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Journal Subscription (For other than members)

Half yearly - Rs. 200.00 per copy

Annual - Rs. 380.00 for two copies

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Address: Dr. D.N. Pande, Chief Editor, GB-5, Lane-2, Ganeshpuri Colony, Susuwahi, Varanasi – 221 005.

#### Tariff for Advertisement in 'Sangyaharan Shodh'

Back Cover Rs. 100000.00-for 15years.

Full Page	-	Rs.	10000.00- annual
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Life	Rs.	5000.00	(for 15 years)

**Editorial Office:** The Chief Editor, Sangyaharan Shodh, GB-5, Lane-2, Ganeshpuri Colony, Susuwahi, Varanasi – 221005.

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## SANGYAHARAN SHODH

# (A Peer-Reviewed International Journal)

Volume 23, Number 2, IJIFACTOR: 4.68 August 2020

Available online at <u>www.aaim.co.in</u> Journal Ranking: A+

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Weakness due to Diabetes

# Editorial

# Sangyaharan:

The gateway for the development of Ayurved as a Total Health System

Dr. D. N.Pande, Chief Editor Sangyaharan Shodh, Professor & Head, Department of Sangyaharan, I.M.S., B.H.U., Varanasi-221005. <u>dnpande@gmail.com</u> Mob. 09415256461

Vision and Mission of Bharat Ratna Pt. Madan Mohan Malviya ji:

Bharat Ratna Pt. Madan Mohan Malviya ji dreamed to establish Ayurved as a Total Health System in pre independent India. He established Ayurved College in Banaras Hindu University with an integrated course curriculum.

The Ayurved College, Banaras Hindu University was started in the year 1922 in the premises of Faculty of Oriental Learning and Theology and further a separate Ayurvedic college was established in 1927 with a six years Course Ayurvedacharya with Medicine and Surgery (AMS).

Bharat Ratna Pt.Madan Mohan Malviya ji mentioned in the vision document of Banaras Hindu University:

Of the Upavedas, particular attention will be bestowed on the Ayurved. It will be brought up-to-date by the incorporation of the result achieved by other nations in anatomy, physiology, surgery and other department of the medical sciences.

The ultimate aim of this department will be to provide the whole country with Vaidyas well qualified both as Physician and surgeon.

A Botanical garden will be maintained for the culture of herbs and roots for medical use , Vegetables and Plants for study of fibres, dyes and tans.

There will be laboratories for teaching and preparation of Rasas, Tail, Aswas and other medicines and for carrying on original investigation and experiments.

■ Eminent graduates and licentiates in European medicine and surgery will be employed to give instruction and training to the students of Ayurved and to help the Vaidyas in preparing works in Sanskrit and Indian vernaculars on Anatamy, Physiology, Surgery, Hygiene and other sciences auxiliary to the Ayurved. (History of the B.H.U., page 66, page125.) This was the seed of Integrated Health Education and thus Banaras Hindu University produced thousand of Under Graduate and Post Graduate –trained in this integrated system.

Banaras Hindu University, now proved that it is a successful model of medicine for the entire world population.

Only the need of the time is to be accepted it by the Governments and to frame an act to practice integrated system of medicine which is most beneficial for mankind.

I pray to the Chairman Board of Governors, C.C.I.M. New Delhi to frame new integrated course for Health services of India.

As an example: If any one is suffering with acute pain in a remote area and there is no M.B.B.S. Doctor but there is a doctor of AYUSH system- trained and taught in Integrated system who is competent as well as Allopathic Doctor. Is it not unfortunate that the patient who need immediate relief but the doctor of AYUSH who can provide him immediate relief is not allowed by country law to prescribe a simple pain relievers and thus is helpless. The patient has to suffer with pain till the M.B.B.S. doctor is approached. Is this not a crime to the society?

A doctor should be able to provide immediate relief to his patient by any means suitable to him. In many conditions Ayurvedic drugs can not help and in the same way Allopath is also fail in many conditions. Therefore integration is needed.

**Turning Point:** Now after 73 years in independent India we have to decide –what we want ?

- 1. Ayurved as a Total Health System with Astang Ayurved including recent 22 branches as per Gazette 2005 or
- 2. Ayurved as a market of Massage Centre/ Spa and Ayuvedic kitchen/Ayurvedic Nutritional foods.

If our choice is number 1(one) then we have to frame our country Law in favor of Integration with teaching and training which is already continued since 1922.

If our choice is number two (2) then we have to frame our country Law in favor of Shuddha Ayurved and to stop teaching and training of all the surgical branches because these all can be practiced by Physicians. There is no need of these all 14 departments. 14 Departments were framed with the vision of integration and to support Ayurved as a Total Health System which will not be fulfilled with option number two (2).

#### National scenario:

There is conflict of interest: Interest of Government is earning foreign currency & Interest of Ayurvedic Pharmacy is to earn money from international and national market.

Thus Ayurved: is known internationally as Complimentary/Alternative/ Supplementary Medicine not as Total Health System .

**International scenario:** Monopoly of Western Medicine and Multinational Pharmaceuticals Companies do not like to make space for Ayurved as a Total Health System. They do not consider Ayurved as Medicine.

In our own country: All the eight parts of Ayurved (Astang Ayurved ) is not nourished equally and even the Ayurvedic Post Graduates in surgical branches are deprived from practicing Surgery? Only Kshar Sutra is allowed to practice.

I will discuss the following facts in favor of Ayurvedic surgeons:

Sushrut Samhita- is an oldest book on surgery.

Sushruta: is recognized as Father of Surgery/ Father of Plastic Surgery .

Several surgical procedures are mentioned in Sushruta Samhita: practiced by Ancient surgeons with Rajagya (permission of then Kings).

**Instruments mentioned in Sushruta Samhita:** Most relevant and with accuracy 101 Yantra(Instuments) and 20 Shastra (Sharp Instuments) are described by Acharya Sushrut and was practiced effectively.

**Wound Management:** Avery good standard principle and practical knowledge of Wound Management is mentioned by Acharya Sushrut.

द्वौ व्रनौ भवतः .....षोड्श् प्रकार इत्यैके । ( स्. चि. 1/3,5 )

**Qualities of ideal incision :** 

# आयतश्च् विशाल्श्च् सुविभक्तो निराश्रय:। प्राप्तकालकृतश्चापि व्रण: कर्मणि शस्यते। स् चि ५/९

**Bhagna Management:** Most relevant and with accuracy Bhagna (Fracture and Dislocation) and its managements are described by Acharya Sushrut and were practiced effectively.

Avery good standard principle and practical knowledge of Bhagna (Fracture and Dislocation) Management is mentioned by Acharya Sushrut.

# द्विविधं हि भग्नं सव्रणं अव्रणं च। मा नि मधुक़ोश। भग्नं सन्धिमनाविध्दमहीनाड़ग्मनुल्वणम ।

सुखचेष्टाप्रसारं च संहितं सम्यगादिशेत ।। सु चि 3/70

**Plastic and reconstructive Surgery:** Avery good standard principle and practical knowledge of Sandhan Karma (Plastic and reconstructive surgery is mentioned by Acharya Sushrut.

गंडादुत्पाट्य मांसेन सानुबन्धेन जीवता। कर्णपालीमपालेस्तु कुर्यान्निर्लिख्य शास्त्रवित। सु सू१६/१४

# Practice of different type of surgery for Ashmari & Arsha (Stones and haemorrhoids):

Avery good standard principle and practical knowledge of different type of surgery for Ashmari & Arsha (Stones and haemorrhoids) is mentioned by Acharya Sushrut. He mentioned specific indications of different type of eight type of surgical procedures.

# छेद्या भगन्दरा ग्रन्थि: श्लैष्मिकतिलकालक:।

# व्रणवत्मार्ब्दान्यर्श चर्म कील़ो\$स्थिमांसगम।। सु सू 25/3

## मंडलाग्र करपत्रे स्याता छेदने लेखने च, वृद्धि पत्र नखशस्त्र, मुद्रिकोत्पत्र,

#### अर्द धाराणि छेदने भेदने च।

#### Acharya Sushruta also mentioned the seriousness of Prognosis.

# अक्रियायां धूवों मृत्युः क्रियायां संशयो भवेत।

# तस्मादापृच्छुय कर्यव्य मीश्वरं साधचकारिणा।। स् चि ७/ २८-२९

Acharya Sushruta also mentioned about the importance of learning of other specialities with theoretical and practical knowledge.

# यथा खरश्चन्दनभारवाही भारस्य वेत्ता न तु चंदनस्य।

# एवं हि शास्त्राणि बह्न्यधीत्य चार्थेषु मूढाः खरवद्वहन्ति ।।स् सू ४/४

Acharya Sushruta also mentioned different methods of management of Trauma and Foreign bodies.

## शल्यं द्विविधं । अववध्द, अनवबध्दं चेति। सु सू २७/३

#### Acharya Sushruta also mentioned about the Quality of Shalyagya- Surgeon:

#### शौर्यमाशुक्रिया शस्त्रतैक्ष्ण्यज्ञस्वेदवेपथु।

#### असमोहश्च वैदयस्य शस्त्रकर्मणि शस्यते।।स् सू ५/१०

Acharya Sushruta also mentioned about the importance of Poorva Karma, Pradhan Karma and Paschat Karma.

#### त्रिविध कर्म-पूर्वकर्म, प्रधानकर्म,पश्चातकर्मेति।स् सू ५/३

He mentioned the concept of nil orally before surgery:

#### मूढगर्भोदराशों अश्मरी भगन्दरम्खरोगेष्वभुक्तवतः कर्म कुर्वीत। सु सू ५/१६

He mentioned a method to make the patient unconscious (Sangyaharan) during

surgery:

# प्राकशस्त्रकर्मणश्चेष्टं भोजयेदात्रं भिषक।

# मद्यपं पायेयेनमद्यं तीक्ष्णं यो वेदनासहः।।स् सू १७/११

#### **Surgery today:**

- Present day advancement in surgery is due to advancement of tools and technology developed by Physics a branch of science, computer & electronics science.
- Present day advancement in Anaesthesia is due to advancement in the field of Physics, Chemistry, computer & electronics science.

All the devices are invented by scientists to facilitate the surgery and anaesthesia. Thus question arised- Why Ayurvedic surgeons are deprived from surgery?

The world is progressive and using each other's inventions for betterment of mankind.

Only Ayurvedic surgeons are deprived from practicing surgery due to hindrance of I.M.A. which is controlled by western world.

Surgery is our ancient wisdom and we are equally beneficiary of newer development in the field of science.

# The Key Role of Sangyaharan in the development of different branches of Ayurved:

## Shalya Tantra:

Shalya Tanta : Kchar Sutra therapy is recognized globally.

It can not performed without help of Sangyaharan.

Kchar Sutra application in even a very small tract is not possible without Pain.

Everyone will like a painless procedure and thus Sangyaharan is required. For different miner, moderate and major surgical procedures require Sangyaharan.

During these procedures some times shock may be faced and Sangyaharak will be required to resuscitate.

Post operative period also it may happen and Sangyaharak will be required to Resuscitate.

#### Shalakya Tantra:

We have enriched heritage of many procedures mentioned in Sushrut Samhita.

To practice this procedures Sangyaharan is an essential part.

During these procedures some times shock may be faced and Sangyaharak will be required to resuscitate.

Post operative period also it may happen and Sangyaharak will be required to resuscitate.

#### Kaumarbhrit: Sangyaharan services are required for:

- Canulation,
- N.I.C.U.,
- Central Line and
- resuscitation etc. ?

# Kay chikitsa:

- Panch Karma emergency.
- Hrid Roga -C.C.U.
- For Canulation in Murchha- unconscious patients.
- Atyayik Chikitsa- I.C.U.,

# Central Line and resuscitation etc. ?

# Dravyaguna & Ras Shastra:

# There is lot of scope of Research for Dravyaguna and Ras Shastra specialty

# of Ayurved:

- Ayurvedic Premedication:
- Ayurvedic Analgesics:
- Ayurvedic Post operative Care Medicines:
- Ayurvedic Sole Agents for anaesthesia :

#### Upshami Chikitsa-Palliative Care: Sangyaharan services are required for:

- Critically ill patients.
- Malignacies.
- C.C.U.
- For Canulation in unconscious patients.
- I.C.U.,
- Central Line and resuscitation etc. ?

#### **Chronic Pain Management.**

- Integrated methods: P.N.B. with Agni Karma, Jalaukavacharan and Siravyadh.
- Pain Management Ayurvedic Clinics
- Palliative Care Ayurvedic Clinics

#### Newer development in the Department of Sangyaharan -B.H.U.:

- Workshop on Cardio Cerebral Resuscitation started in the year 2000.
- 1<sup>st</sup> Workshop w.e.f. 01/03 to 15.03.2000.
- Since then 60 Workshop had completed.
- More than 500 participants from all over the country were trained.
- C.C.P.R. training was given to School students and Rotarian too e.g. C.H.B.S Kamachha, Central school, B.H.U., B.N.S. School, Naria, Navneeta Kuwar Public School, Varanasi Rotary Club & State Ayurved college Varanasi, NIMA Mirzapur.
- A book on C.C.P.R. was published .
- A Six Month Certificate course on C.C.P.R. and First Aid at University label is is started from 2020.
  - One Year full Time Certificate course on Atyayik Chikitsa-Intensive Care is started from 2020.
  - One Year full Time Certificate course in Ayurvedic Pain Managent was started from 2016.
  - Two Year full Time Diploma course in Ayurvedic Pain Managent is started from 2020.

