals. A significant weight loss was observed in the patients receiving Vidangadi Yoga Churna. Body measurements such as skin fold thickness and hip and waist circumferences were significantly decreased. Decreases in serum cholesterol and triglyceride levels were observed. No side effects of any kind were observed during the treatment period. Results of this study are encouraging and trial should be conducted on large sample and long duration with better parameters.

Key Words:- Astanindita purusha, Atisthaulya, Medoroga, Obesity, Sthaulya, Vidangadi Yoga.

# INTRODUCTION

Growing prevalence of Obesity worldwide is an increasing concern surrounding the rising rates of Diabetes, Coronary and Cerebrovascular diseases with the consequent health and financial implications for the population. Obesity is an important disorder associated with a number of potentially fatal diseases such as adult-onset diabetes mellitus, Insulin resistance, Dyslipidemia, Inflammation, Thrombosis, Hypertension, Metabolic syndrome, Obstructive Sleep Apnea and Ischemic Heart Disease(IHD). Santarpanottha Vikaras are increasing during current times. Medodushti serves as one of the important etiological factor in most of these



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disorders including Ischemic Heart Disease (IHD). IHD is identified as one of the leading cause of morbidity and mortality worldwide in both developing and developed countries.

Treating Syhaulya (Obesity) has become a problem since safe drugs are not available for long-term therapy. Thyroid hormones were once used to treat Obesity but are now contraindicated due to their untoward systemic effects. There is a clear need for a safer drug for long-term therapy of Obesity. The development of a nontoxic compound with a capacity to hold weight gain in check is much needed.

Ayurveda is the ancient science of life. In the Sanskrit language, "Ayu" means life and "Veda" means the knowledge. This branch of medicine has a 5000-year record of use in the Indian system of medicine. The concepts and treatment of most of the diseases have been described beautifully and in great depth. Ayurvedic classics such as the Charak Samhita and Sushrut Samhita are still followed critically by Ayurvedic physicians in India.

Obesity is referred to as "Medoroga" and is considered to be a disease of "Medadhatu" meaning a disorder of lipid metabolism. Atisthaulya (Obesity) is considered as one of the eight despicable conditions as described by Acharya Charaka. A person in whom there is excessive accumulation of Meda and Mamsa leading to flabbiness of hips, abdomen, and breast has been categorized as Atisthula. Medas is body tissue predominant in Prithvi and Ap Mahabhutas similar to Kapha Dosha. It is characterized by Snighdha, Guru, Sthula, Picchila, Mridu and Sandra Gunas (qualities). Sneha, Sweda, Drudhatva, and Asthipushti are the main function of Medodhatu. Consumption of Guru, Sheeta, Snigdha, Madhuradi Kaphavardhaka drugs along with lack of exercise and sedentary life style result in excessive nourishment of Medas while other Dhatus are deprived of nourishment. Disproportionately increased Medas is accountable for several serious consequences reported in Charaka Samhita like Ayuhrasa, Javoparodha, Krichravyavayata, Dourbalya, Dourgandhya, Swedabadha and Kshut Pipasadhikya.

In this regard, an attempt has been made to critically review the Medohara and Lekhaniya drugs mentioned in Ganas of Ayurvedic classical texts which may abet our understanding of prevention and management of conditions like Sthaulya(Obesity) and its complications. Administration of drugs possessing Tikta Rasa, Ushna Veerya, Laghu and Ruksha Guna, Katu Vipaka and Vata Kaphahara actions were noted during the analysis. The indigenous drugs described by Ayurveda are comparatively safe and have been used for many years. Vidangadi Yoga Churna is claimed to be effective in the treatment of Obesity but its effectiveness has not been tested in controlled clinical trials. Therefore, we undertook a randomized, singleblind, single group, clinical trial of 30 patients, to test the effectiveness of Vidangadi yoga churna in the treatment of Obesity.

#### **Materials and Method**

The latin name and properties of all six drugs of Vidangadi Yoga Churna are detailed in Table-1 and were obtained from the well-established pharmacy of Bhopal- Rani Dullaiya Ayurved Pharmacy which has a valid drug license issued by the Government. The authenticity of each plant and mineral component was established by the Quality Control Laboratory of the pharmacy, is also certified by the Government. All tests of identification were carried out by a qualified chemist approved by the Food and Drug Administration.



Sr.	Drug	Latin Name	Rasa	Guna	Virya	Vipaka
No.						
1.	VIDANGA	Embelia	Katu, Kasaya	Laghu,	Ushna	Katu
		Ribes		Ruksha,		
				Teekshna		
2.	SHUNTHI	Zingiber	Katu	Laghu,	Ushna	Madhura
		Officinale		Snigdha		
3.	AMALAKI	Embilica	Pancharasa	Laghu,	Sheeta	Madhura
		Officinalis	(Lavana Varjita)	Ruksha,		
			Amla Pradhana	Sheeta		
4.	YAVA	Potassium	Katu	Sara, Laghu,	Ushna	
	KSHARA	Carbonate		Snigdha,		
				Ruksha.		
5.	KALA	Ferrum.	Tikta, Madhur,	Sara, Guru,	Sheeta	
	LAUHA		Kasaya	Ruksha		
	BHASMA					
6.	YAVA	Hordeum	Kashaya,	Ruksha,	Sheeta	Madhura
		Vulgare	Madhura	Laghu		

Table - 1

#### **Clinical Study**

Thirty subjects referred to Obesity during OPD and IPD of Rani Dullaiya Smriti P. G. Ayurved College and Hospital, Bhopal; were entered into the trial. All were having BMI (Body Mass Index) more than 25 kg/m2. At the time of entry into the study, they had a stable weight and none was receiving any drug to reduce their weight. All were in good health and biochemically Euthyroid and Non-Diabetic. None of them had any endocrine disorders.

All the individuals were kept in a single group. Treatment was planned according to Ayurvedic concepts and Vidangadi Yoga Churna was given 4gm thrice a day along with luke warm water as anupana, to all patients in the group. The subjects were interviewed individually with respect to diet and exercise and were advised suitably. The treatment was continued for a period of two months and patients were examined every month. During these visits their body weight, skinfold thickness, body measurements such as waist and hip circumference, blood pressure, temperature, pulse rate and other clinical examinations were carried out.

Subjective findings such as increased or decreased appetite, feeling of lightness, sweating, breathlessness, joint pain, etc. were individually noted. Side effects of the drugs, if any, were carefully noted down. On entry and at the end of the study, biochemical investigation- Lipid profile was estimated.





# **Statistical Analysis**

The information gathered on the basis of observation made about various parameters was subjected to statistical analysis in terms of Mean, Standard Deviation (SD) and Standard error (SE). Paired 't' test was carried out at p<0.05, p<0.01, p<0.001.

The obtained results were interpreted as:

Insignificant P < 0.05

Significant P < 0.01

Highly Significant P<0.001

# Assessment of Total Effect of Theraphy :

The total effect of therapy was assessed taking in to consideration the total all improvement in signs and symptoms and was calculated by formula—

Complete remission	100% relief in signs and symptoms
Marked improvement	75-99% relief in signs and symptoms
Moderate improvement	50-74% relief in signs and symptoms
Mild Improvement	25 – 49% relief in signs and symptoms
Unchanged	No change in signs and symptoms (<25%)

= (total BT - total AT)× 100 /total BT

# Overall effect of Vidangadi Yoga Churna in the management of Sthaulya (Obesity)

CATEGORY	NO. OF PATIENTS	%	
Complete remission	0	0 %	
Marked improvement	1	3.333%	
Moderate improvement	18	60%	
Mild Improvement	11	36.667%	
Unchanged	0	0	





# DISCUSSION

Evaluation of signs and symptoms showed a moderate improvement in 60% (18) patients, mild improvement in 36.667% (11) patients while marked improvement in 3.333% (1) patient. However, Skin fold thickness and circumference of the hips and the waist were significantly decreased as compared to that at the start of the treatment. There was a marked reduction in serum cholesterol and triglyceride levels also.

#### CONCLUSION

At the end of the study, following points can be concluded on the basis of Observations made, Results achieved and thorough discussion in the present context.

- · Sthaulya is a Dushya dominant Vyadhi
- Sthaulya is a predominant metabolic disorder, which is described by Charaka in Ashtaunindita Purusha.
- Excessive indulgence in oily and fatty food, sedentary life style, Divaswapna, Manasika factors like- Harshanitya, Manasonivrita etc. along with genetic predisposition play a major role in aetiopathogenesis of Sthaulya.
- In Society, Percentage of population suffering from Sthaulya is increasing day by day so they should made aware regarding the

disease and its severe complications before it reaches to its epidemic level.

- Vidangadi Yoga Churna shows significant results in biochemical parameters and symptoms of sthaulya.
- Results of this study are encouraging and trial should be conducted on large sample and long duration with better parameters.

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# PRAMEHAHARA POTENTIAL OF "BHUNIMBADI CHURNA" – AN EVIDENCE BASED LITARARY REVIWE

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# **ABSTRACT** :

Diabetes is known to Indians since vedic period under the name of "ASRAVA" meaning mutratisara (excessive urination) as documented in Kaushika Sutra of Atharva Veda. Samhitas have mentioned Diabetes under the title of "Prameha" where prefix "Pra" means in excess, both in terms of quantity & frequency and "Meha" means to flow. Acharya has mentioned Prameha as one with the symptoms of "Prabhutavilamutrata" and the term diabetes having Greek origin too literally means passing through - a general term for a disease which is marked by excessive urination. Diabetes is one such syndrome which is spreading its clutches rapidly due to varied dietary and lifestyle patterns. India retains its position of Diabetic capital of the world. Given the disease is now highly visible across all sections of the society within India, there is now the demand for urgent research and intervention - at regional and national levels - to try to mitigate the potentially catastrophic increase in diabetes that is predicted for the upcoming years. Modern system of medicine offers drugs to control the blood sugar levels but fails to curb the added side effects caused by the prolonged use of such synthetic agents. The drug which have capacity to break the pathogenesis, arrest the progression of disease, restore normal body functions, reduce risk of complications and symptomatic relief, should be brought into light and used in common practice. Present work aimed at highlighting the antidiabetic effects of Bhunimbadi Churna and its probable mode of action in lowering blood sugar levels.

Keywords: Bhunimbadi Churna, Prameha, Diabetes Mellitus, Katuka, Vyosh, Indrayava, Chitraka, Vatsak

#### **INTRODUCTION:**

Global prevalence of diabetes among adults (aged 20–79 years) by 2010 was estimated to be 6.4%, affecting 285 million adults. The age group affected mostly falls under the category of working breadwinners of the family hence diabetes not merely affects the health of the population but adversely affects the economy and growth of the nation. According to W.H.O., "A drug is any substance or product that is used or intended to be used to explore or to modify physiological or pathological states for the benefit of the recipient".

**Need of Study:** The human body or any living organism's body is composed of panchamahabhutas and so is the universe around us. The aushadhis prepared from medicinal plants are much more absorbable and assimilate easily into human body due to similar panchbhautika composition as compared to the organic synthesized drugs.