**Conclusion:**Sangyahran is gateway for the development of Ayurved as Total Health System.

#### Sangyaharan is not only to anaesthetize the patient but it is manifold:

- 1. Sangyaharan- as Anaesthesia.
- 2. Sangyaharan- Integrated Pain Management
- 3. Sangyaharan-Integrated Palliative Care
- 4. Sangyaharan- Integrated Critical Care

Therefore Sangyaharan should be teach and to be train by Sangyaharak in each Ayurvedic institution at U.G. and P.G. Label so that we can produce the number of hand for all of the above facilities.

# The Central and State government should frame new Act in favor to legalize the practice of Integrated Medicine.

Thus **Astang Ayurved** will be a Total Health System and will serve the world population very effectively.

- Ayurved is based on Astang which is consisting of Shalya, Shalakya and Prasuti Tantra -Kaumarbhrit.
- Ayurved is preventive as well as curative.
- Integrated graduate and Post graduate should be allowed to use modern tool and technology including recent development in medicine to restore our own surgical heritage - Shalya, Shalakya and Prasuti Tantra- Kaumarbhrit.
   Last but not the least Sangyaharan is integral part of surgery and it's

#### role is significant for advancement of Shalya, Shalakya , Prasuti Tantra and

#### Kaumarbhrit.

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# Ayurvedic Management of COVID-19 a Pandemic

#### \*Dr Sushma \*\* Dr Rakesh Kumar Singh

#### **ABSTRACT:**

Avurveda is the only science which teaches us equal knowledge of medicines to cure disease and rules & regulations to maintain health in whole life span. Obviously it is designed to strengthen generation providing good health and we all know that health is the only need in achieving dharma, artha, kaama & *moksha* in life. *Roga* (disease) is the enemy to a person which depletes the lifespan along with his prosperity<sup>1</sup>. There are four main types of diseases: Infectious diseases, deficiency diseases, hereditary diseases (genetic and non-genetic), and physiological diseases. Infectious diseases are disorders caused by organisms- such as bacteria, viruses, fungi, or parasites. Many organisms live in or on our bodies. They are normally harmless or even helpful. But under certain conditions, some organisms may cause diseases. There are many types of viruses that cause a wide variety of viral diseases. Coronavirus was first seen in Wuhan city, Hubei Province, China on 31<sup>st</sup> December 2019 causing acute respiratory disease. In the end of year 2019, there were lots of cases of Pneumonia in China. Investigations revealed that it was caused by previously unknown virus. This virus consists of a genetic material enveloped by a covering with protein spikes. These protein spikes give an appearance of a crown, and thus named corona virus. Now it is known as 2019 Novel Corona virus. The disease caused by this virus is named as COVID-19 (Corona Virus Disease-19). The mortality rate (MR) of this novel corona virus differs from country to country depending on population, infection and deaths caused due to the disease. Along with some Ayurvedic medicines as mentioned in our texts and proper diet, and following *dinacharya* with *Pranayam*, *Yogasana*, Meditation and preventive measures we can easily cure COVID-19.

Key words: Corona virus, COVID-19, Dinacharya.

#### Conflict of Interest: None.

#### Ethical Clearance: N.A.

**Introduction**: As we are well aware of Corona virus disease (COVID-19); it is a worldwide epidemic (Pandemic). People are in a panic, schools are closed, roads are closed, cities are closed and everybody has to stay in their homes with their family. In many countries there is a condition of mandatory lockdown. Hence it is a very critical time. As we know the effects of COVID-19 and the fact that there is no curative treatment available in any system of medicine in the world. It is mandatory for the whole community to learn to live with COVID-19 by following proper life style to boost immunity and promoting positive health.

# अथातो जनपदोदध्वंसनीयं विमानं व्याख्यास्यामः॥१॥

Charaka Samhita, Vimana sthana, Chapter -3, sloka-1

\*M.S (Prasuti evam Stri Roga), Assistant Professor, Department of Prasuti evam Stri Roga \*\* Professor, Department of Shalakya tantra, Dr Vijay Ayurvedic Medical College Hospital and Research Centre Varanasi, U.P. Acharya Charaka described Janpadoddhvamsa<sup>2</sup> in Charaka Samhita, Volume -1, Vimana sthana and in it, there is a chapter called "Janapadodadhwamsaneeyam vimanam", which refers to world-wide epidemic or pandemic. Here Acharya Charaka has explained about the causative factors and treatment of Janapadodhwamsa vyadhi.

#### Meaning of Janapadoddhwamsa :

The word Janpadoddhvamsa is made up of two words viz. Janapada and uddhwamsa. Here Janapada means a community and Uddhwamsa means destruction. Therefore, Janpadoddhwamsa means destruction of entire community of the world. Here Acharya Charaka says this is a great opportunity to stay at home.

#### Causative Factors of Janapadoddhwamsa:

द्विविधो हेतूर्व्याधिजनकः प्राणिनां भवति- साधारणः, असाधारणश्च;

तत्रासाधारणं प्रतिपुरुषनियतं वातादिजनकमाहारायभिधाय

# बह्जनसाधारणं वातजलदेशकालरूपं साधारणरोगकारणमभिधातुं

जनपदोद्ध्वंसनीयोऽभिधीयते॥१-२॥

Charaka Samhita, Vimana sthana, Chapter -3, sloka-1, nakrapani)

(Chakrapani)

Causative factors of the disease in epidemic can be classified into two categories. These are-

1. Sadharana-Those factors pertaining to individual.

2. Asadharana- Those common to living beings.

Person who doesn't follow the rules and regulations of diet along with erratic behaviour leads to aggravation of *vatadi doshas* and manifest the diseases in that individual. Other causative factors like vitiated air, vitiated water, vitiated land and vitiated season affect several individuals residing in that locality is called *Janapadoddhwamsa*.

Purvaroopa of Janapadoddhwamsa :

...न हि सम्यगुद्धृतेषु सौम्य! भैषज्येषु सम्यग्विहितेषु

#### सम्यक् चावचारितेष् जनपदोद्ध्वंसकराणां विकाराणां

# किञ्चित् प्रतीकारगौरवं भवति||४||

Charaka Samhita, Vimana sthana chapter 3/4, Page 692

This states that when a medicine collected in proper time before epidemic and prepared step wise so that it contains all the properties of *rasa, guna, veerya ,vipaka, prabhava* can be used in the treatment of worldwide epidemic.

# एवंवादिनं भगवन्तमात्रेयमग्निवेश उवाच- उद्धृतानि

खलु भगवन्! भैषज्यानि, सम्यग्विहितानि,

सम्यगवचारितानि<sup>[1]</sup>च; अपि तु खलु जनपदोद्ध्वंसनमेकेनैव

व्याधिना युगपदसमानप्रकृत्याहारदेहबलसात्म्यसत्त्ववयसां

मन्ष्याणां कस्माद्भवतीति<u>|</u>७||

Charaka Samhita, Vimana sthana chapter 3/5, Page 692

According to this sloka Acharya Charaka in Charaka Samhita raised a query via Agnivesha regarding the causes of *Jananpadoddhwamsa* (worldwide epidemic) caused by a single disease (*vyadhi*). That how can a well prepared medicine (having proper *rasa, veerya,* and *vipaka*) work on different persons having different *prakriti, aahara, deha, satmya, mana and aayu at* one time in *janapadoddhwamsa*. In other words, how the disease manifest to the whole locality even then people residing in the area are of different constitution, age, sex, physical strength, homologation, mental faculties?

तम्वाच भगवानात्रेयः- एवमसामान्यावतामप्येभिरग्निवेश!

प्रकृत्यादिभिर्भावैर्मनुष्याणां येऽन्ये भावाः

सामान्यास्तद्वैगुण्यात् समानकालाः समानलिङ्गाश्च

व्याधयोऽभिनिर्वर्तमाना जनपदमुदध्वंसयन्ति

ते तु खल्विमे भावाः सामान्या जनपदेषु भवन्ति;

तदयथा- वायुः, उदकं, देशः, काल इति 🎼

Charaka Samhita, Vimana sthana chapter 3/6, Page 692

On this question Bhagawan Atreya answered to Agnivesha that although persons have different *bhavas*(like *prakriti, aahara, deha, satmya, mana and aayu*) yet there are other some common *bhavas*(factors), which get vitiated at one time and cause a disease having similar signs and symptoms. This disease destructs the entire community causing worldwide epidemic (*Janapadoddhwamsa*). These common *bhavas*(factors) causing *Janapadoddhwamsa* are *vayu, jala, desha and kala*. That is to say even then there is a development of a disease to the whole region inspite of having different constitutions etc. It is due to certain factors which are common to all individuals and their vitiation brings abnormality in the whole country with the same set of symptomatology leading to the destruction of that particular region is called *Janapdoddhwamsa*.

Vatajanya Janapadoddhwamsa(Air Epidemic)-

तत्र वातमेवंविधमनारोग्यकरं विद्यातुः

तद्यथा-यथर्तुविषममतिस्तिमितमतिच

लमतिपरुषमतिशीतमत्युष्णमतिरूक्षमत्यभिष्यन्दि

नमतिभैरवारावमतिप्रतिहतपरस्परगति

मतिकृण्डलिनमसात्म्यगन्धबाष्पसिकतापांशुधूमोपहतमिति (१);

Charaka samhita Vimana Sthana 3/6/1

Air becomes injurious to mass people due to contamination caused by-

- Absence of fresh and healthy air.
- Excessive moisture in air.
- Excessive dryness in air.
- Excessive cold air.

- Excessive hot air.
- Excessive roughness or humidity in air.
- Air polluted with unwholesome smell, vapor, gravels, ashes and smoke.

#### Janapdoddhwamsa due Dushta jala (water Epidemic)

# उदकं तु खल्वत्यर्थविकृतगन्धवर्णरसस्पर्शं

# क्लेदबह्लमपक्रान्तजलचरविहङ्गम्पक्षीणजलेशयमप्रीतिकरमपगतग्णंविद्यात्(२);

Charaka Samhita, Vimana Sthana, chapter -3, sloka 6/3

Water becomes contaminated and manifests diseases to the whole community in that locality. The nature of contaminated water are-

• Enormous change in smell, color, taste and touch as compared to normal pure water.

- Deserted by aquatic birds.
- Reduction of aquatic animals in water.
- Unpleasant smell due to contamination.
- In Ashtanga Sangraha two more factors were included. These are-
- Water comes from bad or polluted area.
- Reservoirs are dried out.

#### Deshajanya Janapadoddhwamsa(Land Epidemic)-

#### पुनःप्रकृतिविकृतवर्णगन्धरसस्पर्शंक्लेदबहूलम्पसृष्टसरीसृपव्यालमशकशलभ

मक्षिकामूषकोलूकश्माशानिकशकुनिजम्बूकादिभिस्तृणोलूपोपवनवन्तं

प्रतानादिबहलमपूर्ववदवपतितशुष्कनष्टशस्यंधूमपवनं

प्रध्मातपतत्रिगणम्त्कुष्टश्वगणम्द्भान्तव्यथितविविध

मृगपक्षिसङ्घमृत्सृष्टनष्टधर्मसत्यलज्जाचारशीलगुणजनपदं

शश्वत्क्षभितोदीर्णसलिलाशयं<sup>(२)</sup>प्रततोल्कापातनिर्घातभूमिकम्पमतिभयारावरूपं<sup>(३)</sup>

रूक्षताम्रारुणसिताभ्रजालसंवृतार्कचन्द्रतारकमभीक्ष्णं

# ससम्भ्रमोद्वेगमिव सत्रासरुदितमिव सतमस्कमिव

गुह्यकाचरितमिवाक्रन्दितशब्दबह्लं चाहितं विद्यात् (3);

Charaka Samhita, Vimana Sthana, chapter -3, sloka 6/3

Characteristic features of such land are-

• Abnormal change of color, smell, taste, and touch of the sand than normal one.

• Excessive moistures in land.

• Land is full of serpents, wild animals, mosquitoes, locusts, flies, rats, owls, vultures, jackals etc.

• Land is full of grass, creepers, and diffusing plants. Land appears to look differently.

- Land is full of fierce look an d cries in nature.
- Ashtanga Sangraha included two more points.
- These are-
- A Land full of unhealthy foods and herbs.
- Land witnesses various frequent natural calamities.

#### Janapadoddhwamsa due to Dushta Kala-

कालं तु खलु यथर्तुलिङ्गाद्विपरीतलिङ्गमतिलिङ्गं हीनलिङ्गं चाहितं व्यवस्थेत् (4);

इमानेवन्दोषयुक्तांश्वतुरो भावाञ्जनपदोद्ध्वंसकरान् वदन्तिकुशलाः;अतोऽन्यथाभूतांस्तु

# हितानाचक्षते॥७॥

# विगुणेष्वपि खल्वेतेषु जनपदोदध्वंसकरेषु भावेषु भेषजेनोपपाद्यमानानामभयं

# भवति रोगेभ्य इति||८||

Charaka Samhita, Vimana Sthana, chapter -3, sloka 6/4,

These points indicate abnormal seasons-

Appearance of features contrary to normal season like excessive manifestation of symptoms or deficient manifestation of symptoms or abnormal appearance of features in respective seasons. For example- Extreme summer in summer or Lack of summer in summer or appearance of rain or cold in summer.

#### Effect of Janapadoddhwamsa-

#### According to Ashtanga Sangraha, Sutra sthana 9/77,

Contaminated air, water, land and season are difficult to avoid because they are powerfully bad in their succeeding order and their effects are also unpredictable.

• Country may be completely destructed by the polluted air, water, land and season because these manifest various dreadful diseases. These diseases can be managed with difficulty with proper assurance and medicaments.

## Aganatuka Jwara wsr COVID-19

According to Charaka Samhita, Nidanasthana 1/32, Acharya Charaka has explained 7 types of *Jwara in Jwaranidana*. These are-

• 3 Kinds of *Jwara* due to *Dosha* separately : Vataja(V), *Pittaja(P)*, *Kaphaja(K)* 

• 3 Kinds of *Jwara* due to two *doshas* (*Dwandwaja*) : VP, VK, PK

- One kind of *Jwara* due to mixture of three *doshas* (*Sannipataja*): VPK
- 8<sup>th</sup> kind of *jwara* is *Aganatuka Jwara*.

# कामशोकभयक्रोधैरभिषक्तस्य यो ज्वरः॥११४॥

# सोऽभिषङ्गाज्वरो ज्ञेयो यश्च भूताभिषङ्गजः

Charaka Samhita, Chikitsasthana 3/114

Under this *Agantuka jwara*, *Acharya* has illustrated *Abhishangaja jwara*<sup>3</sup>. This type of *Jwara* (fever) originates when a person goes against his mental, spiritual, and physical sanctity. Thus he starts the practice of *Pragyaparadha* (violation of natural rules). Thus *Pragyaparadha is* the root mean cause of all the diseases. As a result of which the person gets infected by many *Bhutas* (germs, bacteria, and viruses) causing various diseases in the body.

# कामशोकभयाद्वायुः, क्रोधात् पित्तं, त्रयो मलाः 🛚 १९४ 🛛

Charaka Samhita, Chikitsasthana 3/115

# भूताभिषङ्गात् कृप्यन्ति भूतसामान्यलक्षणाः

# भूताधिकारे व्याख्यातं तदष्टविधलक्षणम्॥११६॥

Charaka Samhita, Chikitsasthana 3/116

This expiains that *vata* gets vitiated by *Kaama*(i.e. sexual activity), *Shoka*(i.e. tragedy), and *bhaya*(i.e. fear) *Pitta* gets vitiated by *krodha*(i.e. anger). *Tridosa* gets vitiated by *Bhutabhishanga*. Symptoms of *jwara* in *Bhutabhishanga* depends on the type of *bhuta*(due to virus, bacteria etc) infecting the body. Here *bhuta* refers to different kinds of virus and bacteria.

According to Charaka Samhita, COVID-19 originates from here. Some people neglected *sheela*, *shoucha*, *aachara* and *ahimsa* and started eating many animals.

Then viruses from animals infect humans. Persons coming in contact with such infected persons get infected. Thus infection spreads.

# विषवृक्षानिलस्पर्शात्तथाऽन्यैर्विषसम्भवैः| अभिषक्तस्य चाप्याहुर्ज्वरमेकेऽभिषङ्गजम्||११७||

# चिकित्सया विषघ्न्यैव स शमं लभते नरः|

# अभिचाराभिशापाभ्यां सिद्धानां यः प्रवर्तते||११८||

Charaka Samhita, Chikitsasthana 3/116-118

Hence, *vishanu* (virus) /*keetanu*(microbes) /*roganu*(germs /*jeevanu*(bacteria), all are called as *bhuta* in Ayurveda. When a person gets infected by these *bhutas* then fever caused is known as *Bhutabhishanga jwara*. After infection *vatadi doshas* get vitiated, and signs and symptoms of the disease appears. Signs and symptoms of a disease depends on the nature of virus/bacteria(*bhuta*).

#### Transmission: Ayurvedic Approach-

प्रसङ्गाद्गात्रसंस्पर्शान्निश्वासात् सहभोजनात् सहशय्यासनाच्चापि वस्त्रमाल्यानुलेपनात् ॥३३॥ कुष्ठं ज्वरश्च शोषश्च नेत्राभिष्यन्द एव च औपसर्गिकरोगाश्च सङ्क्रामन्ति नरान्नरम् ॥३४॥ Sushruta Samhita, nidana sthana, chapter- 5, Kushthanidana, Sloka 32, 33,

According to Sushruta mode of transmission of Viral diseases (COVID-19), has been clearly explained in Sushruta Samhita, in the chapter-*Kushthanidana*. Sushruta says that *charma roga*(skin disease), *jwara*(fever), *shosha*, *netrabhishyanda and other aupasargika roga*<sup>4</sup> (infectious diseases) are transmitted through contact from one person to other by touching, breathing, eating, sleeping, sharing garments and other things together. Normal healthy persons also get infected when they come in contact with such infected persons.

#### **Diagnosis**:

For the prevention of rapid spread of this disease early detection and rapid confirmation is important. Supportive treatments must be given to the affected patients. COVID-19 can be diagnosed with RT- PCR (Reverse transcriptase Polymerase chain reaction) test. This test identifies virus based on its generic finger print. Based on WHO incubation period of this virus ranges from 2 to 10 days.

**Signs and Symptoms:** The signs and symptoms of patients suffering from COVID-19 present at illness onset varies. Most patients over the course of the disease with COVID-19 will experience the following-

- Fever (83–99%)
- Cough (59–82%)
- Fatigue (44–70%)
- Anorexia (40–84%)
- Shortness of breath (31–40%)
- Sputum production (28–33%)

In COVID-19, there are many symptoms which vary from mild to severe. These are –Fever, cough, shortness of breath, pneumonia, kidney failure, and death. Most patients come as a viral Pneumonia which range from mild to severe in presentation with 20% case progression to become a severe disease. Patients usually presents with fever, cough, and shortness of breath. These are the patients who have Myalgia, fatigue, sputum production, confusion, hemoptysis, diarrhoea and nausea and vomiting. Some patients may be asymptomatic also. Approximately 33% cases may lead to complications like acute respiratory syndrome, acute cardiac disease, Acute respiratory distress syndrome (ARDS), Acute Kidney failure( AKI), and even cause secondary infection.

#### Ayurvedic Management-

सुवर्णरूप्यतामाणि त्रपुरीतिमयानि च॥७४॥ जिहवानिर्लेखनानि स्युरतीक्ष्णान्यनृजूनि च। जिहवामूलगतं यच्च मलमुच्छवासरोधि च॥७५॥ दौर्गन्ध्यं भजते तेन तस्माज्जिहवां विनिर्लिखेत्।७६।

Charaka Samhita, Sutra Sthana 5/74-76

#### <u>Dinacharya</u>-

The first important thing that Ayurveda recommends is to follow our *dinacharya* (daily routine). This is the time to follow our *dinacharya*. Get up early in the morning, brush teeth, scrape the tongue, rinse mouth and drink lukewarm water. Tongue should be scrapped by a tongue-cleaner made of gold, or silver, or copper metals preferably.

#### Pranayama-

Then do pranayama. There is a package of eight beneficial pranayama exercises: *Bhastrika, Kapala Bhati, Anuloma Viloma, Brahmari, Ujjayi, Udgeeth,* and finally *Sheetali* and

*Sheetkari.* Just by doing this package of eight *pranayama*, we can strengthen our immune system including our *pranavaha srotas*, our respiratory system. *Rasa vaha srotas*, our lymphatic system will be cleansed, and that way we can boost our energy. This will maintain the balance of *ojas* (immunity, strength), *tejas* (digestion both subtle and gross), and *praana* (vital life force). This way with *pranayam* we can clean

our *prana vaha srotas*, our respiratory system and it will give us a boosting of energy so that we can keep away the virus.

#### Yogasana-

Another interesting health supporting practice is to do some *yogasana* like camel pose, cobra pose, cow pose, boat, bow, and bridge pose, lotus, and lion pose. If you think that is too complicated, just practice *Surya Namaskar*. For *Surya Namaskar*, do a minimum of 7 rounds and a maximum of 12 rounds. We do 7 rounds of *Surya Namaskar* because there are seven *dhātus* (bodily tissues) viz. *Rasa, Rakta, Mamsa, Meda, Asthi, Majja, Shukra* in our body. There are 12 important poses in *Surya Namaskar*. So, practice 7 or12 *Surya Namaskar* and then do *pranayama* and then sit for meditation.

#### Meditation-

For meditation you can do *So'Hum* meditation. For this, sit quietly in lotus pose, *siddhasana* pose (accomplished) or *sahajasana* pose (easy), and inhale with the sound "*so*" in your mind and exhale with the sound "*hum*". This is a great opportunity. When you do this *So'Hum* meditation, you will find the inner joy, and inner beauty. Then sit quietly and feel your presence. Your easiness is awareness. And that awareness is *Satchitanand*. *Sat* means the truth, *Chit* means the awareness, and *Ananda* means the joy. These are not just three words. They are one and the same thing: *sat* is awareness, *chit* is awareness, *ananda* is awareness. Treat these as awareness. We must see what is going on in this world. Everything that is going on will come and go. Nothing is permanent in this world. Even this coronavirus which has come will go on its own. But we must keep on our integrity, harmony, happiness and balance between body, mind and consciousness. Thus we have a great opportunity to be at home and enjoy homemade foods.

#### **Medication-**

• Then take ginger, cinnamon and cardamom tea, regular tea made with one or two leaves of *Tulsi* (holy basil), or even mint, cinnamon and cardamom tea. This herbal tea boosts energy and immune system.

• Achraya Charaka has mentioned simple herbal remedies. Charaka says that you should take *sitopaladi, talisadi, abhrak bhasma, and mahasudarshan churna* even though there is no common cold. Take this preparation, ½ teaspoon three times a day or twice a day, every morning and evening. When tired, you may not want to do that you can make a tea (*chai*) and just put a pinch of *sitopaldi* or pinch of *talisadi* into the *chai*. It will give a good flavour to the tea.

- Take Rasayana eg. Amalaki rasayana, Brahma Rasayana daily. Amalaki swarasa in the dosage of 20mls twice daily.
- Also take Chyavanaprasha one TSF twice daily.
- Take Guduchi decoction 25 ml twice daily
- Take Laxmivilas Rasa 125mg twice daily to subside fever and nasal rrhinitis.
- Take Trikatu Churna 5-10gms daily in divided doses depending on patient's age and construction.
- Take Golden Milk daily. For this take one glass of warm milk with ½ tsp turmeric powder daily at bed time preferably.

Diet- Take Laghu, Ushna Aahara. It is advised to avoid Vatakara Aahara.

At this time take basmati rice and *mung dal khichari* with *sabji* (vegetables). Hot food is good. Avoid cold drinks, chilled water, iced cold beverages, yogurt, cheese or ice cream. The cold foods suppress your *agni* (digestive fire) and exposure to cold will diminish your natural resistance. So, try to avoid the cold things, but you can have hot water. Sip it throughout the day or while eating food; put a little ginger in the water and make a hot ginger tea that is excellent.

There is a wonderful message from Charaka in *Charaka Samhita* for the "Janapadodadhwamsa Vyadhi" chapter. This means that during epidemics, they performed doom doomasvanadyay ... so as they did during the old days; they would play the drum during epidemics. Doom, Doom, Doom. Even now in India, the prime minister told the people, "You ring a bell or clap just to honour those people who are working to fight this coronavirus."

• Even in home you can perform rituals like *pooja*, *arti* (offering of light during *puja*), burn a little camphor and do *arti* or *ghrita* lamp. The others in your household will clap during the *puja*. This clapping sound is a kind of *marma*. It is a *marma* of the heart, *marma* of the lungs, *marma* of the kidneys, and this clapping will strengthen your energy. It will send a message to your internal organs. So this is also *doom doomasvaniaydahya*. Hence *doom doom* is a *mantra*. You can chant *Om..., Hariom...*, or *Jai Ganesha*. All these are very creative, positive vibrations of higher consciousness and they will support your family, friends, neighbours. Thus we will stand together, walk together, share together the same truth.

#### **Prevention-**

Till now no specific medication of this virus has been prescribed. Only supportive care is must. No vaccine to protect the virus. Treatment and vaccines are in development. Preventive measures are:

• Wash your hands properly for at least 21 seconds with soap and water frequently.

• -Sanitize your hands with a hand sanitizer which contains at least 60% alcohol.

-Avoid touching your eyes, nose and mouth with unwashed hands.

• -Sanitize daily frequently touched surfaces with a cleaner which contains at least 70% alcohol.

• -Always use a tissue on sneezing and cough into your elbow, not on your hands.

- Always wear a face mask, If you are sick, to control the spread of virus.
- -Take sunlight for a minimum period of half hour daily.
- Use colloidal silver water that kills germs in 6 minutes only.
- -Fumigate your house with *dhoopan dravyas* like *Guggulu' Agaru. Vacha, Lavan, Sarshap, Nimb, Ghrita* etc.
- Supportive treatments must be given to the affected patients.

• Panchakarma treatment is very effective in eradication of *Janapadoddhwamsa vyadhi* like COVID-19.

• Put 2-3drops of coconut oil/*Goghrita/Anu taila* in your nostrils daily. This avoids entry of virus and bacteria.

- Practice of social distancing up to six feet.
- Stay at home if you or your household member is sick.
- If you can work from home, stay home.
- Avoid unnecessary travel.