The qualities required for a drug to be potent as quoted by Acharya Charaka and Vagbhata is



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fulfilled by these drugs, i.e. found in abundance, can be used in different formulations, having potent properties and complete with Rasa Panchaka. These criteria are fulfilled by both the drugs and hence have been taken up for the present study to explore more about them and their qualities.

Aims & objectives: To evaluate the role of Bhunimbadi Churna in the management of Prameha.

Materials & methods: References were collected from the classical Ayurvedic texts as

well as from previous research works/thesis, research articles, modern medical texts, internet etc. & analyzed to evaluate the efficacy of Bhunimbadi Churna in the management of Prameha/ Diabetes Mellitus.

# Bhunimbadi churna1: [Table-1]<sup>1</sup>

Churna is a fine powder of drug or drugs. Any dried substance when grinded into fine powder and then sieved is defined as churna.<sup>2</sup>

Synonyms: raja, kshoda

Dose: 1 karsha (tola) ~  $12 \text{gm}^3$ 

		Table-1				
	CONTENTS OF BHUNIMBADI CHURNA					
S.NO.	NAME OF THE	BOTANICAL NAME	PART USED	PROPORTION		
	HERB					
1.	BHUNIMBA	Andrographis paniculata	Panchanga	1 PART		
2.	KATUKI	Picrorhiza kurroa	Modified stem	1 PART		
3.	VYOSH					
	PIPPALI	Piper longum	Fruit			
	MARICH	Piper nigrum	Fruit	1 PART		
	SAUNTH	Zingiber officinale	Rhizome			
4.	MUSTAK	Piper rotundus	Modified Root	1 PART		
5.	INDRAYAVA	Holarrhena antidysenterica	Seed	1 PART		
6.	CHITARAK	Plumbago zeylanica	Root	2 PARTS		
7.	VATSAKA	Holarrhena antidysenterica	Twak	16 PARTS		

#### **BHUNIMBA:**

Traditionally bhunimba (A. panniculata) is used as an antidiabetic, anti-inflammatory, hepatoprotective, antispasmodic, and antioxidant agents.<sup>4</sup>

In phytochemical studies, Andrographis paniculata (whole plant, leaf, and steam) contains diterpene lactone consisting of andrographolide, 14-deoxyandrographolide, neoandrographolide, andrographi,

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14-acetylandro-grapolide, 14-deoxy didehydroandrographolide, and homoandrographolide, 19-O acetylanhydroandrographolide. The plant also contains small amount of flavonoids such as polymetoxyflavon, andrographine, panicholine, apigenin. Among them, andrographolide is a major (>4%) and most active compound in a dried whole plant.<sup>5</sup>

Andrographolide can decrease the blood glucose level in both normal and type 1 DM mice. The compound also increases the glucose utilization through the increase of mRNA and protein levels of GLUT-4, a transporter of glucose through the cell membrane.<sup>6</sup> Its antidiabetic activity is reportedly associated with antioxidant activity and inhibition of NF-kappa B.<sup>7</sup> The compound can also stimulate the insulin release, and inhibits the absorption of glucose through inhibition of the enzyme alpha-glucosidase and alpha-amylase.<sup>8</sup>

The purified extract and andrographolide significantly (P<0.05) decreased the levels of blood glucose, triglyceride, and LDL compared to controls in high-fructose-fat-fed rats, a model of type 2 DM rats. Metformin also showed similar effects on these parameters.<sup>9</sup>

## KATUKA:

Picrorhiza kurroa Royle ex Benth (Pk) has been mentioned as an important remedy by Jivek<sup>10</sup>, Charak<sup>11</sup> and Vagbhatt<sup>12</sup> in ancient Ayurvedic literature. The plant has been described as very useful in jaundice, nausea anorexia, dyspepsia and periodic fevers.

Katuki (P. kurroa) whole plant, decrease serum glucose concentration on account of Picrorrhizin & kutkin.<sup>13</sup> Kutaki is said to reduce hepatic glucose production.<sup>14</sup>

Picrorhiza extract (PkE) has shown antidiabetic activity through alloxan induced diabetic rat model, found effective in diabetic nephropathy and possess hypolipidemic activity. Oral administration of PkE to glucose loaded normal rats was associated with a significant decline in blood glucose level compared to normal control animals indicating better tissue glucose utilizing capacity of PkE treated rats. Further, both PkE and glibenclamide treatment elevated the reduced liver glycogen level in diabetic rats which suggest an improvement in the liver glycogenesis. Picrorhiza extract has been reported to reverse the increased AST and ALT activities towards near normalcy, which suggests prevention of cellular and tissue damages under diabetic conditions. Therefore, hepatoprotective activity of Picrorhiza extract may be partially responsible for the observed antidiabetic activity.15

# PIPPALI:

Several medicinal plants are being investigated for possible hypoglycemic activities based on several approaches including ethanobotanical survey. Of the several indigenous plants used in the local treatment of DM in Rayalaseema region, Piper longum is one of those plants used by tribes to treat diabetes, digestive disorders, obesity etc.<sup>16</sup>

Increase in blood glucose was accompanied by an increase in glycosylated Hb and decrease in plasma insulin, liver glycogen content and altered activities of carbohydrate metabolizing enzymes in diabetic rats as compared to control rats. The observed increase in glycosylated Hb and decrease in total Hb in diabetic rats indicates poor glycemic control mechanism (Koenig et al., 1976). The increase in total hemoglobin and

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decrease in glycosylated hemoglobin in diabetic rats treated with PLEFet (ethanolic extract of dried fruits of Piper longum) indicates its ability to prevent the glycosylation process and there by improved the glycemic control mechanisms.<sup>17</sup>

Oral administration of dried fruits has shown significant anti-hyperglycemic, antilipidperoxidative and antioxidant effects in diabetic rats comparable to that of the standard reference drug glibenclamide.<sup>18</sup>

# MARICH:

The biological role of this species is explained in different experiments that peppercorn and secondary metabolites of Piper nigrum can be used as Antiapoptotic, Antibacterial, Anti-Colon toxin, Antidepressant, Antifungal, Antidiarrhoeal, Anti-inflammatory, Antimutagenic, Antimetastatic activity, Antioxidative, Antiriyretic, Antispasmodic, Antispermatogenic, Antitumor, Antithyroid, Ciprofloxacin potentiator, Cold extremities, Gastric ailments, Hepatoprotective, Insecticidal activity, Intermittent fever and Larvisidal activity. Other roles of this specie includes protection against diabetes induced oxidative stress; Piperine protect oxidation of various chemicals.<sup>19</sup>

Twenty one (21) days treatment with 100, 200 and 300mg/kg body weight of the extract of Piper nigrum and a standard drug (glibenclamide) lowered elevated fasting blood sugar level, which was reported high in diabetic control animals. The significant reduction (P<0.05) in the blood glucose levels of the test animals suggested that the extract which has already been shown to contain some antioxidants was able to lower blood sugar possibly because of its antioxidant properties. Thus, the ethanol extract of Piper nigrum proved to have hypoglycaemic activity in diabetic rats,

which was comparable to the standard drug (glibenclamide) used.<sup>20</sup>

The possible mechanisms of hypoglycaemic action may be by increasing either the pancreatic secretion of insulin from â-cell of islet of Langerhans or its release from pro-insulin form. Often hyperglycaemia is associated with the generation of ROS causing oxidative damage and also increased production of sorbitol which also causes damage to the kidney, eyes, nerves and cardiovascular system. The significant decrease (P<0.05) in sorbitol levels showed that Piper nigrum extract at the concentration of 100mg/kg body weight was able to reduce the production of sorbitol in diabetic conditions which is advantageous in reducing diabetic complications.21

### **SHUNTHI:**

The main pharmacological actions of ginger and compounds isolated therefrom include immuno-modulatory, anti-tumorigenic, antiinflammatory, anti-apoptotic, anti-hyperglycemic, anti-lipidemic and anti-emetic actions.<sup>22</sup>

The findings of experimental animal study indicate that Zingiber officinale rhizomes ethanol extract possesses analgesic, anti-inflammatory and hypoglycaemic properties; and thus lend pharmacological support to folkloric, ethno medical uses of ginger in the treatment and/or management of painful, arthritic inflammatory conditions, as well as in the management and/or control of type 2 diabetes mellitus in some rural Africa communities.<sup>23</sup>

The lipid lowering and antioxidant potential of ethanolic extract of Zingiber officinale Roscoe (family, Zingiberaceae) was evaluated in streptozotocin (STZ)-induced diabetes in rats.

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Ethanolic extract of Zingiber officinale (200 mg/ kg) fed orally for 20 days produced, significant anti-hyperglycaemic effect (P < 0.01) in diabetic rats. Further, the extract treatment also lowered serum total cholesterol, triglycerides and increased the HDL-cholesterol levels when compared with pathogenic diabetic rats (P < 0.01). STZ-treatment also induced a statistically significant increase in liver and pancreas lipid peroxide levels (P < 0.01) as compared to normal healthy control rats. Zingiber officinale extract treatment lowered the liver and pancreas thiobarbituric acid reactive substances (TBARS) values (P < 0.01) as compared to pathogenic diabetic rats. The results of test drug were comparable to gliclazide (25 mg/kg, orally), a standard anti hyperglycaemic agent. The results indicate that ethanolic extract of Zingiber officinale Roscoe can protect the tissues from lipid peroxidation. The extract also exhibit significant lipid lowering activity in diabetic rats.24

## **MUSTAK:**

Oral administration of 500 mg/kg of the extract (once a day for seven consecutive days) significantly lowered the blood glucose levels in alloxan induced hyperglycaemic rats. This antihyperglycaemic activity might be due to the antioxidant activity attributed by the strong DPPH radical scavenging action in vitro.<sup>25</sup>

### **INDRAYAVA:**

Methanolic extract of H. antidysenterica (seed) has favourable effect not only on blood glucose levels, liver glycogen but also on serum lipids & body weight. This point out the promising effect of H. antidysenterica seed being a useful antidiabetic agent & also in diabetic complications.<sup>26</sup> The folklore use of indrayava in Diabetes was reported from Sikkim, West Bengal, Orissa & Jharkhand.<sup>27</sup>

# **CHITRAKA:**

The literature reveals its wide application in traditional system of medicines against various diseases, as anti-inflammatory, anti-malarial, anti-fertility, anti-microbial, anti-oxidant, blood coagulation, wound healing, memory enhancer and anti-cancer. The therapeutic uses of the plant have been attributed to the presence of number of bioactive compounds, such as elliptinone, zeylanone, sistosterol and plumbagin.<sup>28</sup>

Plumbago zeylanica L. root is widely used in Indian medicine to treat diabetes mellitus. Plumbagin, isolated from P. zeylanica L. root (15 and 30 mg/kg.b.wt.) was orally administered to STZ-induced diabetic rats for 28 days. An oral glucose tolerance test was performed on 21st day. Plumbagin significantly reduced the blood glucose and significantly altered other biochemical parameters to near normal. Further, plumbagin increased the activity of hexokinase and decreased the activities of glucose-6phosphatase and fructose-1,6-bisphosphatase significantly in treated diabetic rats. Enhanced GLUT4 mRNA and protein expression were observed in diabetic rats after treatment with plumbagin. The results indicated that plumbagin enhanced GLUT4 translocation and contributed to glucose homeostasis. It could be further probed for use as a drug to treat diabetes.<sup>29</sup>