Discussion-Properties and action of some of the Ayurvedic medicines are-

• **Giloy-** It is having *Kasaya, tikta rasa, Ushna veerya, madhura vipaka, and doshatrayhara*. Balances *tridoshas-vata, pitta, kapha*.

**Effect of Giloy Decoction**–Antipyretic, Antispasmodic, anti-inflammatory, antiarthritic, antioxidant, anti allergic, anti- malarial, hepato-protective, immunomodulatory.

• Laxmivilasa rasa- It pacifies *Tridosha*. Although it can be used in any *dosha* predominance, still it is more beneficial in diseases with vitiated *Vata and Vata-Kapha dosha*.

Effect of Laxmivilasa rasa- Antipyretic, cardiotonic, cardioprotective, antioxidant.

• Amalaki is having Amla Pradhana Pancharasa, Sita Virya, Madhura Vipaka and Tridoshasamaka.

*Effect of Amalaki Rasa* – *Tridoshaghna, Vrishya, Vayah Sthapana, Rasayana,* and Immunity booster. *Amla Rasa is Raktakrit* in nature. It is capable of promoting health, preventing and curing diseases. It is also well known for its *Rasayana* property.

Trikatu Churna-- Kasaghna, Deepaneeya, Kaphavatanasaka.

Effect of *Trikatu churna*- Owing to its specific *gunas, Madhura rasa, ushna veerya, and Madhura Vipaka,* it should reduce fever, cough, and antispasmodic symptoms.

• Chyavanaprasha- Rasayana, Immunity booster, Kaasahara.

• **Golden milk-** Immunity booster, antibiotic, pain reliever.

• *Sitopaladi churna*-Antioxidant, antidiabetic, anti-inflammatory. Widely used in respiratory problems. Helpful in anaemia and migraines. Pramotes digestion and appetite. It is carminative and clears out toxins from the system.

• *Talishadi Churna-* It is Swasa- Kasa nashaka, Kapha-vatahara, Jwaraghna, Deepana, Pratishyayahara.

Action of Talishadi churna on body- Anti-histaminic, Anti-pyretic, Antiallergic, Anti-inflammatory, Anti-viral, Anti-bacterial, mucolytic, digestive, carminative. It is widely used in cold and running nose, chest pain, respiratory disorders and asthma.

Now it is clear that above medicines are capable of treating COVID-19 successfully.

The current state of world health and precipitating factors easily increase *vata dosha* in the body, creating feelings of anxiety and overwhelm and fear. These feelings can ultimately weaken our immune system and leave us even more vulnerable to disease. Now, we must all utilize our traditional healing system to regulate our stress response and keep the immune system strong and resistant to pathogens. These pathogens that lead to common cold, flu are now the coronavirus.

Ayurveda is known as sister science to yoga. Ayurveda is India's 5,000 year old medical system. This ancient wisdom offers excellent preventative health care protocols, which empower all of us to take an active role in our health and wellness. **Conclusion-**

"Rogāhāsaravepimandegnam sutrambhuterānitu"

This sutra states that as long as we keep our *agni* (digestive fire) strong, then illness will not approach to us. Thus Ayurveda has a great way of prevention of diseases. In this way, we can prevent ourselves from being affected by coronavirus. Always keep your *agni* strong and, to do that, follow your *dinacharya*.

Utthisthata	(Rise	Up)
Jagrataha	(Wake	Up)
Dumment and an it a dly at a last	a a abiarra tha biabaat arranaa lun arris	(aab

*Prapyavarannibodhata*(Let us achieve the highest supreme knowledge)

Let us walk together, share together, stand together but not too close. We should maintain a little distance of approximately one meter. Avoid shaking hands, instead do Namaste. Namaste is a very beautiful gesture, as there is no direct hand-to-hand contact. So, as mentioned in Rigveda, this *sangachchhadhwam* (Let us go together) - Let us speak the same truth together. Let us share this wisdom with our friends and be happy and this period will soon go away within couple of weeks. Thus when we move in harmony, speak in one voice; let our minds be in agreement; just as the ancient gods shared their portion of sacrifice. We will see positive vibration and don't be nervous. Don't be unhappy. Don't be sad. Come out. Stand together and you will see the energy will flower into bliss, into peace.

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		Lox	А	nawin			
		(Lignocaine	(Lignocaine) (Bupivacaine				
	REGIONAL ANAESTHETICS						
Fent	Supridol	Riddof	Myorelex	Neovec	Neocuron		
(Fentanyl)	(Tramadol)	(Pentazocine)	(Succinyl)	(Vecuronium)	(Pancuronium)		
	ANALGE Nex		N	IUSCLE RELAXAN Myostigmin	TS		
	(Naloxo	ne)	(Neostigmine)				
OP	OPIOID ANTAGONIST		REVERSAL AGENTS				
Th	iosol	Aneket	Hypnothane		Sofane		
(Tł	niopentone)	(Ketamine)	(Halothane)		(Isoflurane)		
11	NDUCTION A	GENTS	INHALATION AGENTS				
Mezolam	r	Neomit	Tropin	ie Pyr	olate		
(Midazola	m) (Onda	insetron)	(Atrop	ine) (Gl	ycopyrrolate)		
PREMED	PREMEDICANTS		ANTICHOLINERGICS				
			NEON				
			Offers				
		WID	ER CH	HOICE			

# Clinical Evaluation of the effect of Chhardinivarak Yog

# As Anti- Emetic in Ketamine Anaesthesia

\*Dutt Anil

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**Abstract:** Complications of anaesthesia are not uncommon since the origin of anaesthesia. Patients often suffer when several problems combine to result in adverse outcomes. The most common and distressing symptoms, which follow anaesthesia and surgery are pain and emesis. Nausea and vomiting have been associated with the use of general anaesthesia for many years. Prevalence of PONV is unacceptably high and is distressing to the patients and potentially detrimental to their post-operative recovery. There have been volley of systemic reviews in the world literature on PONV. However there is no consensus on specific treatment of this problem. Thus, a thorough study was planned to search out for an ideal *Ayurvedic* preparation for management of PONV after Ketamine anaesthesia.

Aims & objectives of study- To evaluate the efficacy of *Ayurvedic* formulation to check/reduce the incidence of PONV and to come out with an effective and safe alternative to conventional treatment. Twenty four patients of both sexes proposed for surgical procedures under Ketamine anaesthesia were selected for the presented study. Material and Methods- All selected cases fulfilling the criteria, were divided randomly into two groups as trial group (I) and control group (II). The clinical assessment was done according to the incidence and severity of PONV after ketamine anaesthesia in patients.Results and Conclusion- The trial drug has shown encouraging results as a prophylactic anti emetic when used as premedication to check/reduce the incidence of PONV.

Key words: PONV, Ketamine Anaesthesia, Chhardi, Ayurveda.

Conflict of interest: None.

Ethical clearance: Approved by Ethical committee.

#### Introduction:

Post-operative nausea and vomiting (PONV) is one of the most common complaints of patients undergoing surgery, along with pain. It has been confirmed by many surveys that patients who undergo surgery fear about PONV considerably. It is even rated above pain by many patients and it is their number one concern.<sup>[1]</sup> Therefore it causes great distress to the patient. The incidence of PONV varies from 14% to 82% in different studies, variation may be due to different designs of studies.<sup>[2]</sup> This high prevalence is unacceptable and causes great distress to the patients and also hampers their desired post-op recovery.

Post-operative nausea and vomiting (PONV) is defined as nausea and vomiting that occurs within 24 hours of surgery.<sup>[3]</sup>(i) Early- First 2-6 hours after surgery,(ii)Late-6-24 hoursand (iii) Delayed- Beyond 24 hours.It is a common problem in the ambulatory surgery patient population, occurring in an estimated 35% of all patients.

<sup>\*</sup>Reader & Head- P.G. Department of ShalyaTantra, R.G.G.P.G.Ayurved College,Paprola, H.P.,E-mail- <u>dr seemanil@yahoo.com</u>, mobile no. 9418205225, <sup>\*\*</sup>Clinical Registrar, Chaudhary BrahmPrakash Ayurved Charak Sansthan, Najafgarh, New Delhi-110073. E-mail- <u>drgauravphull18@gmail.com</u>, mobile no. 9990448807 APFEL SCORE is used for estimation of risk factors for PONV which is as follows:

Risk Points	1	2	3	4
Riskestimation%)	20%	40%	60%	80%

**One point each for:-**Female gender, Non-smoking status, History of PONV or motion sickness andUse of post-operative opioids for the perioperative care of surgical pain. <sup>[4]</sup>

#### Definitions<sup>[5]</sup>

- Nausea: It is an unpleasant sensation referred to a desire to vomit, not associated with expulsive muscular movement.
- Retching: When no stomach contents are expelled even with expulsive muscular efforts.
- ✤ Vomiting: It is the forceful expulsion of even a small amount of upper gastrointestinal contents through mouth.

Vomiting and nausea are described in various Ayurvedic texts as chardi and hrillas respectively.<sup>[6][7]</sup>Chardi has been described as an independent diseases as well as symptom of various diseases. As no anti emetic Ayurvedic preparation has been tried in this regard, keeping this in mind a thorough study was planned to search out for an ideal Avurvedic preparation for management of PONV after Ketamine anaesthesia. Ketamine is the core medicine in WHO's "Essential drug list" which is a list of minimum medical needs for a basic health care system.<sup>[8]</sup> Ketamine was introduced in clinical anaesthesia with immense possibilities because it is not just another anaesthetic agent. It is a dissociative anaesthetic, which separates the patient's senses from the painful environment of surgery. Blood pressure, heart rate and cardiac output are maintained or even increased with ketamine. Muscle tone is maintained, spontaneous respiration is preserved and there is prolonged analgesia and amnesia. It is useful in paediatric population undergoing short, painful procedures and useful in asthmatic patients too. <sup>[9]</sup>Excellent analgesia, a very good tissue tolerance coupled with rapidity of effect following intravenous as well as intramuscular injection give ketamine a special status amongst all intravenous anaesthetic agents. There are many instances where it is the most preferred anaesthetic agent.

#### **Aims and Objectives**

- 1. To evaluate its efficacy to check/reduce the incidence of PONV.
- 2. To come out with an effective and safe alternative to conventional treatment.

#### Material and Methods

In the present research work an indigenous drug *Chhardinivarakyog* was evaluated for its efficacy to check/reduce the incidence of PONV after ketamine anaesthesia. The trial drug has been taken from a classical *Ayurvedic* text book *Chakradatta*<sup>[10]</sup> and it

was given in form of capsules containing alcoholic extracts of *Haritaki, Trikatu, Dhanyak* and *Jeerak* along with *Anupana* of *Madhu*(honey).

**Trial Design:** Twenty four patients of both sexes proposed for surgical procedures under Ketamine anaesthesia were selected for the presented study, which was designed as an open- labelled randomised controlled trial. All selected cases were divided randomly into two groups.

Group-I (Trial group): Cap *ChhardinivarakYog* (1gm to adults, 500mg to children) night before surgery and 1 hour before surgery with 1tsf of honey.

Group II (Control Group): Tab Metoclopramide 10mg night before and 1 hour before surgery.Injection Glycopyrrolate 0.2mg or 0.1mg i/m, 1 hour before surgery in both the groups as pre-medication before giving injection Ketamine to counter the secretions.<sup>[11]</sup>

#### Inclusion criteria:-

- 1. Age group >8yrs.
- 2. Patients undergoing surgical procedures under ketamine anaesthesia.
- 3. Patients fit for anaesthesia (ASA grade I and II).<sup>[12]</sup>
- 4. Informed consent about the trial before inclusion.

#### Exclusion criteria:-

- 1. Patients not willing for trial.
- 2. Patients not fit for ketamine anaesthesia.
- a. Intracranial pathology (such as raised ICP or penetrating eye injury)
- b. I.H.D., vascular aneurysm
- c. HTN
- d. Psychiatric disease (e.g. schizophrenia)

Patient of age group< 8 years.

- 3. Those outside ASA risk classification I or II.
- 4. History of reaction to herbs
- 5. Upper respiratory tract diseases.

#### Assessment Criteria:-

Clinical assessment of this study consisted of evaluation of trial drug as premedication in prevention of post-op nausea and vomiting after ketamine anaesthesia based upon the following criteria.

#### Subjective criteria:-

Verbal analogue scale (VAS) for PONV immediately (0-2hrs),2-6 hours and 6-24 hours after ketamine anaesthesia.

Scheme of verbal analogue scale (VAS) for PONV

- ✤ 0 No PONV
- ✤ 1A Nausea only.
- ✤ 2 Retching
- ✤ 3
  Yomiting with or without nausea

**The other assessment criteria included:-**The following factors were assessed for their relation to PONV- Age, Sex, Dose of Ketamine, Total duration of anesthesia and H/O motion sickness.

**Grading:** PONV was graded at 0-2 hours, 2-6 hours and 6-24 hours after ketamine anaesthesia according to Verbal descriptive scale (VDS).<sup>[13]</sup>

✤ G0 - NO PONV

✤ G1 - Mild (mild nausea and/or 1 episode of vomiting)

✤ G2 - Moderate ( moderate nausea and/or 2-4 episodes of

Vomiting)

✤ G3 - Severe (>4 episodes of vomiting)

The relevant routine investigations which were essential prerequisite for the conduct of anaesthesia were got done and after complete satisfaction the grouping was done. The patients were re-evaluated thoroughly just before surgery regarding their vital signs, physiological and psychological conditions etc. and recorded on the standard proforma for the study. These signs were again recorded after premedication, during subsequent anaesthesia and after recovery from anaesthesia. It was compared in same group at different times and between group I and II at corresponding identical times using relevant statistical tests. Finally, the response of patients to the drug in their respective group was assessed and evaluated based upon:- Incidence of PONV (Using VAS), Severity of PONV, Duration of Anaesthesia and h/o Motion sickness.

**Study Design:** An open-labelled randomised controlled trial. (CONSORT) **Statistical Analysis:** 

The changes in vital signs were compared in same group at different times using paired t-test

and between group I and II at corresponding identical times, using unpaired t-test or student's 't'-test. The incidence of PONV between patients of group I and II was calculated by Z- value. For all the analysis, the 'p' value used for statistical significance will be 0.05.

# **Observations and Results**

Patients were randomly grouped under two groups of 12 each, falling under ASA grade 1 & 2 and of either sex who underwent surgical procedures under ketamine anaesthesia.

- 1. Age- wise distribution of trial group (Group-I) showed that 67% (8 patients) were in age group of 0-10 yrs. 25% (3 patients) were in age group of 11-20 yrs and 8% (1pateitns) was in age group 21-30 yrs. In control group (Group-II) 67% (8 patients) presented in age group 0-10, 25% (3 patients) in 11-20 age group and 8% (1 patient) in age group 21-30 years. Overall distribution of patients in both groups was 67% (16 out of 24 patients) in age group. 0-10 yrs., 25% (6 out of 24 patients) in age group 11-20 yrs. and 8% (2 out of 24) in age group 25-30 yrs. respectively.
- 2. Sex wise distribution of trial group (Group-I) presented 50% patients (6 patients) were male and 50% (6 patients) were female. Likewise distribution of control group (Group-
- **3.** II) showed that 58.3% (7 patients) were male while 41.65% (5 patients) were female. Overall percentage of male and female in both the groups was found to be 54.1% (13 patients) and 45.83% (11 patients) respectively.
- 4. Effect on Blood Pressure Statistical comparison represents that difference in mean of blood pressure in between group-I and group-II at corresponding and different timings are statistically insignificant. The statistical comparison of mean of mean B.P. in mmHg before premedication (A), after premedication (B) and after recovery from anaesthesia (C) within the group by applying paired t-test, p-value and remarks are as follows:

Comparison with in groups	Group-I		Group-II			
	Mean <u>+</u> SD	t-value,p- value	Remarks	Mean <u>+</u> SD	t-value,p-value	Remarks
A Vs B	1.40 <u>+</u> 7.69	t=0.82, p>0.05	NS	1.52 <u>+</u> 8.59	t=0.79,p>0.05	NS
A Vs C	2.06 +6.63	t=1.39, p>0.05	NS	2.96 <u>+</u> 7.04	t=1.88, p>0.05	NS

#### Table 1

From table it is observed that difference of mean B.P. before premedication and after premedication, difference of mean B.P. before premedication and after recovery from anaesthesia in both the groups is insignificant at all corresponding 3 different timings. It was also observed that difference of mean B.P. before premedication and after premedication, difference of mean B.P. before premedication and after recovery from anaesthesia in both the groups was insignificant at all corresponding 3 different timings.

#### 5. Effect on Pulse Rate

Table 4 (A)- the statistical comparison of difference of mean pulse rate/min, between the two groups at corresponding time i.e. before premedication (A), after premedication (B) and after recovery from anaesthesia (c), by applying student t-test, p-values and remarks are as follows:-

#### Table 2(A)

It was observed that difference of mean pulse rate when compared in between group-I and group-II at corresponding 3 different timings was insignificant.

Group		Mean Pulse Rate/min (Mean <u>+</u> SD)				
		Before pre medication (A)	After pre medication (B)	After recovery from Anaesthesia (C)		
Group-I (trial)	Group-I (trial)		82.50 <u>+</u> 5.34	81.70 <u>+</u> 5.57		
Group-II (Control)		79.75 <u>+</u> 4.38	82.45 <u>+</u> 4.91	81.05 <u>+</u> 4.47		
Comparison between groups unpaired t test	t value	t= 0.38	t = 0.03	t = 0.41		
	p value	p>0.05	p>0.05	p>0.05		
Remarks	1	NS	NS	NS		

#### Table 2(A)

It was observed that difference of mean pulse rate when compared in between group-I and

group-II at corresponding 3 different timings was insignificant.

#### Table 2 (B):-

Statistical Table 2(A)				
Group		Mean Pulse Rate/min (Mean <u>+</u> SD)		
		Before pre medication (A)	After pre medication (B)	After recovery from Anaesthesia (C)
Group-I (trial)		79.20 <u>+</u> 4.48	82.50 <u>+</u> 5.34	81.70 <u>+</u> 5.57
Group-II (Control)		79.75 <u>+</u> 4.38	82.45 <u>+</u> 4.91	81.05 <u>+</u> 4.47
Comparison between groups unpaired t test	t value	t= 0.38	t = 0.03	t = 0.41
	p value	p>0.05	p>0.05	p>0.05
Remarks		NS	NS	NS

Statistical Table 2(A)

It was observed that difference of mean pulse rate when compared in between group-I and group-II at corresponding 3 different timings was insignificant. Discussion: The demographic data revealed thattype of cases undertaken for the study belonged largely to the age group of 8-20 years and maximum cases were suffering from fractures (orthopaedic injuries) which are commonly found in growing age group. Overall percentage of male and female was 54.1% and 45.8% respectively in both the groups. Incidence of PONV was found in 7.69% male patients (1 patient) and 54.5% females (6 patients) which demonstrates the more propensity of female gender in having PONV. There was no alteration in CVS findings and no untoward effect on respiratory system in both groups. The cardiovascular stability was observed during the whole procedure. The longer duration of anaesthesia was having more incidence of PONV. The dose of ketamine did not seem to have clear cut influence on occurrence of PONV, as different observations were found in both groups which may further be attributed to difference in nature of surgeries performed. Total 62.55% of female patients among those having h/o motion sickness previously, suffered from PONV. It confirms that history of motion sickness is an important risk factor for this disease. The incidence of PONV was lesser in group-I (25%) than in group 2 (41.6%) which justifies the use of trial drug. The average VAS score for PONV was lesser in trial group (0.42) in comparison to control group (0.59). These results were not significant on statistical basis although. Based on grading of PONV, the percentage of patients was higher in group II when compared between two groups.

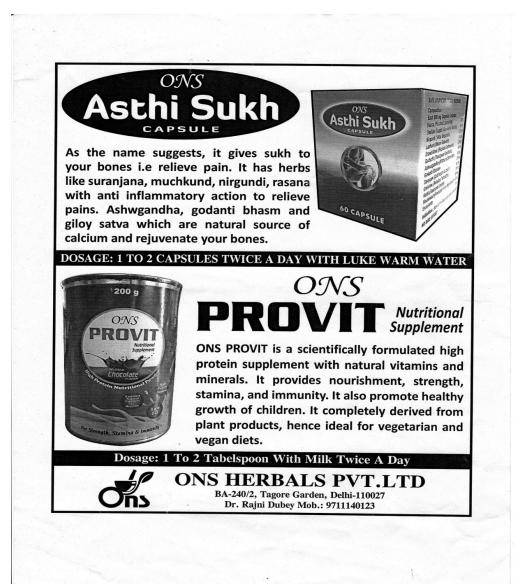
**Probable mode of action of the Trial drug:** The anti-emetic effect (to reduce incidence of PONV) of the trial drug can be well understood on bases of *Ayurvedic* principles. This drug denoted as *chhardinivarakyog*, contains *Haritaki*,<sup>[14]</sup>*Trikatu*,<sup>[15][16][17][18]</sup>*Dhanyak* <sup>[19]</sup> and *Jeerak*<sup>[20]</sup> and was given with *anupan* of *Madhu*(honey). Most of the drugs of this formulation are having *vata-kaphashamaka* properties. All the drugs have *Ushnavirya* (only *Pippali* has *Anushnavirya*) which brings vitiated *Vata* and *Kaphadosha* to normal level, which are mainly vitiated.<sup>[20]</sup> Drugs in this formulation help to remove '*Ama' dosha* which is major cause of any disorder including emesis and nausea, due to their *deepana-paachna* properties. *Haritaki* and *Shunthi* have *anulomana* (Prokinetic effect) which enhances gastric emptying while *Madhu* provides soothing effect on gastric mucosa thus preventing gastric irritation and it is "*Yogvahi*"( enhance the effects of others).<sup>[21][22]</sup> So, all these effects collaborate to reduce/check the incidence of PONV.

**Conclusion:** It can be concluded that the trial drug i.e. *Chhardinivarakyog* has shown encouraging results as a prophylactic anti emetic to check/reduce the incidence of PONV. The incidence of PONV in trial group was significantly less than the control group, in the patients who had history of PONV. The average score on VASwas also lesser and no side effects were found on CVS or respiratory system. Thus, it can be concluded that the trial drug i.e. *Chhardinivarakyog* containing *HaritakiTrikatu, Dhanyak* and *Jeerak* along with *Madhu* can be a better alternative when used as a premedication, to check /reduce the incidence of PONV. However, this is a very preliminary study and requires more comprehensive observation and assessment on larger number of patients to reach the final conclusion for the drug to be acceptable for prevention of PONV.

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#### A Conceptual Analysis of Ancient Indian Resuscitative Measures

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**ABSTRACT:** Ayurvedic texts have advocated various methods for revival of a baby at birth. The term *Pranapratyagaman*<sup>15</sup> is used to describe neonatal resuscitation. Approx.3000 years back, *Punarvasu Atreya* has described the concept of initial steps of resuscitation and three sense organs stimulation procedures to revive the baby from apparent death just after birth. The main principles of resuscitation such as Patent airway, initiation of breathing and maintenance of circulation was adapted and resuscitation was carried out by the available measures. Cleaning of mouth, with a finger, wrapped with pre-washed clothes, followed by cleansing of other body parts; initiation of breathing with sound stimulation by striking of stones, and stimulation of thermal receptor, present in the cheek, by the sprinkles of water, use of *Bala oil* to maintain circulation, local and probable central, etc. were the main resuscitative measures. The basic concept of Pranapratyagamana in Ayurvedic texts i.e. three sense organ stimulation is still appreciable and adaptable in present era<sup>16</sup>.

**Keywords:** *Pranapratyagamana,* Resuscitation, Airway, Breathing, Circulation, *Ashmsanghattana*, fetal distress.

Ethical Clearance: Not applicable.

Conflict of Interest: None

**INTRODUCTION:** Struggle for existence is started in human since the conception, continue through out the intrauterine life and persisted during the extrauterine life. After the birth of a baby, more than 90% newly born babies make transition from intrauterine life to extra uterine life without any difficulty. As per WHO approx. out of the 24 million births each year in India 4-6 per cent of neonates fail to establish spontaneous breathing at birth. More than 2.5 million neonatal deaths occur worldwide

\* Assistant professor ,department of sangyaharan, faculty of Ayurveda , Institute of Medical Science, Banaras Hindu University,Varanasi UP. India.<u>bnmaurya@bhu.ac.in</u> mobile no 9415447600.\*\* Associate Professor, P.G. Deptt. Of Kaumarbhritya, State Ayurvedic College, Lucknow. <u>mngupta75@yahoo.com</u> each year<sup>1</sup>. It has been estimated that birth asphyxia accounts for 19% of these deaths, suggesting that the outcome might be improved for more than 4,75000 infants per year through implementation of simple resuscitative measures. Resuscitation means revival of a baby from apparent death. In other words, *pranapratyagamana* / resuscitation may be defined as a series of co-ordinate interventions to restore adequate ventilation and circulation, whose vital functions have been ceased. This is in real sense bringing back life to the neonate, when changes from dependent to independent existence.

**HISTORICAL ASPECT:** First time, in written evidences of resuscitation is found in Ayurveda. Approx.3000 years back, *Punarvasu Atreya* has described the concept of initial steps of resuscitation and three sense organs stimulation such as ear, skin & eyes procedures to revive the baby from apparent death just after birth<sup>2</sup>. In western literature, first evidence of neonatal resuscitation was mouth-to--mouth breathing, cited in Bible 2019 years ago<sup>3</sup>. It is well known that to make patent air ways, positioning of infant, suctioning of mouth, nose and sometimes trachea is essential. Thereafter, breathing can be initiated by tactile stimulation or by positive pressure ventilation with either bag and mask or bag and endotracheal tube.

The circulation is maintained by external cardiac massage and medication. Almost similar methodology was adapted with the help of available measures during the *Pranapratyagamana* or resuscitation.Since ancient period, different scholars, to combat the hypoxic and anoxic sequalae, have postulated various methods for revival of neonates and numbers of papers have been published on them, Ayurvedic as well as modern views. In this paper, a physio-anatomical approach of ancient resuscitative procedures has been analyzed with the present advanced knowledge regarding the resuscitation.

# ANCIENT RESUSCITATIVE MEASURES AND THEIR EXPLANATION

In Ancient Ayurvedic literature, the procedures have been explained to revive both normal as well as asphyxiated baby at birth.