# VATSAKA:

Kutaj stem bark is listed as a drug to cure Diabetes Mellitus along with its anthelmintic, amoebicidal & antibacterial properties.<sup>30</sup>

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		Table - 2		
	RASAPANCHAK	A OF BHUNIMBADI	CHURNA	
	Rasa	Gunna	Virya	Vipaaka
Bhunimba	Tikta	Laghu Ruksha	Ushna	Katu
Katuka	Tikta	Ruksha Laghu	Sheeta	Katu
Pippali	Katu	Snigdha	Anushna	Madhur
Marich	Katu	Teekshna	Ushna	Katu
Shunthi	Katu	Snigdha	Ushna	Madhur
Mustaka	Katu, Tikta, Kashaya	Laghu Ruksha	Sheeta	Katu
Indrayava	Katu	-	Sheeta	Katu
Chitraka	Katu	Laghu Rukhsa	Ushna	Katu
		Ushna		
Vatsaka	Katu, Kashaya	Ruksha	Sheeta	Katu

#### **DISCUSSION:**

In Ayurveda, the action of drugs is determined on the basis of pharmacodynamics properties such as rasa, guna, veerya and vipaka along with certain unexplained specific properties called prabhava. These drugs in combination act as antagonist to the main morbid factors i.e. aggravated dosha and dushya to cause samprapti vighatana so as to allay the symptoms of the disease. Katu rasa and ruksha guna of drug will help in the upshoshana of sweda, kleda and mala along with shamana of kapha. Likewise Tikta rasa will normalize the excess kleda, meda, vasa, majja & malas i.e. act mainly on liver functions & will facilitate faster glycogenesis. Dipana and pachana effect of katu and tikta rasa would have acted upon dhatvagnimandya and helped in normalizing the body metabolism. [Table-2]

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#### **CONCLUSION:**

Diabetes mellitus is a metabolic disorder caused due to relative or absolute deficiency of insulin or insulin resistance at the cellular level. Bhunimbadi Churna mentioned in grahni chikitsa in charaka Samhita & ashtanga hridya (10/38) is stated as Pramehahar. It is evident that the listed herbs have varying degree of hypoglycemic activity along with antioxidant property. The Antidiabetic activity of these plants can be attributed to the presence of polyphenols, terpenoids, alkaloids, flavonoids, glycosides and other active constituents, which shows reduction in blood glucose levels. There is need for further clinical research to evaluate the mechanism of action of the Antidiabetic effect of the medicinal plants not listed under Prameha Chikitsadhyas.





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# बालकों के सेरिब्रल पाल्सी रोग में आयुर्वेद एवं आयुर्वेदीय चिकित्सा पद्धतियों कि उपादेयता

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सेरिब्रल पाल्सी के लक्षण एवं चिन्ह– इस व्याधि में किसी प्रकार कि शारीरिक गति में मांसपेशियों में सामन्जस्य आज के इस आधुनिक जगत मे सेरिब्रल पाल्सी (सी.पी) कि कमी होना, मांसपेशियों के तान (टोन) में अत्याधिक पोलियो के उपरान्त एक ऐसी व्याधि है जो कि बालको में विभिन्नता या तो अत्याधिक संकोच या अत्याधिक ढीला होना। स्थायी विकलांगता का कारण है। '' सेरिब्रल पाल्सी एक चिन्हों में '' कैंचीवत चाल'' का मिलना, अत्याधिक लार का विस्तृत शब्द है जिसमें किसी भी कारण से हुए अप्रगतिशील गिरना, लिख ना पाना, शर्ट के बटन ना बन्द कर पाना मस्तिष्काघात के उपरान्त हुए गति एवं संतूलन संबंधि इत्यादि। इनके अतिरिक्त सी.पी. में मस्तिष्क में लगी चोट के स्थानानुसार विभिन्न संबंधित लक्षण भी पाये जाते है। इन लक्षणों में मानसिक दुर्बलता (50–75 प्रतिशत)(3), आक्षेप विकार (25–30 प्रतिशत)(3), विलंबित शारीरिक वृद्धि एवं विकास(3), मेरूदण्डगत विकार जैसे कुबडापन, इसके

अतिरिक्त भैंगापन एवं मूत्रा विकार भी शामिल है।(3)

सेरिब्रल पाल्सी के कारण – मूलतः दो कारण है– 1) जन्मजात – जन्म के समय नवजात के सांस ना ले पाने कारण अथवा मस्तिष्क में आक्सीजन कि कमी हो जाने कारण | 2) जन्मोपरान्त – जीवाणुवों के मस्तिष्क में संक्रमण (बैक्टीरियल मैनिन्जाइटिस एवं वाइरल मैनिन्जाइटिस) के कारण, बाहय शिराघात (हेड इन्जरी) के कारण इत्यादि। सेरिब्रल पाल्सी की संभावना मुख्यतः अल्प जन्म भार, अकाल जन्म, बह्रगर्भता, प्रसव के समय संक्रमण, रक्तवर्ग विकार, माता मे चुल्लिका ग्रंथि जन्य विकार, गर्भस्थिति का ब्रीच होना, प्रसव का कठिन और लम्बे समय तक होना तथा अपगार स्कोर का कम होना इत्यादि कारणों में बढ जाती है।<sup>3</sup>

सेरिब्रल पाल्सी का उपचार – आज एलोपेथिक जगत सी.पी. का पूर्ण रूप उपचार करने में असमर्थ है। सेरिब्रल पाल्सी के उपचार में मुख्य धेय्य बालक की विकलांगता को कम करके कार्यात्मक छमता को बेहतर बनाना है। इस उद्वेश्य को ध्यान में रखते हुए विभिन्न प्रकार कि चिकित्सा पद्यतियाँ जैसे फिजियोथेरपी, ओक्युपेशनाल थेरपी, स्पीच

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सेरिब्रल पाल्सी के भेदः- चिकित्सीय प्रस्तूतिकरण के अनुसार यह व्याधि चार प्रकार कि होती है –

समस्त विकारों को संकलित किया जाता है।''(2)

1. स्पाज्टिक सेरिब्रल पाल्सी – इस प्रकार में मांसपेशियों कि सामान्य तान (टोन) अधिक हो जाती है।

2. डिसकाइनेटिक सेरिब्रल पाल्सी – (इस प्रकार में एथेटोइस, कोरियोएथेटोइस एवं डिसटोनिक प्रकार सी.पी. भी सम्मिलित है) – इस प्रकार में बालक अनियन्त्रित एवं विचित्र प्रकार की गतिविधियां करता है।

3. एटेक्सिक सेरिब्रल पाल्सी – यह एक दूर्लभ प्रकार है जिसमें सेरिबेलर भाग के मस्तिष्काघात के कारण बालक को शारीरिक संतुलन का बोध समाप्त हो जाता है।

4. मिश्रित सेरिब्रल पाल्सी – इस प्रकार मे सभी भेद मिश्रित रूप से पाये जा सकते है। इन भेदों के अतिरिक्त स्पाज्टिक प्रकार का सी.पी. अंगाघात के अनुसार पुनः भेदित है यथा – अ) मोनोप्लाजिक अथवा एकांगघात – इसमें किसी एक हाथ या पैर का आघात होता है। ब) हेमीप्लाजिक अथवा पक्षाघात – इसमें शारीर का किसी एक भाग का अघात हो जाता है। स) डाईप्लाजिक – इस प्रकार में दोनो ही हाथ अथवा दोनों ही पैर (मुख्यतया पैर) का अघात हो जाता है। द) क्वाड्रीप्लाजिक अथवा सर्वागंघात – इस प्रकार में चारों शाखाओं (दोनो हाथ दोनो पैर) का अघात हो जाता है।<sup>2</sup>

परिचय ः



थेरपी, काउन्सलिंग तथा बिहेवियेरल थेरपी आदि विकसित कि गयी है। इनके अतिरिक्त शल्य चिकित्सा एवं औषधियों के द्वारा मांसपेशिगत एवं अस्थिगत विकारों का भी उपचार किया जाता है।(3)

आयुर्वेद जगत में सेरिब्रल पाल्सी की उपादेयता – आयुर्वेदीय संहिताओं में कही भी सेरिब्रल पाल्सी जैसी व्याधि का हू--बहू वर्णन नहीं मिलता है तदपि इस व्याधि के समान लक्षणों का वर्णन ''वात व्याधि'' नामक अध्याय मे मिलता है। पूर्व में कई अन्य अनुसंधान कर्ताओं के मतानुसार यह व्याधि '' वात दोष'' के प्रकोप के कारण हुए मस्तिष्काघात के कारण हुए अंग घात के कारण इसे ''मस्तिकाघात'', ''बालपक्षघात'' एवं '' वात व्याधि'' ।(27) आदि से नामित किया गया है। सेरिब्रल पाल्सी के लक्षणों में मूलतः संकुचन, ढीलापन एवं अनियन्त्रित गति आदि लक्षण वात दोष के क्रमशः कोप, छय एवं आवरण से मिलते है।(8)

# सेरिब्रल पाल्सी के आयुर्वेदीय उपचार के उद्वेश्य-

- मस्तिष्काघात के उपरान्त मृत तान्त्रिकाओं के कार्य बचे हुए स्वस्थ तान्त्रिकाओं द्वारा करने हेतु उपादान करना।
- मांसपेशियों के संकोच, अनियंत्रित गति को ठीक करना, खड़े होने कि मुद्रा का विकास करना।
- संबंधित विकारों जैसे आक्षेप, मानसिक दुर्बलता एवं भैंगापन आदि का उपचार करना।
- आगे आने वाली जटिलताओं को कम करके अधिक से अधिक शारीरिक स्वतंत्रता प्रदान करना।

आयुर्वेदीय पद्यतियाँ एवं सेरिब्रल पाल्सी – आयुर्वेदीय चिकित्सा पद्यतियों मे मुख्यतः काष्ठौषधियों एवं पंचकर्म का स्थान सर्वोपरी है। काष्ठौषधियों का विभाजन उनकी अनुसंध ाानोपरान्त स्थापित छमताओं को ध्यान में रखते हुए विभिन्न प्रकार से करना चाहिये:–

- मांसपेशी शिथिलीकर औषधियाः विशेष कर स्पाजटिक प्रकार की सेरिब्रल पाल्सी में प्रभावी इस औषधि घटक में मुख्यतः – अश्वगंधा(11), विदारीकन्द(12), सहिजन(14), एवं तगर(16) प्रभावी है।
- मांसपेशी बलदायक औषधियाँ:-- यह औषधि घटक सी.
   पी. के दोनो ही प्रकार स्पाजटिक एवं डिसकाइनेटिक