#### A) General Measures:

For normal newborns as-

#### 1. Temperature maintenance:

For maintaining body temperature of newborn baby, two measures were used in ancient time by

- i) Maintaining thermo neutral environment of Sutikagar / Labour Room
- ii)

Increasing body temperature by irrigation with lukewarm Bala oil. This procedure was helpful in preventing evaporative heat loss; and lukewarm Bala oil provides heat to the baby via conduction. Nowadays coconut oil in used.

# 2. Cleansing of Mouth etc <sup>18</sup>-

Cleaning of mouth, palate, lips, oro-pharyngeal cavity by mucous extractor and with sterile gauze piece wrapped around finger with trimmed and clean nails and emesis is induced by oral application of Rock salt and *Ghrit*.

The concept of cleansing of mouth and other body parts is the same at present. Healthy, vigorous, newly born neonates generally do not require suctioning after delivery<sup>4</sup>. Secretions may be wiped from the nose and mouth with gauze. If suctioning is necessary, clear secretions first from the mouth and then from the nose with suction catheter (8F)<sup>5</sup>.

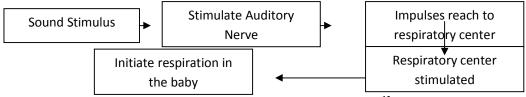
#### **B)** Specific measures:

Management of apparently dead baby

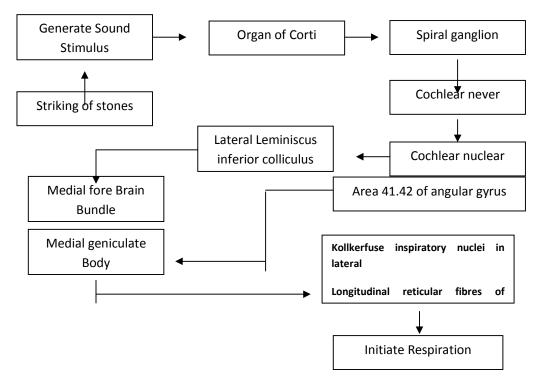
To revive the baby following measures have been advised-

A.) Striking of two stones near the mastoid process initiate respiration in following ways-

Physio-anatomical approach:



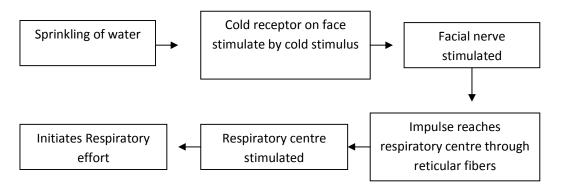
The sound stimulus travels through following neuronal pathway<sup>13</sup>-



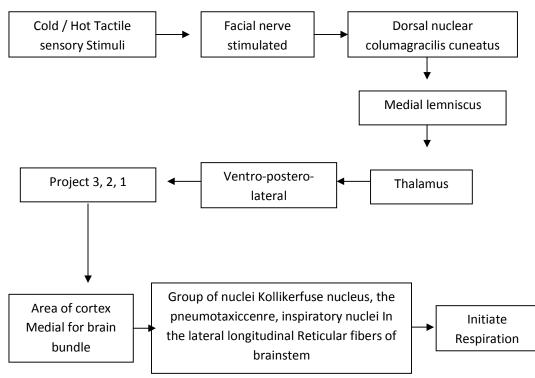
Making the sound with the stones near the ears of the newborn stimulates the tympanic membrane and auditory nerve which ultimately stimulates respiratory centre. Intensity of sound noted by this also remained low, so rupture of tympanic membrane by creating loud sound through any other means was also avoided.

# **B.)** Sprinkling of Hot/cold water over face initiate respiration in following ways-Physio-anatomical approach

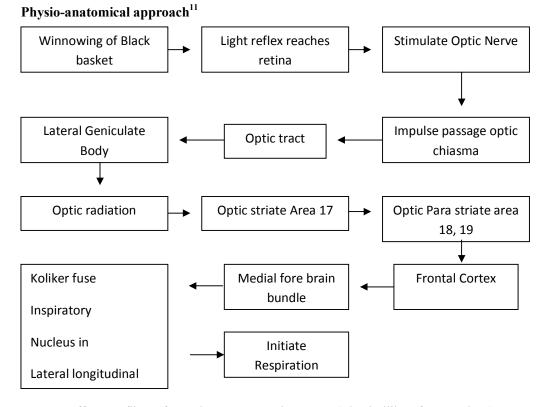
Sprinkling of cold water in summer and hot water in winter on the face of neonate is to stimulate the peripheral nerves as reflex response because the face is rich in vascular and sensory supply.



The impulse reaches to respiratory centre through following neuronal path ways-<sup>12</sup>



Even after all these procedures, the child is not having he movements and does not establish the respiration then fanning with the Krishna kapalika surpen is started free the baby can get movements. Fanning with black and port or winnowing fan is the process of ventilation and it helps the child regain the consciousness. By fanning the local pressure of air will be increased and this positive pressure just outside the respiratory opening i.e. mouth and nose with give the pressure stimuli required for better ventilation of air and establishment of respiration. Repeated (light alternate by dark) movement of black basket provide fresh air as well as produces light reflex, which stimulates optic nerve and respiratory center and causes respiratory initiation in following ways.



Afferents fibers from the pneumotaxic centre (The kolliker fuse nucleus) project into an inspiratory center in the ventrolateral part of nucleus solitarius, and a mixed expiratory-inspiratory center in the superficial ventero-lateral reticular area. Inspiratory neurons in both centers monosynaptically projects to the phrenic and intercostal motor neurons; the axons of expiratory neurons terminate on lower motor neurons innervating intercostal and abdominal musculature. Reticular neurons in the region of kolliker fuse nucleus contain noradrenergic cells group and having function to regulate respiratory and cardiovascular activities<sup>6</sup>.

A physiological stimulus such as sound flash of light or mild cutaneous stimulation causes stimulation of hypothalmic region and shows dilation of pupil "piloerection and respiratory stimulation in the form of provoking alerting reaction<sup>7</sup>.

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Greater the sharpness of contrast light and greater the intensity difference

between the light and dark area the greater the degree of stimulations<sup>8</sup>.

#### Analytical comparison:

The ancient *Pranapratyagaman* measures and recent resuscitation measures have following near similarities.

ANCIENT MEASURES <sup>16</sup>	RECENT MEASURES
A) General measures 1. Temperature maintenance:	To maintain thermoneutral ambient temperature by Vertical
a) To maintain thermoneutral	Radiant warmer etc Cerebral
temperature of Sutikagar as per	hypothermia; avoidance of
season	perinatal hyperthermia including
b) Useful in prevention of	hypothermia at birth (Susan
evaporative heat loss & maintain	Nieimeyer, et al 2000(5), Gandy
body temperature, if Bala oil used	GM, et al; 1964(10); Dahm LS;
in lukewarm state	1972(11); Perlman JM; 1999;(12)
	Lieberman H et al, 2000(13))
2. Patent Air Ways:	a) suctioning of oral and Naso-
a) Cleaning of oral cavity with	pharyngeal cavity
sterile swab wrapped around little	b) Same concept
finger	Stomach wash with Nasogastric
b) Clean the mouth first followed	tube and N. saline
by other parts of body	
3. Stomach wash:	
To clean stomach, rock salt with	
butter oil was used to initiate	
emesis (A.S.U. 1/2)	
(may be dangerous in floppy baby	Stomach wash with Nasogastric
because of risk of aspiration in	tube and N. saline
preterm as well as in sick baby)	
4. Breathing initiation	
(a) Sound Stimulation	Not used as a resuscitative measure
(b) Use of cold/lukewarm water	Tactile stimulation
sprikling stimulate cold receptor	
present in the cbeek (may be a risk	
of aspiration and hypothermia)	

Nowadays, tactile stimulation is used for initiation of breathing in a baby having primary apnea. It is clear that tactile stimulation may initiate spontaneous respirations in newborn who are experiencing primary apnea. If these efforts do not result in prompt onset of effective ventilation, discontinue them because the infant is in secondary apnea and positive-pressure ventilation will be

required<sup>9</sup>.( Dawes GF 1968). Sprinkling of water on face is not advised because there is a chance of aspiration and hypothermia in the baby.

#### COMPLICATIONS:

The perinatal hypoxia is the leading cause of perinatal mortality and survivors are at greater risk for the development of permanent disabilities. *AcharyaVagbhatta* has described complications, similar to HIE manifestation, occurred due to obstruction and compression of fetus during the delivery<sup>17</sup>. He also mentioned the complication of asphyxia including management occurred in a baby with the Bala oil, which is prepared with many drugs, useful to revive the baby as well as in combating many complications by providing drugs through the skin.

# **CONCLUSION:**

Thus, descriptive measures of *Pranapratyagamana*<sup>15</sup> in Ayurvedic text and resuscitation in recent text are seemed nearly similar. Application of Bala oil is described probably for maintaining circulation, but in modern text, it is achieved by external cardiac massage and medications. The effect of winnowing of black supa (photo-stimulation) may be more useful noninvasive technique to revive apparently dead baby (in secondary apnea). On conceptual analysis of ancient Indian resuscitative measures showed that the procedures of *Prana Pratyagamana*<sup>15</sup> stimulates respiratory as well as heart rate. Therefore, it requires further exploration related to clinical as well as experimental study.

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# To Study the Impact of Clothing Behaviour on Human Health

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**Abstract:** Clothing is one of the basic needs of people who are living in this world. Naturally, it provides us the feeling of being comfortable in every situation. In this society we come to be updated of the fashion styles of dresses. As clothes has been one of the top and trending subjects in today's generation. We have an illusion that most of the clothing items are safe, however the bitter truth is clothing materials are full of invisible chemicals. In the past, clothes were made of natural fibers like wool, silk, flax, cotton etc. But since 1900s, the usage of synthetic items became prominent. These include nylon, rayon, acrylic, polyester, spandex etc. the manufacture of synthetic fibers like polyester uses exorbitant amounts of energy and crude oil, which release harmful emissions like volatile organic compounds, particulate matter, and acid gases like hydrogen chloride.

Present study was conducted on 300 respondents from different areas of Varanasi District with group age between 20-40 years from both male and female. The data used in the study were collected using a self- structured questionnaire. The data were analyzed by the use of chi- square and t-test.

Key-word: clothing behaviour, synthetic, fibers, organic compound, hydrogen chloride.

Ethical clearance-Not applicable.

#### **Conflict of intrest-** No.

*Introduction:* As Aristotle mentioned, "Man is a social animal. One who lives without society is either a beast or God." To be accepted as a part of the society, he or she must follow the set rules and standard of the society.<sup>1</sup> He/ She accept or tolerate the differences and diversity in other people of the society. Clothing depicts our societal values and ethics greatly. There is a reverse relationship too. Clothing and fashion reflect the societies that human live in too. For instance, the dressing sense of women in Islamic states speaks a lot about its society.<sup>2</sup> An evolving, changing fashion offers an interesting vantage point of changing values and attitudes.

We have an illusion that most of the clothing items are safe, however the bitter truth is clothing materials are full of invisible chemicals.<sup>3</sup> In the past, clothes were made of natural fibres like wool, silk, flax, cotton etc. But since 1900s, the usage of synthetic items became prominent. These include nylon, rayon, acrylic, polyester, spandex etc.<sup>4</sup> These synthetic fibers became popular as they were marketed as specialties, such as 'wash and wear' (acrylic), 'wrinkle free' (polyester), sports utility (spandex) etc.

It is estimated that around 8,000 synthetic chemicals are currently in use for making synthetic fabrics.<sup>5</sup> The more synthetic clothing we wear, the greater we are at risk of absorbing toxic chemicals that harm our health.<sup>6</sup> Clothes contain toxics like formaldehyde, brominated flame retardants, defluorinated chemicals to provide specific qualities such as 'non-iron' and 'non-wrinkle' qualities.

The organic compound formaldehyde is used to make fabrics waterproof, moth-proof, antishrink. It is also used in dyes and to prevent 'running' of design.<sup>7</sup> However, formaldehyde increases the risk of lung cancer and cause irritation and contact dermatitis.<sup>8</sup> Chrome (VI) is formed by the oxidation of Chromium (Cr) and are found in tanned leathers, textiles etc. Chrome

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(VI) is highly carcinogenic and can cause wide range of diseases from rashes and ulcers to cancer, dizziness and vomiting. Another chemical Dimethyl fumarate (DMF) is used for antifungal properties, but is a potent allergic sensitizer. Phthalates used in PVC for shoes and rainwear are suspected of being carcinogenic and may disturb the hormone system. Silver Nano particles are used to create anti-wrinkle, anti-odour and anti-stain clothes. These nanoparticles get absorbed as toxins easily owing to their miniscule size and are transferred to different organs, leading to health problems.

#### Description of clothing in a Ancient Indian Literature

Medical science includes different pathies like medicine, Ayurveda, Siddha, Homeopath, Unani, Yoga and n\Naturopathy etc. Ayurveda an ancient system of medicines encompasses the description of clothes in the form of different types of uses and application such as in the context as daily routine, seasonal routine, sadvritta (good code of conducts/ novel acts), different rituals and even in clinical practices also.

If we see the Charak Samhita we find that in the context of fomentation therapy, collection of drug, lifestyle of good progeny, quality of wet nurse aseptic measure of clothing, Panchkarma procedure and so on. Similarly if we study the Susruta Samhita we found most of the references are similar to Charak Samhita but few specific uses of clothing are also available in the context of dressing, gauze, pads, cotton –swab, suturing thread and in different clinical application.

#### Aim & Objective

To study the effect of clothing behaviour on health

#### **Inclusion Criterion**

300 respondents were purposively selected between the age of 20-40years of both male and female gender from BHU and nearby area.

#### **Exclusion** Criterion

Below 20 years and above 40 years of respondents was excluded from this study.

The respondents with the obvious Physical and Psychological abnormality in health were excluded.

#### **Preparation of questionnaire**

For the purpose of study a self- structured questionnaire was used for collecting the data. The questionnaire was prepared on the basis of Likert scale and based on five Likert items. The Likert scale is the sum of responses on several Likert items.

A Likert item is simply a statement which the respondent is asked to evaluate according to any kind of subjective or objective criteria; generally the level of agreement or disagreement is measured. It is considered symmetric or "balanced" because there are equal numbers of positive and negative positions. Five point rating scales were used for collecting the data– Strongly agree, Agree, Sometimes, Disagree, Strongly Disagree.

For the assessment of Clothing behaviour related to health of the respondents questions were prepared including different health dimensions like infection, allergy, body inflammation etc.

#### **Results and Discussion**

The present study has been undertaken mainly to study the impact of clothing behaviour on health. All the statistical result has been summarized and discussed.

#### Table No. 1: The distribution of respondents according to gender

Gender	Number	Percentage
Female	170	56.7
Male	130	43.3
Total	300	100.0

Table no.1 shows that out of 300 respondents there were 130 male and 170 female respondents.

#### Table No. 2: The distribution of respondents according to Religion

Religion	No.	Percentage
Christian	18	6.0
Hindu	234	78.0
Muslim	48	16.0
Total	300	100.0

Table No. 2 shows that 234 respondents were Hindu, 48 Muslims and 18 were Christians.

#### Table No. 3: The distribution of respondents according to their Education

Education	No.	Percentage
Ph. D	35	11.7
Post graduation	59	19.7
Graduation	139	46.3
Intermediate	41	13.7
High school	11	3.6
Middle school	9	3.0
Primary	3	1.0
Illiterate	3	1.0
Total	300	100

Table No.3.shows that out of 300 respondents 46.3% were Graduate, 19.7% respondents Post graduate, 11.7% Ph. D and only 1.0% were Primary and Illiterate respectively

General questions related to purchasing the clothes

Table No. 4

CLOTHING	Fashion	Comfort	Both	Total
PREFERENCES				
Criterion for	11	96	193	300
selection of cloths				
Percentage (%)	3.7	32.0	64.3	100

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Above table shows that while selection criterion of clothes 32% respondents chooses Comfort first, 64.3% preferred both fashion and Comfort and 3.7% respondents select their clothes as per fashion.

Table No. 5: Distribution of respondents according to the Preference of cloth material

CLOTHING	Cotton	Synthetics	Other material	Total
PREFERENCES				
Preference of	228	26	46	300
cloth material				
Percentage (%)	76.0	8.7	15.3	100

Table No. 5. showed that 76% respondent's preferred Cotton clothes, 8.7% Synthetics and rest were chooses other cloth material.

Table No. 6: Distribution of respondents according to the Preference of cloth material

CLOTHING PREFERENCES	Cotton	Synthetics	Other material	Total
Preference of cloth material	228	26	46	300
Percentage (%)	76.0	8.7	15.3	100

Table No. 6 showed that 76% respondent's preferred Cotton clothes, 8.7% Synthetics and rest were chooses other cloth material.

Table No.7: Distribution of respondents according to the Preference of colour

CLOTHING PREFERENCES	Dark	Light	Both	Total
Preference of colour	35	133	132	300
Percentage (%)	11.7	44.3	44.0	100

Above table shows that 44.3% respondents preferred Light colour clothes whereas 44% would like to wear both Dark and Light colour clothes. It will be pertinent here to mention wordings of <u>Huchendorf, (2007)</u> that the Colour, is one of the effective factors in a space which influences to express one's emotion. A single colour can have series of meanings and interpretations to various people in various regions of the world. Thus, we live in a world of colour.

Table No. 8: Distribution of respondents according to the Health problem related to clothes

14	Yes	No	Sometimes	Total
Health problem	34	176	90	300
related to clothes				
Percentage (%)	11.3	58.7	30.0	100

Table No. 8 shows that 11.3% respondents had health problem related to clothes, 30% reported sometimes whereas nearly 58% haven't any health problem

#### Specific Questions related to clothes

# Distribution of respondents according to CLOTHING BEHAVIOUR RELATED TO HEALTH

CLOTHING BEHAVIOUR RELATED TO HEALTH		Strongly agree	Agree	sometimes	Disagree	Strongly disagree
1.	Allergic problem should be occur from clothes like-polyester, nylon, synthetic	59 (19.7)	137 (45.7)	79 (26.3)	16 (5.3)	9 (3.0)
2.	Always wear cotton clothes	54 (18.0)	101 (33.7)	83 (27.7)	54 (18.0)	8 (2.7)
3.	Infection cannot be caused by clothes	9 (3.0)	41 (13.7)	70 (23.3)	149 (49.7)	31 (10.3)
4.	Tight fitted clothes feel uncomfortable	106 (35.3)	140 (46.7)	31 (10.3)	13 (4.3)	110 (3.3)
5.	Breathing problems can be creates with tight clothing	59 (19.7)	149 (49.7)	58 (19.3)	25 (8.3)	9 (3.0)
6.	Baggy clothes should be wear	48 (16.0)	120 (40.0)	108 (36.0)	22 (7.3)	2 (0.7)
7.	I didn't like to wear cotton clothes	9 (3.0)	13 (4.3)	39 (13.0)	156 (52.0)	83 (27.7)
8.	Back pain, fainting can be caused by tight fitted clothes	42 (14.0)	100 (33.3)	90 (30.0)	56 (18.7)	12 (4.0)
9.	Clothes does not cause allergic	6 (2.0)	40 (13.3)	70 (23.3)	151 (50.3)	33 (1.0)
10.	Clothes sometimes cause inflammation of the body parts	29 (9.7)	105 (35.0)	79 (26.3)	76 25.3)	11 (3.7)
11.	Clothes are the source of infection	29 (9.7)	60 (20.0)	112 (37.3)	79 (26.3)	20 (6.7)
12.	Itching, yeast-infection can be caused by cloth dyes.	23 (7.7)	103 (34.3)	91 (30.3)	62 (20.7)	21 (7.0)
13.	Baggy clothes are not comfortable.	10 (3.3)	14 (4.7)	43 (14.3)	151 (50.3)	82 (27.3)

Above table shows the clothing behaviour related to health of the respondents. 45.7% respondents were agreed that Allergic problem should be occurring from clothes like- polyester, nylon synthetic etc. whereas 26.3% said sometimes and 5.3% were disagreed. 49.7% respondents were disagreed that infection cannot be caused by the clothes, 10.3% were strongly disagreed and 23.3% told sometimes.

46.7% respondents were agreed that tight fitted clothes are uncomfortable and 35.3% were strongly agreed whereas 10.3% told sometimes and 4.3% and 3.3% were disagreed and strongly disagreed respectively. Breathing problems can be caused with tight clothes 49.7% respondents were agreed and 19.7% were strongly agreed but 19.3% told sometimes and 8.3% denied.

40.0% respondents were agreed that baggy clothes should be wear whereas 36.0% told sometimes. Back pain, fainting can be caused by tight fitted clothes 33.3% and 14.0% were agreed and strongly agreed respectively. 35.0% respondents were agreed that sometimes cloth may cause inflammation in the body parts whereas 25.3% were denied. 34.3% respondents were agreed that Itching, yeast- infection can be caused by cloth dyes. 50.3% respondents were disagreed that baggy clothes are not comfortable, 14.3% told sometimes whereas 0nly 3.3% were strongly agreed.

**L.M. Narganes., et al (2013)** defined that Textile articles may contain respiratory sensitisers and irritants that can cause symptoms, such as asthma, bronchitis and irritation in the upper airways. The risks of respiratory symptoms linked to chemical substances in textiles, are most likely limited to certain groups exposed in an occupational setting

#### Summary and Conclusion

In Ayurvedic texts there is already description of surprising varieties of clothing both for the purpose of therapeutics and habiliment. Ayurveda advocates that one should always wear clean clothes, preferably made from natural fibres such as cotton, wool, linen or silk. The clothing which is used in present days is mostly dictated by fashion or appearance and not on a sense of comfort. For many people fashion surpasses the health need. When the respondents were asked about **Health Problems** related to clothes 11.3% reported that they have health problems related to clothing like breathing problem, Itching, Skin allergies etc. whereas 30% sometimes and 58% told that they never had any health problems. *According to clothing behaviour related to health* of the respondents. 45.7% respondents were agreed that Allergic problem should be occurring from clothes like- polyester, nylon synthetic etc. whereas 26.3% said sometimes and 5.3% were disagreed. 49.7% respondents were disagreed that infection cannot be caused by the clothes, 10.3% were strongly disagreed and 23.3% told sometimes.

In Ayurveda change in clothing with seasonal variation, dressing in special occasions, effect of clothing on Dosha (bodily humours) and along with that very high value is given for maintaining the sanitation combined with an aesthetic appreciation of style form and colour. As per Acharya Susruta and other scholars of Ayurveda, good clothing causes good health and on the other hand contaminated clothes cause infectious diseases also as it is mentioned in Susrut Samhita-<sup>9-10</sup>

# प्रसङ्गाद्गात्रसंस्पर्शान्निश्वासात् सहभोजनात्।सहशय्यासनाच्चापि वस्त्रमाल्यानुलेपनात् || सु नि ७

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कृष्ठं ज्वरश्च शोषश्च नेत्राभिष्यन्द एव च|औपसर्गिकरोगाश्च सङ्क्रामन्ति नरान्नरम् \lVert सु नि ७ /३४

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# Kshara Karma and Its Utility - A Review

\*ShekharMrigank \*\*Gupta S.J. \*\*\*JaiswalRamnihorTapsi

**ABSTRACT:** Ksharais alkaline or basic in nature. It is obtained from certain plants, minerals and animal products by evaporation method, which may be used as single, or compound, or mixture form. There is a wide range of literature available about Kshara Karma in many AyurvedicSamhitas. Kshara Sutra explained by Chakradatta is being used widely nowadays by surgeons and appreciated its effectiveness. Kshara is used both internally (PaniyaKshar) and externally (PratisarniyaKshar) for the treatment of many diseases like Mutrashmari , external application in Arshas and in the form of Kshara Sutra in the treatment of NadiVrana , Bhagandara etc. Kshara is also aided in the different pharmaceutical procedure like Shodhana (purification), Jarana (roasting) and Maran (incineration). The importance of Kshara in therapeutics as well as in pharmaceutical procedure inspire us to explore the uses of Kshara and Kshara Sutra in view to establish its importance as well to get its clues for future scopes.

*Keywords:* Ayurveda, Kshara, Kshara Sutra, Paniya, Pratisarniya, Arsha, Bhagandara.

Ethical Clearance: Not applicable.

Conflict of Interest: None

#### **INTRODUCTION**

Ayurveda is serving the peoples since thousands of year with aim to provide healthy status to healthy individual and to cure the disease of patient. During this long time this traditional system undergone many ups and downs but still treating people of india and all over the world effectively. About 1000 single drugs and 8000 compound formulations are described in classical books of Ayurveda with their uses. Panchavidhakasayakalpana are fundamental preparation in Ayurveda pharmaceutics and is the primary source of todays available Tablets, ointments, Syrups etc. Various dosage forms are derived from these fundamental and basic preparations. KsharaKalpana (alkaline preparation) is one among them. The process of preparation of Kshara involves the extraction of 'alkalies' from ash of dried plants. It is said in AyurvedicSamhitas that the diseases which are difficult to treat can be cured by Kshara therapy (alkaline therapy) [1]. Ayurvedictreatment is based on various types of dosage forms. Panchavidhkashaykalpana is the basic form. Many formulations are developed over time having long shelf life, stability, strong action like gutika, vati, syrup, asava, arishta, snehakalpana, kshara etc. Ksharakalpana is alkaline substance derived from plants, minerals and animal products. Kshara therapy can treat those with good results which

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are difficult to cure. It can be given both internally as well as externally as per guidance given in AyurvedicSamhitas or depends on yukti of Vaidya. In different text of Rasa Shastra number of Kshara are mentioned to prepare metals and minerals in to therapeutic formulations (Bhasma form) through the process of Shodhana (purification), Sattvapatana (metal extracting), Marana (incineration of metals and minerals) [2], and also contradict the ill effects of poisonous drugs (schedule E-1) as antidote [3]. As per mode of use, it has two types that is Pratisaraniyakshar, Paniyakshara and on the intensity of corrosive property, it is divided into three types:

1. Mridupaka, 2. Madhyampaka, 3. Tikshnapaka[2]. In this article, an attempt has been made to review and highlight the uses of Kshara.

#### AIM AND OBJECTIVE

Present article aims to collocating the literature about Ksharakalpana , its classification, methods of preparation and therapeutic indication in a scientific way.

#### MATERIAL AND METHODS

Literature about Kshara and KsharaKalpana has been collected from the AyurvedicSamhitas like Sushrut Samhita, Sharangdhar Samhita, AstangHridya and Rasa Grantha like Rasatarangini, related research and review articles and recent ongoing researches for review work.