प्रकार में – अश्वगंधा(11), विदारीकन्द(12), आमलकी(17), एवं बला(18) मुख्य है।

- मेध्य औषधियाँ:-- सेरिब्रल पाल्सी चुंकि एक मुख्यतः मस्तिष्कगत विकार है अतः मेध्य औषधियां से उपचार आवश्यक हो जाता है। मेध्य औषधियों में -- ब्राह्मी(20), मण्डूकपर्णी(23), वचा(23), गुडुची(23), आदि मुख्य है।
- आक्षेपघ्न औषधियां:- इन औषधियों में- वचा(23), जटामांसी(23), तगर(23), खुरासनी(23), अजवायन(23) मुख्य है।
- रोगप्रतिरोधक क्षमता वर्धक एवं सुधारक औषधियां सी. पी. रोगीयों में आम तौर पर अत्याधिक तनाव की स्थिति में रहने के कारण रोगप्रतिरोध क्षमता कम हो जाती है और परिणाम स्वरूप ऐसे रोगी अधिक बीमार पड़ते हैं अतः ये औषधियां इनमें रोगप्रतिरोधक क्षमता का विकास करती है। यह औषधियां है– पिप्पली(22), गुडुची(10), लवंग(10), तुलसी(10) एवं अश्वगंधा(11),आदि।

सेरिब्रल पाल्सी उपचार में पंचकर्म की उपादेयता – पंचकर्म आयुर्वेद का प्रमुख अंग है। इस चिकित्सा में विभिन्न विधियों द्वारा शरीर का शोधन किया जाता है। शोध ।नोपरान्त शरीर के दोष, धातु एवं मलादि अपना काम सुचारू रूप से करने लगते है। सेरिब्रल पाल्सी में उपयुक्त विभिन्न पंचकर्म विधियां निम्न है।(24)

1 स्नेहन – यह विधि पंचकर्म में पूर्वकर्म में के रूप् में जानी जाती है। अभ्यंग स्नेहन का ही एक भाग है, इसके द्वारा शरीर की औषधि युक्त तैलों से एक निश्चित क्रम व समय तक मालिश की जाती है। बला तैल, क्षीरबला तैल, माशसैन्धव साधित तैल एवं प्रसाारणी तैल(24), आदि का प्रयोग हितकर माना गया है। आधुनिक जगत में भी अनुसंधानोपरान्त सेरिब्रल पाल्सी में तैल अभ्यंग हितकर कहा गया है।(25)

2 स्वेदन– स्नेहन के उपरान्त स्वेदन भी पंचकर्म में पूर्वरूप्का एक भाग है। इस व्याधि में मुख्यतः षष्टिक शालि पिण्ड स्वेद का प्रयोग किया जाता है। इस प्रकार के स्वेदन में औषधियुक्त दूध में उबले शालि चावलों का पिण्ड बना कर तत्पश्चात् उन्हे औषधियुक्त कोष्ण दूध में ही डूबा कर गरम–गरम ही मालिश एक निश्चित समय तक करते है।<sup>(4)</sup>

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3 शिरोधारा – यह विधि शिरोअभ्यंग का ही एक प्रकार है। इसमें औषधियुक्त दूध को शिरोधारा हांडी में भर कर मस्तक "आठ सेन्टीमीटर" ऊपर से धारा के रूप में प्रवाहित करते है। पंचकर्म की यह विधी मस्तिष्क को शान्त करती है एवं इसका लगातार प्रयोग करने से विभिन्न प्रकार की मानसिक व्याधियां शान्त होती है। (24)

4 वस्ति – यह विधि पंचकर्म कि एक प्रधान विधि है एवं इसमें गुदा मार्ग से औषधि शारीर में पहुंचाई जाती है। बालकों में औषधि प्रयोग हेतु गुदा मार्ग ही सर्वश्रेष्ठ माना गया है। इसके अतिरिक्त इस मार्ग से दी गयी औशध रक्त मे अपना प्रभाव अधिक समय तक बनाये रखती है क्योंकि यह औषधि ायां रक्त में सीधे अवशोषित हो जाती है एवं इन्हें यकृत द्वारा गुजरना नही पड़ता इसी कारणवश इस मार्ग में कम मात्रा में औषधि देनी पड़ती है एवं उस औषधि का असर लम्बे समय तक बना रहता है।(23) पूर्व में किये गये अनुसंधानों मे ''प्रसारणी तैल'', ''धान्वान्तर तैल''(27), अनुवासन वस्ति एवं ''राजयापन आदि निरूह वस्ति''(27) का प्रयोग सेरिब्रल पाल्सी एवं अन्य तंत्रिकामांसपेशिगत विकारों में लाभदायक रहा है।(24)

5 शिरो पिच्चु धारा – इस विधि में एक सूती कपड़े को औषधि युक्त तैल में डुबो कर बाल साफ किये शिर पर एक निश्चित समय तक रखते है। पूर्व में किये गये अनुसंधान में यह विदित है कि शिर से दिये गये औषधि मस्तिष्कगत रोगों में अधिक लाभदायक होती है।(24)

6 पिषिजिल – इस विधि में औषधि युक्त तैल कि धारा समस्त शारीर पर डाली जाती है एवं वात व्याधि रोगों में यह विधि अत्यंत लाभदायक है। सेरिब्रल पाल्सी के लक्षण वात व्याधि के समान होने के कारण इसके प्रयोग से निश्चित लाभ होता है।(24)

7 पट्ट बन्धन – यह विधि आचार्य सुश्रुत कि मौलिक देन है, इस विधि को आचार्य ने संकोच युक्त स्थान एवं रनायु, सन्धि, विशेष वात प्रकुतित स्थानों पर प्रयोग के लिये बताया है। सेरिब्रल पाल्सी में यह विधि आधुनिक जगत के ''आर्थोटिक्स'' का स्थान ले सकती है जिसके प्रयोग से बालक में चलने की क्षमता को और अधिक विकसित किया जा सकता है।(5) फिजियोथेरेपी एवं योग की सेरिब्रल पाल्सी के उपचार में उपादेयता— सेरिब्रल पाल्सी के उपचार में एक मात्र फिजियोथेरेपी ही आज के आधुनिक जगत में एक स्थापित उपचार विधि है। इसके द्वारा शारीर के विभिन्न अंगो की कार्यात्मक क्षमता बढ़ायी रखी जाती है।(23) दूसरी ओर ''योग'' आयुर्वेद का एक ऐसा विभाग है जिसके द्वारा व्यक्ति अपने शरीर के कार्यक्षमता को बढ़ाता एवं बनाये रखता है साथ ही प्राणायामक के द्वारा अपना मानसिक विकास भी करता है।(28) अतः योग द्वारा सेरिब्रल पाल्सी में शारीरिक एवं मानसिक विकास भी किया जा सकता है।

निष्कर्षः— सेरिब्रल पाल्सी एक अप्रगतिशील परन्तु एक अशक्त कर देने वाला रोग है। इस रोग में मुख्यतया शरीर की कार्यात्मक क्षमता का विकास रूक जाता है। आयुर्वेद शास्त्रों यद्यपि यह रोग एक स्थान में वर्णित नहीं है तथापि व्यापक रूप से इसके लक्षण ''वात व्याधि'' के समान प्रतीत होते है। इस व्याधि में आयुर्वेदीय चिकित्सा पद्यतियां तत्काल में उपस्थित लक्षणों का उपचार करने के अतिरिक्त मस्तिष्क में उपस्थित लक्षणों का उपचार करने के अतिरिक्त मस्तिष्क में उपस्थित नृत प्राय भाग को पुनरूज्जीवन प्रदान करती है। सेरिब्रल पाल्सी का उपचार अवश्य ही एक दुष्कर कार्य है तथापि आयुर्वेदीय उपचार निश्चित ही रोगी कि विकलांगता को दूर कर शारीरिक कार्य क्षमता का विकास करने में सहायता करते है।

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# KASA IN CHILDREN – A LITERARARY REVIEW

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# **ABSTRACT :**

In Ayurvedic point of view descriptions of disease kasa clearly correlates with cough, moreover the samprapti of kasa almost exactly correlates with cough reflex mechanism As cough is the most frequent symptom of respiratory diseases. Respiratory system is most vulnerable to infections and considered as prime victim of hypersensitisation in most of the circumstances. Thus respiratory tract infections (RTI)accounts to about more than 50% of patients attending paediatric OPD in developing countries and even developed countries world wide. According to world health organisation report (WHO, 2004), 6.9% of the deaths in children were attributed to respiratory infections. Kasa is the disease named after the cardinal symptom of coughing. The mention of the disease kasa in such ancient literature proves its existence from time immemorial. the detailed knowledge of the disease kasa is present in the samhitas which is adequate enough to diagnose and plan the treatment. therefore this proper understanding of the disease kasa is necessary for treatment and prevention.

**KEYWORDS:** kasa, samprapti, samhita, cough reflex, Respiratory system.

# **INTRODUCTION:**

Kasa is probably the most frequent presenting disease in children. Respiratory system is most vulnerable to infections and considered as prime victim of hypersensitisation in most of the circumstances<sup>1</sup>. Thus respiratory tract infections (RTI) accounts to about more than 50% of patients attending paediatric OPD in developing countries and even developed countries world wide.<sup>2</sup> According to world health organisation report (WHO, 2004), 6.9% of the deaths in children were attributed to respiratory infections.

Paediatric age group is more vulnerable to respiratory tract infections because of anatomical and physiological peculiarities i.e. small narrow airways<sup>3</sup> Hypertrophied lymphoid tissues<sup>4</sup> underdeveloped para nasal sinuses<sup>5</sup>, Mucous hyper secretion and peculiarities of Eustachian tube<sup>6</sup> and social factors such as attending school, improper food and eating habits.

As cough is the most frequent symptom of respiratory diseases<sup>7</sup>

In Ayurvedic point of view descriptions of disease kasa clearly correlates with cough, moreover the pathophysiology (samprapti)of kasa almost exactly correlates with cough reflex mechanism<sup>8</sup>. Kasa(Cough) has been dealt in much detail in Ayurvedic literature, but not in terms of children specially. It has to be of five types i.e. Vataja, Pittaja, Kaphaja, kshataj and kshayaj However certain specific disorder in which kasa is the major symptoms have been reported in ancient Ayurvedic literature like Ksheeralasaka, Graha Roga(Naigmesha, pitragriha, Andhaputana, Revati).

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Etymology(Utpatti)- The word kasa is derived from the root 'kas gathou' meaning course. Pathologically the morbid vata dosha either alone or in combination with morbid kapha dosha constricting the body parts like shira, kantha etc.and then escapes from mouth.this abnormal course of vayu is referred as kasa<sup>9</sup>

The word kasa is also derived from the root 'kas gati shatanyoh,refers to constriction.<sup>10</sup>

Definition(Nirukti)- By the association of udana vayu,prana vayu assumes an abnormal upward course and spontaneously escapes from mouth generating sound similar to the one produced by the broken bronze vessel and this illness is known as kasa<sup>11</sup>

Synonyms of kasa (paryayas)- In Atharvaveda 'kasaa' and 'kasika' are considered as synonyms of kasa. Kasika-means it is a rog vishesha,which produces a pecular sound i.e. ' kas shabdha'<sup>12</sup>

# HISTORICAL VIEW-

Vedas being the earliest known literature of human beings. The mention of the disease kasa in such ancient literature proves its existence from time immemorial. the detailed knowledge of the disease kasa is present in the samhitas which is adequate enough to diagnose and plan the treatment.

**VEDIC KALA-** Few reference to kasa and its management are found mentioned in Rigveda<sup>13</sup>

**UPNISHAD KALA** –Yoga chudamani upnishad carries the impression that kasa ,hikka, pain or siras ,karna and akshi and other diseases are created by the disturbance of movement of air. This may e the lok vayu or sharir vayu.

PURANA KALA- Garuda purana contains detailed reference of abhraja kasa, vataj kasa and saumya kasa and its management. SAMHITA KALA- The description of kasa is seen in charak samhita, where its bheda, poorvarupa, samprapti, description of individual varieties of kasa in terms of nidana, samprapti, lakshnas, sadhya-asadhyatva, chikitsa and upadrava has been mentioned.<sup>14</sup>

In Sushruta samhita, mentioned kasa not only as disease entity but also as a symptom.he also explained its Nidans, samprapti, bhedas, poorvarupa,individual lakshanas ,sadhyaasadhyata and more importance over herbal medicines .also there is description about dhoompana in kasa roga<sup>15</sup>

Description about the different types ,the causative factors,the symptomatology and detailed treatment is found in Bhela samhita<sup>16</sup>

One of the major contributions among the varieties of kasa comes from Harita samhita. He also stated the etiology, pathology, presenting features and management of the disease<sup>17</sup>

Reference of kasa is also found in kashyapa samhita in the context of urogataroga as one of its complications<sup>18</sup>

MADHYAM KALA- Vaghbhata has devoted a separate chapter for dhoompana for for maintaining health, different types, contraindications, symptoms of atiyoga,time of administrations,dhoomnetra,dhoomvarti, method of administration, dosages, different drugs used<sup>19</sup> etc.

Madhavkara has described the nidana aspect of kasa in his treatise Madhava Nidana<sup>20</sup>

Vangasena advocated the herbal remedies as well as medicaments prepared from ghee.Also mention about dhoompana in kasa is present<sup>21</sup>.

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LATER THE SAMHITAS OF MEDIEVAL PERIOD – Like Sharangdhar Samhita, Gadnigraha<sup>22</sup>, Bhavaprakash<sup>23</sup>, Yogratnakara<sup>24</sup> etc have described about Kasa and its line of treatment with therapeutic measures to control Kasa, they also mention about different Yogas of Dhoompana for curing kasa.

Numerous references can be seen in Bhaisajya Ratnavali<sup>25</sup>, Chakradutta, Rasratna Samucchaya<sup>26</sup> etc.All the subsequent compilation work in Ayurveda could really add nothing new, except some modified medicaments.

ADHUNIKA KALA-Almost all 20th century authors like Vaidya Yadavji Trikamji Acharya,Vaidya Vidhyadhar Shukla,Shivcharana Dhyani,Kaviraja Ramraksha Pathak have described the disease kasa under the heading of pranavaha strotodushti vikara.

#### NIDANA OF KASA -

General etiological factors are responsible for the manifestation of all varieties of kasa, on the contray specific etiological factors are responsible for specific varieties of kasa. Nidana according to types of Kasa<sup>27</sup> –

1. Vataja Kasa Nidana –Ruksha, Sheeta,Kashaya,Alpa,Pramita Ahara sevana ,Anashana,vegavorodha produces vataja kasa.(c.chi.18/10)

2.Pittaj kasa Nidana-Ati Katu,usna,vidahi amla,kshara,sevana(Excessive use of pungent,hot irritant,acidic andalkaline fgoods)krodha(excessive anger),and Ati samsarga of surya and agni( use of heat or fire) these all facors are responsible for vitiation of pitta dosha with association of vata and responsible for pittaja kasa.( c.chi 18/14). 3.Kaphaja kasa Nidana-The kapha can increased by Guru, Abisyandi (heavy, liquid diet),madhur(sweet),snigdha(unotous) diet and by day sleep, habitual inactivity, obstructs the course of vata and produces the kasa disorder of kapha type.(c.chi18/17).

4.Kshataja kasa Nidana-The eiological factors of this type of kasa are excessive sexual indulgence, heavy weight lifting,long distance walking,wrestling with more powerful opponents, like restraining in elephants and horse or similar acts may cause kshataja kasa.(c.chi18/20).

5.Kshayaja kasa Nidana-To those persons who takes unbalanced or unwholesome diet, excessive sexual indulgence and suppression of natural urges, the three humorsb become vitiated and produce wasting which in turn leads to consumption of body and produce kshayaja kasa(C.Chi 18/24).

POORVARUPA OF KASA(Premonetory Symptoms)-Charaka, sushruta, and vaghbhata have mentioned the premonitory symptoms of kasa in near about similar in numbers.

According to Charaka-shookpurnta in throat(patient feel like throat and mouth feel like bristles),kanthe kandu(feeling throat irritation),Bhojyanama Avrodha(Difficulty in deglutition)(C.Chi.18/5)

In addition sushruta described poorvarupa of kasa-swa shabda vaishamya-(change or hoarseness of voice), arochakta(feeling of tasteless), Agnisad(Anorexia), Gal-Talu Lepa(Feeling of coating in throat)(S.U.52)

# SAMPRAPTI OF KASA(Pathogenesis)-

Charaka had described the pathogenesis of kasa as vata(Apana Vayu) getting obstructed in lower srotasas(channels) moving upwards to the

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upper srotas(channels) taking the function of udana vayu(Expiratory Function) and getting localised in throat and chest entering inall chidras srotasas and vahinis(channels)of head and fills them.thus it convulsive movement of body specially of the eyes and sides of the neck, stiffening and distortion of the eyes back of chest and then produces kasa of productive and unproductive nature.(C.Chi.18/ has given too similar 6,7,8). Vaghbata pathogenesis like charaka28,29According to sushruta, vitiated pranvayu associated with udana vayu(udananugat) produces the noise of broken bronze pot comes out of mouth all of sudden30.

Thus it becomes evident from all above description that for kasa roga the main responsible dosha is apana vayu followed by Udaan vayu and kapha dosha respectively.

# ROOPA OR LAKSHNAS OF KASA (SYMPTOMS):

Charaka, Sushruta and Vagbhatta have almost identically described the symptoms of Kasa.

1.Vataja Kasa Lakshanas-Pain in cardiac region ,chest, sides(flanks),head specially in temporal region and abdomen. there is change in facial expression and voice, dryness of throat and mouth, along with these there is loss body weight, horripilation,rattling sound in throat and continuous attacks of cough with production of hollow sound on coughing.(C.Chi18/11-13)

2.Pittaj Kasa Lakshanas-The patient develops bitter taste of mouth, sometimes even vomiting and yellowish expectoration. on coughing change of voice ,excessive thirst, burning sensation in whole body, excessive thirst, burning sensation in whole body, specially in chest, stupor, yellow colouration of eyes and body, fever, anorexia, giddiness and prolonged coughing, illusion of twinkling light or stars .(C.Chi18/15-16)

3.Kaphaja kasa Lakshanas –Mandagni (anorexia), vomiting, coryza, nausea, heaviness, horripilation, feeling of mucus covering oral cavity and throat may be complained of expectoration of sweet heavy thick sputum without any pain on exertion occurs and the patient always feels his chest to be full of sputum(C.Chi18/18-19).

4.Kshataja kasa Lakshanas –In the beginning the patient has dry cough followed by blood stained sputum and piercing pain in throat and chest. on touching the painful part tenderness of stabbing nature increases. Along with the above symptoms patient develop pain in joints and body, fever, dyspnoea, thirst, change of voice and increased attacks of cough and produces pigeon like sounds. afterwards there occurs gradual loss of energy, falling appetite and digestive power with a dulling of body complexion, haematuria and stiffness of lumbar region. (C.Chi18/21-23).

5. kshayaj kasa Lakshanas –The patient expectorates offensive, greenish, sanguineous or purulent sputum. during coughing it gives him shifting of heart from its proper place. the patient gets sudden desire to eat hot or cold food ,consumes too much of food, becomes weak, emaciated ,face becomes lustrous or shining greasy, skin, bright eyes and smooth palms and feet (C.Chi18/26-27).

Kasa has also been mentioned in various classics as a symptom of so many other disease.

#### CHIKITSA OF KASA (Management)

In kasa roga both types of yuktivyapasraya chikitsa i.e. shodhana and shaman are indicated.





Vataj kasa chikitsa-To wasted patients suffering from vataj kasa initially snehana (oleative measures)should be given such gruels, soups, milk, meat-juices etc .medicated with drugs curative of Vata; along with unctuous foods, smokes, electuaries, inuctations, unctuous baths and sudations(C.Chi18/32-34).

Pittaj kasa chikitsa-In the case of cough due to pitta associated with kapha, emesis with medicated ghee is beneficial. the patient may be given emesis with the decoction of common emetic nut, white teak and mahwa or with the paste of liquorice and emetic nut mixed with the juice of white yam and sugarcane when the morbid matter is expelled, the patient should be put on a course of sweet and cold thin gruel.(C.Chi.18/83-84).

Kaphaj kasa chikitsa-The strong patient from cough due to morbid kapha first should be purified by emetics followed by treatment by course of barley diet ;pungent, dry and hot articles curative of kapha(C.Chi.18/108).

Kshataja kasa chikitsa-In case of kshataj kasa the line of treatment to be followed is the same as of cough due to pitta provocation. the treatment mainly consist of milk, ghee and Honey. If, however ,the cough due to pectoral lesions is complicated by other morbid humors, the line of treatment should be supplemented by remedies indicated in those conditions.(C.Chi18/134)

Kshayaj kasa chikitsa-The debilitated patient suffering from cough born of consumption with all the symptoms fully developed should be considered incurable ;but if the cough of recent origin and the patient is strong, the treatment should be undertaken despite declaring it to be of the incurable type. Such patients should initially be administered reborant and promotive of jatharagni medicines; and if he shows much morbidity, a mild unctuous purgative may be given. (C.Chi18/149)

#### PATHYA (Diet)-

Diet in Vataj kasa-In Vataj kasa meat juice of Gramya, Anupa, audaka animals or thin gruel of black gram should be given. (C.Chi18/76)

Diet in Pittaj Kasa-In pittaj kasa senwa millet, common barley and common millet with sweet meat juice of jangal animals, thin gruel of green gram etc. And bitter vegetable in appropriate quantity may be given. (C.Chi18/96)

Diet in kaphaj kasa-The patient may eat light food consisting of soups and from horse gram and raddish mixed with longa, pepper and alkali; or he may take meat juice of jangal or terriculous animals mixed with pungent drugs and oil of til rape seed or bael(C.Chi18/109).

Diet in kshataj kasa-In this type of kasa disease, patients having strong pachak agni(digestive power) should be given a potion of the compound life promoter drugs and ghee.For emaciated patients who are accustomed to meat diet, meat juices of the quail group of creatures are beneficial(C.Chi18/141).

Diet in kshayaj kasa-Diet of meat juices of animals of the jangal animals, quail group of birds, terriculous group of creatures and the carnivorous creatures of tearer group is advisable. (C.Chi18/184).

#### CONCLUSION

Kasa is probably the most frequent presenting disease in children .In addition ,kasa is a symptom that can appear innocuous, but represent serious underlying disease; on the other

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hand, it could be a trivial clinical problem but very disturbing for the child and family. The detailed knowledge of the disease kasa is present in the samhitas which is adequate enough to diagnose and plan the treatment. Therefore this proper understanding of the disease kasa is necessary for treatment and prevention.

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# HEALTH BENEFITS AND MEDICINAL USES OF MORINGA OLEIFERA LAM.

### - Poonam Sharma\* e-mail:drpsharma.vns@gmail.com

## **ABSTRACT :**

Moringa oleifera has an impressive range of medicinal uses with high nutritional value and medicinal benefits, distributed in many countries of the tropics and subtropics. Different parts of Moringa contain a profile of important minerals and are a good source of protein, vitamins, betacarotene, amino acids and various phenolics. Moringa provides a rich and rare combination of zeatin, quercetin, beta-sitosterol, caffeoylquinic acid and kaempferol. In addition to its compelling water purifying powers and high nutritional value, M. oleifera is very important for its medicinal value. Various parts of this plant such as the leaves, roots, seed, bark, fruit, flowers and immature pods act as cardiac and circulatory stimulants, possess antitumor, antipyretic, antiepileptic, antiinflammatory, antiulcer, antispasmodic, diuretic, antihypertensive, cholesterol lowering, antioxidant, antidiabetic, hepatoprotective, antibacterial and antifungal activities, and are being employed for the treatment of different ailments in the indigenous system of medicine, particularly in South Asia.

Key words : Moringa, antidiabetic, antifungal, antibacterial.

#### **INTRODUCTION :**

Ayurveda has been in existence right from the dawn of human creation. Acharya Charaka has said it as Shasvata while Acharya Sushruta has mentioned its origin even before the creation of the universe. Since in Rigveda there are numerous plants used in medicine and in Atharvaveda we find somewhat advanced picture of it the position in which the number and variety of drugs is increased.

Urinary tract infection is a worldwide problem. Though with the introduction of antibiotics its management has greatly improved. However, several problems still remain. The antibiotics and antiseptics used generally have limitations because of the fact that the infective organisms develop resistance to them and toxic side effects are also common. For the last few decades efforts are being made for a safer and effective management of urinary tract infection and any contribution in the field may prove itself of significant value.

Management of urinary tract infection is mainly based on the organisms demonstrated in the urine culture and administration of suitable antibiotics based on sensitivity.

In Samhitas and nighantus Shigru is prescribed for Mutrakrichcha. It posses Katu, Tikta rasa and Kaphavatanasaka karma so drug seems to be rationale for the treatment of Mutrakrichcha.

Botanical Description of Moringa Oleifera Lam.:

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#### Scientific classification:

Kingdom : Plantae Subkingdom : Tracheobionta Superdivision : Spermatophyta Division : Magnoliophyta Class : Magnoliopsida Subclass : Dilleniidae Order : Capparales Family : Moringaceae Genus : Moringa Species : Moringa oleifera Lam.

#### The Wealth of India Raw Material :

Moringa Adans. (Moringaceae)

A small genus of quick – growing tree distributed in India, Arabia, Asia Minor and Africa. Two species are recorded from India, of which one, M. oleifera, is widely cultivated in the tropics for its edible fruits.

M. oleifera Lam. Syn. M. Pterygosperma Gaertn.:

Habitat – A small or medium-sized tree, about 10m. high, found wild in the sub – Himalayan tract, from Chenab eastwards to Sarda, and cultivated all over the plains of India.

Bark thick, soft, corky, deeply fissured; young parts tomentose; leaves usually tri-pinnate;

leaflets elliptic; flowers white, fragrant, in large panicles; pods pendulous, greenish, 22.5-50.0 cm. or more in length, triangular, ribbed; seeds trigonous with wings on angles. The tree is not affected by any serious disease in India.

The tree is valued mainly for the tender pods which are esteemed as vegetable. They are cut into slices and used in culinary preparations; they are also pickled. Flowers and tender leaves are eaten as pot herb. Seeds are consumed after frying; they are reported to taste like peanuts. The roots of the tree are used as condiment or garnish in the same way as those of true horse radish. Twigs and leaves are lopped for fodder.

All parts of the tree are considered medicinal and used in the treatment of ascites, rheumatism, venomous bites and as cardiac and circulatory stimulants. The root of the young tree and also root bark are rubifacient and vesicant. The leaves are rich in vitamin A and C and are considered useful in scurvy and catarrhal affections: they are also used as emetic. A paste of the leaves is used as external application for wound. Flowers are used as tonic, diuretic and cholagogue, the seeds are considered antipyretic, acrid and bitter, the seed oil is applied in rheumatism and gout.

Moringa oleifera leaf, raw		
Nutritional value per 100 g (3.5 oz)		
Carbohydrates	8.28 g	
Dietary fiber	2.0 g	
Fat	1.40 g	

NUTRIENTS : Moringa oleifera leaf, raw



Protein	9.40 g
Vitamins	
Vitamin A equiv.	(47%) 378 µg
Thiamine (B1)	(22%) 0.257 mg
Riboflavin (B2)	(55%) 0.660 mg
Niacin (B3)	(15%) 2.220 mg
Pantothenic acid (B5)	(3%) 0.125 mg
Vitamin B6	(92%) 1.200 mg
Folate (B9)	(10%) 40 µg
Vitamin C	(62%) 51.7 mg
Minerals	
Calcium	(19%) 185 mg
Iron	(31%) 4.00 mg
Magnesium	(41%) 147 mg
Manganese	(17%) 0.36 mg
Phosphorus	(16%) 112 mg
Potassium	(7%) 337 mg
Sodium	(1%) 9 mg
Zinc	(6%) 0.6 mg
M. oleifera pods, raw	
Nutritional value per 100 g (3.5 oz)	
Energy	37 kcal (150 kJ)
Carbohydrates	8.53 g
Dietary fiber	3.2 g
Fat	0.20 g
Protein	2.10 g
Frotein	2.10 g
Vitamins	
Vitamin A equiv.	(1%) 4 µg
Thiamine (B1)	(5%) 0.0530 mg
Riboflavin (B2)	(6%) 0.074 mg
Niacin (B3)	(4%) 0.620 mg
Pantothenic acid (B5)	(16%) 0.794 mg
Vitamin B6	(9%) 0.120 mg
Folate (B9)	(11%) 44 µg
	· · · · ·

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Many parts of moringa are edible,<sup>1</sup> with regional uses varying widely:

- · Immature seed pods, called "drumsticks"
- · Leaves
- · Mature seeds
- · Oil pressed from seeds
- · Flowers

#### Leaves

Nutritional content of 100 g of fresh M. oleifera leaves (about 5 cups) is shown in the table (right; USDA data), while other studies of nutrient values are available.<sup>2</sup>

The leaves are the most nutritious part of the plant, being a significant source of vitaminsh B, vitamin C, provitamin A as beta-carotene, vitamin K, manganese, and protein, among other essential nutrients.<sup>3,4</sup> When compared with common foods particularly high in certain nutrients per 100 g fresh weight, cooked moringa leaves are considerable sources of these same nutrients. Some of the calcium in moringa leaves is bound as crystals of calcium oxalate<sup>5</sup> though at levels 1/25th to 1/45th of that found in spinach, which is a negligible amount.

The leaves are cooked and used like spinach and are commonly dried and crushed into a powder used in soups and sauces.

#### Drumsticks



Drumstick vegetable pods

The immature seed pods, called "drumsticks", are commonly consumed in South Asia. They are prepared by parboiling, and cooked in a curry until soft.<sup>6</sup> The seed pods/fruits, even when cooked by boiling, remain particularly high in vitamin C[7] (which may be degraded variably by cooking) and are also a good source of dietary fiber, potassium, magnesium, and manganese.<sup>7</sup> Seeds

The seeds, sometimes removed from more mature pods and eaten like peas or roasted like nuts, contain high levels of vitamin C and moderate amounts of B vitamins and dietary minerals.

#### Seed oil

Mature seeds yield 38–40% edible oil called ben oil from its high concentration of behenic acid. The refined oil is clear and odorless, and resists rancidity. The seed cake remaining after oil extraction may be used as a fertilizer or as a flocculent to purify water.<sup>8</sup> Moringa seed oil also has potential for use as a biofuel.<sup>9</sup>

#### Roots

The roots are shredded and used as a condiment with sharp flavour qualities deriving from significant content of polyphenols.<sup>10</sup>

#### **Malnutrition relief**

Moringa trees have been used to combat malnutrition, especially among infants and nursing mothers. Since moringa thrives in arid and semiarid environments, it may provide a versatile, nutritious food source throughout the year. Moringa leaves have been proposed as an ironrich food source (31% Daily Value per 100 g consumed, table) to combat iron deficiency. However, further study is needed to test practical applications of using this dietary source and its iron bioavailability.





#### THERAPEUTIC USES:

**On B Cells -** One study using the methanolic extract of the leaves at 250-750mg/ kg in mice has noted an increase in circulating antibody titre and immunoglobulins.<sup>11</sup>

In Arthritis - In a carrageenin model of edema where rats were orally supplemented with 750-1,000mg/kg of a root water extract 30 minutes prior to carrageenin injections, the lower dose was able to suppress edema when measured at one hour (53.5%), three hours (44.6%), and five hours (51.1%) while the higher dose was not more effective and 750mg/kg being somewhat comparable to Indomethacin (10mg/ kg).<sup>12</sup>

**Bacterial Interactions-** When looking at extracts from moringa oleifera leaves (hot and cold water extract, a juice, and an ethanolic extraction) it was noted that the juice had a minimum inhibitory concentration (MIC) in the range of 229-458µg/mL against a variety of bacteria; this was slightly more potent than the ethanolic extract (458-916µg/mL) and water extracts (29.87-58.75mg/mL).<sup>13</sup>

Currently unknown components in the leaves appear to possess somewhat respectable antibacterial properties.

Moringa oleifera can be used to create high activated carbons<sup>14, 15</sup> which are able to sequester and remove cyanobacterial microcystin-LR quite effectively,<sup>16</sup> and the seed extract also appears to be capable of suppressing cyanobacterial growth as 20-160mg of moringa oleifera extract per liter of water is able to suppress growth of Microcystis aeruginosa and cause the colony count to decline.<sup>17</sup>

#### Virology

Moringa oleifera (80% hydroalcoholic extract) appears to have antiviral potential against

hepatitis B (HBV) in vitro with a potency lesser than that of turmeric, Momordica charantia, and Cratoxylum formosum although 30ig/mL still appeared to reduce HBV cccDNA by more than 85%.<sup>18</sup>

#### Kidneys

In mice subject to DMBA-induced kidney who recieved 200-400mg/kg of a hydroalcoholic extract of moringa oleifera (pods) for two weeks prior to DMBA, supplementation was able to dose-dependently reduce changes in oxidative status (with the higher dose normalizing GST and glutathione transferase) and fully normalized changes in renal enzymes (AST, ALP, ALT).[19] The protective effect of moringa oleifera was greater than 0.5-1% Butylated hydroxyanisole (BHA; antioxidant).<sup>19</sup>

Elsewhere, moringa oleifera appears to be protective against gentamicin-induced nephrotoxicity with 150-300mg/kg of the aqueous-ethanolic extract of the leaves.<sup>20</sup>

## Liver

In response to DMBA induced carcinogenesis, 14 days pretreatment with 200-400mg/kg of a pod extract appear to normalize glutathione transferase and GSH levels in the liver as well as liver enzymes with a potency exceeding 0.5-1% BHA.21 Antioxidant-mediated protection has also been noted against antitubercular drug induced toxicity (causing hepatic lipid peroxidation)<sup>22</sup> and against acetominophen toxicity.23, 24, 25 The seed oil also appears to be somewhat hepatoprotective (again attributed to antioxidants) as is seen in a model of hepatitis in rats<sup>26</sup> and one study has noted hepatoprotective effects against a high fat diet<sup>27</sup> where the leaf extract (150mg/kg) as the early phases of liver damage from a high fat diet involves increased â-oxidation of fatty acids (in response to high dietary intake) causing lipid peroxidation.28,29

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In particular against acetominophen toxicity (which causes a production of NAPQI<sup>30</sup> causing glutathione depletion and oxidative stress<sup>31</sup>) moringa oleifera (both flower and leaf extracts) appears to work via preserving glutathione with 200-400mg/kg hydroalcoholic extracts (injection) having comparable potency to 7.35mM injections of N-acetylcysteine.

300mg/kg of the leaf extract of moringa oleifera appears to reduce the ability of ionizing radition to cause lipid peroxidation in the liver when preloaded for 15 days, fully preventing the increase in lipid peroxidation.<sup>32,33</sup>

#### **Colon Cancer**

In a rat model of chemical induced colon carcinogenesis, oral ingestion of the pods of moringa oleifera at 1.5-6% of the rat diet for two weeks prior to toxicity (and continued throughout the study period) resulted in a dose-dependent reduction in colon tumors by 47% (1.5% of the diet), 53% (3% of the diet), and 71% (6% of the diet).<sup>34</sup> These suppressive actions are thought to be related to antiinflammatory actions, as iNOS and COX2 expression were dose-dependently reduced.

## **Interactions with Pregnancy**

#### Lactation

In women during postpartum days 3-5 (after giving birth to preterm infants), supplementation of 250mg moringa oleifera leaf extract twice daily appears to increase milk production in a time dependent manner on the first day of supplementation (31% increase over placebo) as well as the second (48%) and third (165%) day.<sup>35</sup>

#### **CONCLUSION** :

The research on M. oleifera is yet to gain importance in India. It is essential that the nutrients of this wonder tree are exploited for a variety of purposes. M. oleifera has great antidiabetic and anti-cancer properties. More studies are needed to corroborate the primary mechanisms of moringa as antidiabetic and anticancer agents. Research on the antioxidant nature of aqueous extracts on cancer cells needs further inquiry. Studies have proven that moringa causes ROS in cancer cells that leads to apoptosis or necrosis. However, the aqueous extracts also have antioxidants present in them. The exact mechanism of this irony is yet to be explored. The effect of environmental factors affecting the nutrient levels of leaves and other parts of M. oleifera grown across the globe have got its importance.

Further research to isolate endophytic fungi and identify the enzymes or proteins from M. oleifera that are accountable for the anticancer and antidiabetic activity may lead to development of novel therapeutic compounds. The tree as a native to India can become a great source of income for the nation if its potential for highly nutritional food is exploited by the industries and researchers.

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#### ..... Cont. from Page No. 45

- 7- Kakmachi shak used in Gout. (C. Ch. 29-52)
- 8- Kakmachi shak processed with oil and water without salt used as diet in Urustambh (C.Ch.27-25)
- 9- Ghrit processed with kakmachi used in Rat bite (S.K.7-31)
- 10- Oil of Til and kakmachi seeds in equal amount used as nasya for blackening of hairs. (Ras Ratnakar)

#### Part used-

Whole Plant

#### **Dosage:**

Fresh juice 10-20ml

#### **Important formulation:**

Hridayarnava Ras, Maha Visagarbha Taila, Rasa Raja Ras.

#### **Researches:**

- 1- Now a day's kakmachi broadly used as hepatoprotective.
- 2- Steroidal glycosides SN-0, SN-2 and SN-3 at 15 mcg / ml showed inhibition of tumour cells of human uterus. (Ya Kugaku Zasshi 1982)
- 3- Alcohlic extracts reduces levels of alkaline phosphate, ,SGOT, and thymol turbidity are reduced significantly and increased body weight of treated rats significantly increase in RNA concentration of liver was significantly more than that of DNA.(J. Ra. Ay. & Siddha 1980)





# Kakmachi

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## ( काकान् मुञचते धारयति पूजयति इति। )

Latin Name - Solanum nigrum

Family - Solanaceae (Nightshade family)

English Name - Garden Night shade

Hindi Name - मकोय

#### Synonyms:

Dwangmachi

Kakahwa

Vaysi

काकमाची ध्वाङ्क्षमाची काकाह्ना चैव वायसी । काकमाची त्रिदोषघ्नी स्निग्धोष्णा स्वरशुक्रदा ।। तिक्ता रसायनी शोथकुष्ठार्शोज्वरमेहजित् । कटुर्नेत्रहिता हिक्काच्छर्दिहृद्रोग नाशिनी ।। (भा0प्र0 / ग्रड्च्यादिवर्ग 247)

#### **Classical Categorisation:**

Charak - Tikta, Skandha

Sushrut - Sursadi Gana

Vagbhat - Guduchyadi Varga

#### **Properties :**

Snigdha, Usna guna, Tridosaghana, Svarya, Sukrala, Rasayana, Soth hara, Kustha hara, Arshoghana, Jwarahara, Hikka Chardishamak properties are attributed to Kakmachi.

#### **Chemical Constituents:**

Salasonine, Salemargin in leaves, Salasodine from leaves and fruits, Tigogenin in berries, steroidal alkaloids are also isolated.

# Identity, Purity and Strength According to API:

Foreign matter - Not more than 12%

Total Ash - 9%

Acid Insoluble Ash - 1%

Alcohal Soluble Extractive - Not less than 20%

Water Soluble Extractive -70%

#### **Botanical Description:**

It is a branched herb, 1-1.5m height. Leaves are lanceolate, dentate 2-3" long. Flowers are small white, in axillary bunches. Fruits small berry in bunches, rounded 6mm in diameter, black or red on ripen. Seeds discoid 1.5mm in diameter, smooth, minutely pitted, yellow.

#### **Classical Therapeutic Uses:**

- 1- Leaves of kakmachi used in kustha. (C. Su. 3-17)
- 2- kakmachi shak is tridosh shamak, sukra vardhaka, rasayana and kustha nasaka . (C. Su. 27-89)
- 3- Swaras of kakmachi used in kustha.(C.Ch.7-93)
- 4- Kakmachi swaras with Ghrit applied on visarpa (C.Ch.11-88)
- 5- Kakmachi shak used in suska arsha. (C. Ch. 14-124)
- 6- Kakmachi shak used in diet in all types of edema and Kasa (C.Ch.17-60)

.....Cont. on Page No. 44

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# परिषद् समाचार

## तिरूपति में राष्ट्रीय संगोष्ठी एवं राष्ट्रीय कार्यकारिणी की बैठक सम्पन्न

तिरूपति, आन्ध्र प्रदेश में 12—13 फरवरी 2017 को विश्व आयुर्वेद परिषद् इकाई द्वारा ग्रामीण भारत में प्राथमिक स्वास्थ्य सेवा आवश्यकता के लिए आयुर्वेद (Ayurveda for Primary Health care needs in Rural India) विषयक राष्ट्रीय संगोष्ठी, राष्ट्रीय कार्यकारिणी बैठक एवं आयुर्वेद चिकित्सक सम्मेलन का आयोजन किया गया। यह आयोजन श्री वेंकटेश्वर आयुर्वेदिक कालेज, तिरूपति के साथ संयुक्त तत्वावधान में सम्पन्न हुआ। कार्यक्रम का शुभारम्भ माननीय श्री यशो पद नाईक, आयुष मंत्री, भारत सरकार के कर कमलों द्वारा सम्पन्न हुआ। इस अवसर पर डॉ0 के श्री निवास, स्वास्थ्य चिकित्सा शिक्षा एवं परिवार कल्याण मंत्री, आन्ध्र प्रदेश; डी0 पुरन्देश्वरी, पूर्व केन्द्रीय मन्त्री, मानव संसाधन, भारत सरकार; जी0 भानु प्रकाश रेड्डी, प्रो0 सत्येन्द्र प्रसाद मिश्र, संरक्षक, वि0 आ0 प0; प्रो0 बी0 एम0 गुप्ता, राष्ट्रीय अध्यक्ष, वि0 आ0 प0; प्रो0 बी0 पी0 ए0 वेंकटाचारी, राष्ट्रीय उपाध्यक्ष, वि0 आ0 प0; प्रो0 ए0 शंकर बाबू, प्राचार्य, एस0वी0आ0 कालेज, तिरूपति आदि मंच पर उपस्थित होकर वृहद कार्यक्रम के साक्षी बने। डॉ0 एस0 दत्तात्रेय राव, डॉ0 एम0 भास्कर राव ने कार्यक्रम का संचालन किया। डॉ0 के0 वी0 विजय भास्कर रेड्डी, डॉ0 रेनू दीक्षित, डॉ0 जी0 रमेश बाबू, डॉ0 पदमजा, डॉ0 नागमनी से विशेष सहयोग दिया।

भारत वर्ष के प्रत्येक राज्यों से लगभग 700 प्रतिभागियों ने भाग लिया। विभिन्न सत्रों में लगभग 150 शोध पत्र मौखिक एवं 100 शोध पत्र पोस्टर सेशन के माध्यम से प्रस्तुत किये गये। प्रो0 पी0 मुरली कृष्ण के निर्देशन में इन सभी वैज्ञानिक संगोष्ठी का आयोजन सम्पन्न हुआ।आन्ध्र प्रदेश एवं तेलंगाना के पदाधिकारियों ने संयुक्त रूप से इस कार्यक्रम को सफल बनाया। डॉ0 टी0 श्रीनिवास राव, डॉ0 टी0 उदय किरन, डॉ0 के0 हर्षवर्धन अप्पाजी, डॉ0 पी0 जे0 के0 रेड्डी, डॉ0 वी0 पार्वती देवी, डॉ0 ए0 विजेन्द्र रेड्डी, डॉ0 जी यशोधरा, डॉ0 हरि प्रसाद, डॉ0 एम0 परम सुख राव, डॉ0 सुरेश जकोटिया, डॉ0 ए0 श्रीधर, डॉ0 ए0 शामनी रेड्डी आदि ने विशेष सहयोग प्रदान किया।

राष्ट्रीय कार्यकारिणी की बैठक में मुख्य रूप से प्रो0 योगेश चन्द्र मिश्र, प्रो0 अश्विनी भार्गव, प्रो0 बलदेव धीमान, प्रो0 यू0 एस0 निगम, डॉ0 नितिन अग्रवाल, डॉ0 रामतीर्थ शर्मा, डॉ0 के0 के0 द्विवेदी, डॉ0 मनीष मिश्र, डॉ0 शिवादित्य ठाकुर तथा देश के प्रत्येक प्रान्त के पदाधिकारियों ने भाग लिया। दो दिवसीय कार्यकारिणी की बैठक में कार्यक्रमों की समीक्षा, आगामी कार्यों की रूपरेखा पर विस्तृत चर्चा हुई। प्रो0 अश्विनी कुमार भार्गव, जालन्धर को सर्व सम्मति से राष्ट्रीय महासचिव तथा प्रो0 बलदेव धीमान जी को राष्ट्रीय उपाध्यक्ष का उत्तरदायित्व सौंपा गया। इसके अलावा देश के विभिन्न प्रान्तों से आये पदाधिकारियों का दायित्व एवं लक्ष्य निर्धारित किया गया।

# स्व० इन्द्रा गुप्ता स्मृति पदक सम्मान समारोह सम्पन्न

विश्व आयुर्वेद परिषद् एवं राजकीय आयुर्वेद महाविद्यालय, वाराणसी के संयुक्त तत्वावधान में विश्व स्वास्थ्य संगठन के स्थापना दिवस, विश्व स्वास्थ्य दिवस 7 अप्रैल 2017 को महाविद्यालय परिसर में प्रो0

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सत्यपाल गुप्त, पूर्व निदेशक, उत्तर प्रदेश की धर्मपत्नी की स्मृति में स्व0 इन्द्रा गुप्ता स्मृति पदक समारोह का आयोजन किया गया। इस अवसर पर राजकीय आयुर्वेद महाविद्यालय, वाराणसी के 2012 बैच में प्रसूति तन्त्र एवं स्त्री रोग की वार्षिक परीक्षा में क्रमशः सर्वोच्च अंक पाने वाले तीन विद्यार्थियों को स्वर्ण, रजत एवं कांस्य पदक तथा प्रमाण पत्र प्रदान किया गया। स्वर्ण पदक कुमारी आकांक्षा पाठक, रजत पदक कु0 पूजा सिंह तथा कांस्य पदक दिलीप कुमार उपाध्याय को प्राप्त हुआ।

कार्यक्रम के मुख्य अतिथि प्रो0 वनिता आर0 मुरली कुमार, अध्यक्ष केन्द्रीय भारतीय चिकित्सा परिषद् भारत सरकार, नई दिल्ली; विशिष्ट अतिथि प्रो0 ए0 के0 चौधरी, विभागाध्यक्ष, रस शास्त्र विभाग, काशी हिन्दू विश्वविद्यालय, वाराणसी एवं अध्यक्ष श्री रवीन्द्र जायसवाल, क्षेत्रीय विधायक, शहर उत्तरी, वाराणसी थे। प्रो0 एस0 एन0 सिंह, प्राचार्य राजकीय आयुर्वेद महाविद्यालय, वाराणसी ने अतिथियों का स्वागत, विषय स्थापना डॉ0 कमलेश कुमार द्विवेदी, कार्यक्रम सचिव ने तथा कार्यक्रम का संचालन डॉ0 चन्द्र शेखर पाण्डेय ने किया। डॉ0 विजय लक्ष्मी, संयोजक पुरस्कार वितरण समारोह ने विद्यार्थियों का परिचय कराया। इस आयोजन में विश्व आयुर्वेद परिषद के पदाधिकारियों, कार्यकर्ताओं सहित महाविद्यालय के समस्त शिक्षक, चिकित्सक कर्मचारीगण एवं छात्र—छात्राओं की उपस्थिति रही। इस आयोजन में डॉ0 मनीष मिश्र, डॉ0 अजय कुमार, डॉ0 रमेश गुप्ता, डॉ0 विजय राय, प्रो0 ए0 के0 सोनकर आदि का विशेष सहयोग रहा।

## छात्र ईकाई, काशी हिन्दू विश्वविद्यालय का नव सम्वत्सर समारोह

काशी हिन्दू विश्वविद्यालय की छात्र ईकाई ने नवसम्वत्सर के अवसर पर नवीन व्याख्यान माला की शुरूआत की। प्रो0 आर0 के0 सिंह, आचार्य, स्कूल ऑफ मैनेजमेंट साइंस, वाराणसी ने 'आयुर्वेद छात्रों के लिए समय प्रबन्धन' विषय पर व्याख्यान दिया। यह कार्यक्रम दिनांक 01 अप्रैल 2017 को द्रव्यगुण विभाग के सेमिनार कक्ष, आयुर्वेद संकाय, बी0एच0यू0, वाराणसी में प्रो0 के0 एन0 द्विवेदी की अध्यक्षता में सम्पन्न हुआ। कार्यक्रम में मुख्य रूप से प्रो0 जे0 एस0 त्रिपाठी, डॉ0 पी0 एस0 व्याडगी, डॉ0 आशुतोष पाठक, डॉ0 उमेश चन्द्रा, डॉ0 विजय राय, डॉ0 रानी सिंह, डॉ0 डी0 एन0 एस0 गौतम, डॉ0 के0 के0 द्विवेदी, डॉ0 अजय पाण्डेय उपस्थित थे। श्री अभिनव, सुशील, धनन्जय, शशांक, राहुल, ऋचा, अंजली, श्रुति आदि विद्यार्थियों ने मुख्य रूप से कार्यक्रम को सफल बनाने में सहयोग दिया।

## वाराणसी में नव सम्वत्सर समारोह

विश्व आयुर्वेद परिषद् काशी के द्वारा दिनांक 29 मार्च 2017, बुधवार को राजेन्द्र प्रसाद घाट पर नव संवत्सर 2074, हिन्दू नव वर्ष मिलन समारोह का आयोजन किया गया। प्रातः सूर्योदय के समय उगते सूर्य को अर्ध्य देकर नवसम्वत्सर का स्वागत किया गया। सदस्यों द्वारा अर्ध्य के पश्चात एक दूसरे से गले मिलकर नये वर्ष की बधाई दी गयी तथा सबके उत्तम स्वास्थ्य की कामना की गयी।

इस अवसर पर अध्यक्ष वैद्य राजीव शुक्ल तथा सचिव वैद्य सुभाष श्रीवास्तव ने अपने उद्बोधन में स्वास्थ्य रक्षा के सूत्र बताये तथा स्वच्छता मिशन में जुड़ने की अपील की। इस अवसर पर वैद्य ध्रव कुमार

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अग्रहरि, डॉo केo केo द्विवेदी, डॉo सुमन मिश्रा, डॉo भावना द्विवेदी, डॉo पीयूष त्रिपाठी, डॉo अनिल मिश्र, डॉo निवेदिता, डॉo अश्विनी गुप्ता, ऋचा, डॉo अनुपमा गुप्ता, डॉo मनीष मिश्र, डॉo अभिषेक, डॉo दिलीप, डॉo उत्तम जायसवाल, डॉo अनुज, डॉo शुभ्रांशु आदि ने घाट पर स्वच्छता के लिए आमजनों को प्रेरित किया।

# भोपाल में आयुर्वेद छात्रों को बताए समय प्रबन्धन के तरीके

विश्व आयुर्वेद परिषद् द्वारा राजधानी के हिन्दी भवन में छात्र—छात्राओं के लिए विशेष कार्यशाला का आयोजन किया गया। इसमें कैरियर सलाहकार व व्यावसायिक प्रशिक्षक, श्रीमती दीपा आत्याचित ने समय प्रबन्धन तथा संवाद कौशल पर आयुर्वेद के छात्रों को विस्तार से जानकारी दी। साथ ही उन्होंने रूचिकर ढ़ंग से छात्र—छात्राओं को यह भी बताया कि आज के समय में हम किस तरह से प्रतियोगिताओं का सामना करें और व्यवहारिक जीवन में अपने आप को किस तरह से कसौटियों पर खरा उतारें, ताकि एक बेहतर तरीके से हम समाज में अपना स्थान बना सकें।

हिन्दी भवन में आयोजित इस कार्यशाला में शहर के पांचों आयुर्वेद महविद्यालयों, खुशीलाल शर्मा, आर. डी. मेमोरियल, मानसरोवर कालेज, वीणावादिनी तथा राजीव गांबी महाविद्यालय, के सैकड़ों छात्र—छात्राओं ने हिस्सेदारी की। कार्यक्रम का सफल आयोजन डॉ0 सौरभ मेहता व विकास, भोपाल द्वारा किया गया। इसमें विशेषज्ञों ने उन तमाम मुद्दों पर जानकारी दी, जिनपर आज के दौर में विद्यार्थियों को चर्चा करना चाहिए। कार्यक्रम की संयोजक डॉ0 बबिता शर्मा ने बताया कि आज के समय में आयुर्वेद चिकित्सा पद्धति की बहुत अधिक जरूरत है, लोगों का रूझान भी इस ओर बहुत है, लेकिन हमारे चिकित्सक उसे लोगों तक सही तरीके से अपनी बात नहीं पहुंचा पर रहे हैं। हालांकि इसमें कुछ गुंजाइस है और हमारा संवाद कौशल अच्छा होगा, तो ज्यादा से ज्यादा लोगों तक आयुर्वेद चिकित्सा को पहुंचाया जा सकता है। उन्होंने संवाद कौशल बढ़ाने की आवश्यकता पर जोर देते हुए छात्र—छात्राओं से कहा कि समय का सदुपयोग करें और अपना व्यक्तित्व निखारें। अंत में सभी का आभार प्रदर्शन किया गया।

# धन्वन्तरि सेवा यात्रा में विश्व आयुर्वेद परिषद् की सहभागिता

नेशनल मेडिकोज आर्गनाइजेशन, सेवा भारती पूर्वांचल और विश्व आयुर्वेद परिषद् के संयुक्त तत्वावधान में 14वीं धन्वन्तरि सेवा यात्रा का आयोजन किया गया। देश के विभिन्न क्षेत्रों से आये चिकित्सकों के साथ विश्व आयुर्वेद परिषद् चिकित्सक भी पहुंचे। काशी हिन्दू विश्वविद्यालय छात्र ईकाई के मृत्युंजय के नेतृत्व में डॉ0 योगेन्द्र, डॉ0 शैलेन्द्र, देवेन्द्र, रंजन, सुधांशु, धनंजय, विवेक, धीरेन्द्र ने अपनी सेवायें दी। डॉ0 के0 के0 द्विवेदी के निर्देशन में इन सदस्यों ने उत्तर पूर्व भारत के विभिन्न प्रान्तों के गाँवों में 7 दिन घुमकर जगह—जगह पर शिविर लगाकर निःशुल्क चिकित्सा एवं दवायें वितरित की।



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