#### **DEFINITION OF KSHARA IN DIFFERENT AYURVEDIC CLASSICS**

The substance that removes the vitiated material from skin, flesh etc. or the substance, which detoxify or balance the Dosha, Dhatu, and Mala (excreta) is known as Kshara[4]. According to the Ayurvedic Formulary of India, Kshara are alkaline or basic substance obtained from the ashes of plants, minerals, and animals [5].

# THERAPEUTIC IMPORTANCE OF KSHARA

Acharya Susruta said that the diseases which are difficult to treat can be cured by Kshara therapy [4]. VranaShodhana (purification of wound), Ropana (healing) and ksharan are its special properties [5].

#### METHOD OF KSHARA PREPARATION

The selected drug is cut down to small pieces and dried well so that no moisture remains in it. The pieces are put together and burnt into ash. Firstly, a few well dried pieces of drug are put in fire and ignited. As they burn more and more pieces are added, when all the pieces are burnt and turn down into ash then leave it for self cooling. After that Water is added to the ash in the ratio of 6:1 and mix well. This is then filtered 21 times through a piece of cotton cloth or till a clear liquid is obtained. This filtered liquid is then put in an iron vessel and heated over a moderate fire till the water evaporates, leaving a solid salty white substance kshar which is collected and put in an air tight jar for future use [6].

#### **MODERN CONCEPTS**

Herbal ashes mostly contain sodium, potassium, carbonate, calcium oxide, magnesium and silica. Kshara is prepared by dissolving this ash in water and after filtering many times, it is dried by the evaporation method. In this process when so many substances come in contact of each other and forming some new substances and some compounds get decompose. It means that Kshara having more hydroxides will have more Ksharana property and hence it is comparatively more 'Tikshna' so used externally only. Ksharodak (alkaline water) contains hydroxides in traces hence prescribed internally and can be termed as 'PaniyaKshara'. The hydroxide level of kshar can be increased by the addition of lime stone, conch shell, etc. substance which are known to have Calcium rich. These reaction is set up in the Kshara preparation, the outcome of which is the transformation of some of them into carbonates. In the pharmaceutical process of metallic Bhasma preparation Jarana (roasting) is one of the intermediate process where ShodhitDhatu (purified metal) roasted with alkaline herbs in which herbal drug get completely burned and Kshara of that herb help in the process of Jarana. Jarana may be compared with "poling" process in which refining of crude metal is done from its own oxide as impurity [7].

# **DESCRIPTION OF KSHARA SUTRA**

In the present era Ksharasutra (medicated alkaline thread) in ano-rectal disease has become a miracle in Ayurvedic surgical practice. Many Acharya like Acharya Vagbhatta, Chakradutta, Bhavaprakasha has described about Kshara smeared with SnuhiKsheera (exudate of Euphorbia nerifolia) and Haridrachurna (Curcuma longa powder) in a strong thread to use for Arsha, Nadibrana, Bhagandara . Chakradutta has given the clear cut idea about the thread which is to be used. Later on in Rasa Tarangini description regarding the way of coatings, the numbers of coatings have been described. In Ayurveda Formulary of India, Part- III, described about the preparation of Ksarasutra in detail. According to the description 20 number surgical linen is soaked in fresh latex of snuhi and dried. The thread is smeared by 11layers of snuhi latex. Every smearing is done after thread is dried. After smearing in snuhi latex the thread is smeared with Apamargakshara and dried well again. The process is repeated 7 times, and then thread is smear with snuhiksheera and haridra powder for three times. Finally dry well the thread, sterilized by ultraviolet rays and sealed packed in glass tubes **[5].** 

#### **PROPERTIES OF KSHARA**

Kshara is predominant with Agni and Vayu Mahabhuta hence having teekshna and corrosive properties with fast acting. It is having other qualities like Chhedana, Bhedana, Lekhana etc. So, Kshara having Lavana (salty), Tikta (bitter) Rasa; Ruksha (dry), TeekshnaGuna (properties); Ushna (hot) Virya (potency); and Katu (pungent) Vipaka (attributes of drug assimilation) **[8]**.Kshara has possessed the Chedana (excision), Bhedana (incision) properties along with various other therapeutic actions. Thus, they are used in different diseases **[9]**.

#### **CLASSIFICATION OF KSHARA**

Ayurvedic texts Kshara are classified on the basis of their mode of use. These are Pratisaraniya (external use) and Paneeya (internal use) Kshara.

Sr.No	Kshara	Indications	
1.	Apamarga	Gulma, Udarasula	
	(Achyranthusaspera)	, Swasa	
	kshara[10]		
2.	Kadali (Musa paradisiaca)	Gulma , Plihodara	
	kshara[5]	, Jirnajwara ,	
		Shopha	
3.	Mulaka(Raphenussativus) [5]	Mutrakrichhra ,	
		Asmari	

# **USES OF KSHARA**

PratisaraniyaKshara has been further classified according to its corrosive potential into Mridu (mild), Madhya (moderate), and Tikshna (intense). This classification is entirely based on the strength or concentration of hydroxide in Kshara and applicable in the external use.

#### CHARECTERSTICS AND PRESERAVATION

Kshara is white in color and hygroscopic in nature so when exposed to environment it becomes moist that's why prepared kshar should be kept in an air tight jar. It will last for approximately five years.

DOSAGE OF KSHARA - 125 mg to 1 gm

#### INDICATIONS OF KSHARA

**PratisaraniyaKshara**: PratisaraniyaKshara is indicated in Kustha (skin disorders), Arsha (piles), Visha (poison), Kitibha, Dushtavarna (non-healing ulcers), Dadru (fungal infection), Nadivrana (sinus), Mukharoga (mouth disorders), Arbuda (tumor), Bhagandar (fistula), and Krimi (worms) Roga

**PaniyaKshara**: PaniyaKshara is indicated in GaraVisha (artificial poison), Arochak (tastelessness), Krimi, Gulma (tumors), Anaha (constipation), Visha, Udararoga (GIT

disorders), Agnimandya (loss of appetite), Ashmari (renal calculi), Ajirna (indigestion), Arsha, Bhagandar, Ashmari, Gulma, and Udararoga.

# CONTRAINDICATIONS OF KSHARA

In case of Raktapitta (bleeding disorders), Timira (eye disease), Ruksha (dryness), Moorchha (unconscious), and the diseases occurs at the sites of Marma (vital points), Sira (veins), Snayu (ligaments), Sandhi (joints), Tarunasthi (cartilaginous bones), Dhamani (arteries) etc. cannot be used in pregnancy **[11, 12.]** 

Major interest shown by whole of the pharmaceutical industry towards design and development of new plant based drugs through investigation of traditional system of medicine. In recent years, traditional uses of natural compounds, especially of plant origin received much attention as they are well tested for their efficacy and generally believed to be safe for human use with nil or very low side effects. It is best classical approach in the search of new molecules for management of various diseases. Kshara is one of the important dosage forms as mentioned in Ayurveda to cure various diseases like Kustha, Gulma, Mutraghata and Kshara Sutra is one of the important surgical procedures for the treatment of fistula in Ano. Kshara and Kshara Sutra are very popular remedy among the various Ayurvedic effective medicaments, Researchers are exploring the therapeutic potential of Kshara derived from different plant as it has more therapeutic properties which are not known can serve the mankind for better management of diseases.

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# आयुर्वेद का स्वतन्त्र दार्शनिकत्व

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सारांश: आयूर्वेद हमारी सांस्कृतिक विरासत एवं एक प्राचीन चिकित्सा-विज्ञान है, जो किसी भी विषय या प्रकरण के विश्लेषण-विवेचन हेत् इसकी समग्रदर्शिता एवं पृथुदर्शिता के लिये जाना जाता है, प्रसिद्ध है। आयूर्वेदीय-ज्ञान मात्र कतिपय लोगों द्वारा एक बन्द कमरे में बैठकर किये गये विचार और सिद्धान्तों पर आधारित नहीं है, बल्कि यह विज्ञान, अध्यात्म, दर्शन और ज्ञान की विविध विधाओं का एक आदर्श संगम है। इसीलिये चरक-संहिता के प्रसिद्ध टीकाकार चक्रपाणिदत्त ने आयुर्वेद शास्त्र को ''सर्वपारिषद्य-शास्त्र'' कहा है। यही कारण है कि दर्शन सम्बन्धी भी कई विषय-सिद्धान्त आयुर्वेद में दृष्टिगोचर होते हैं। मानव-जीवन और चिकित्सा हेतु जो भी उपयोगी सिद्धान्त हैं, उन्हें आयुर्वेद में ग्रहण किया गया है। आयुर्वेद में सांख्य, योग, न्याय, वैशेषिक, मीमांसा, वेदान्त तथा अन्य दर्शनों से मिलते जुलते कई विषय हमें प्राप्त होते हैं। यह साहित्यिक शोध-पत्र इस विषय पर विचार प्रस्तुत करता है कि आयुर्वेद एक चिकित्सा विज्ञान होने पर भी दर्शन सम्बन्धी विचार उपस्थित करने की क्या प्रासंगिकता है। इस शोध-पत्र का मुख्य लक्ष्य यह स्थापित एवं प्रतिपादित करना है कि इन सभी दर्शनों से सम्बन्धित विचार होने पर भी आयुर्वेद का अपना एक स्वतन्त्र दर्शन है ।

मुख्य-शब्द (keywords): आयुर्वेद, चिकित्सा, दर्शन, विज्ञान। Conflict of interest: None Ethical clearance: NA प्रस्तावना

आयुर्वेद चिकित्सा विज्ञान है और चिकित्सा विकारयुक्त देह एवं मन की होती है, आत्मा तो निर्विकार होती है, अतः चिकित्सा का विषय नहीं है। दर्शनशास्त्र आध्यात्मिक वस्त् विवेचनपरक,

मोक्षप्रतिपादक तथा आत्म-दर्शन प्रधान होते हैं,तब फिर आयुर्वेद में दार्शनिक तत्त्वों के विचार की आवश्यकता क्या है? आधुनिक मतानुसार भी दर्शन (Philosophy) केवल चिन्तनात्मक, जगत् के मूल तत्त्वों के तर्क-वितर्क द्वारा निश्चायक तथा सिद्धान्तों के स्थापक शास्त्र होते हैं। सुविचारित प्रयोगों के द्वारा , पुनः पुनः संयोग-विभाग द्वारा, कार्य-कारण सम्बन्ध द्वारा ,शुभ-अशुभ प्रभाव उत्पादन द्वारा, व्यवहार में प्रत्यक्षतया उपयोगी , प्रत्यक्षादि प्रमाणों एवं प्रयोगों के द्वारा परीक्षा करके ही जो स्थापित किया जाता है, प्रामाणिक होने से निः सन्देह सर्वजन स्वीकार्य होता है. वह ज्ञान विज्ञान (science) पद से कहा जाता है, जाना जाता है। चिकित्सा शास्त्र विज्ञान के गुणों से युक्त होने से विज्ञान-कोटि में समाविष्ट होता है, न कि दर्शन की कोटि में, क्योंकि विज्ञान तथा दर्शन में परस्पर भेद स्पष्ट ही है<sup>1</sup> । प्राचीन काल से ही आयुर्वेद को प्रत्यक्षशास्त्र कहा गया है, प्रत्यक्ष फल देने वाला होने से, हेतुओं तथा तर्कों से अमीमांस्य है, ऐसा स्वयं आचार्य धन्वन्तरि एवं सुश्रुत कहते हैं<sup>2</sup>।

प्रत्यक्ष प्रयोग द्वारा विकार(रोग) के नाश हेतु तथा स्वस्थ के स्वास्थ्य की रक्षा हेतु जो प्रयुक्त होता है, उतने जान तक ही आयुर्वेद का क्षेत्र है, ऐसा कहा गया है<sup>3</sup>। इस प्रकार प्राचीन तथा नवीन आयुर्वेदाचार्यों का मत प्रमुखतः प्रत्यक्ष और प्रयोग के पक्ष में ही देखा जाता है, तो फिर दार्शनिक विचार का अवसर कहां है?

इस सन्दर्भ में यह कहा जाता है- यह सही है कि आयुर्वेद व्याधिनाशपूर्वक स्वास्थ्यलाभ और दीर्घायुष्य के लिये प्रयोग किया जाता है और भेषजज्ञान इसमें समर्थ है, किन्तु रोगों के हेतु सामान्य-विशेष के द्वारा ही धातुओं के वृद्धि-क्षय के उत्पादक तथा चिकित्सा में प्रयुक्त द्रव्य भी सामान्य-विशेष द्वारा ही धातुसाम्यकर होते हैं, अतः देह और लोक के मूल तत्त्व कौन हैं? उनमें क्या समानता है?और क्या विशेष है? यह जिज्ञासायोग्य है। दूसरा दुःखों (रोगों) के प्रकारों में स्वाभाविक जरा, मृत्यु आदि तथा दुःख के

हेत्ओं में कर्मों का, रागद्वेषात्मिका उपधा (तृष्णा) के ज्ञान में, उसकी निवृत्ति यदि होती है, तो फिर किस प्रकार से? ऐसी जिज्ञासा होने पर नैष्ठिकी चिकित्सा ज्ञातव्य होती है,जिससे दुःख आत्यन्तिक रूप से समाप्त होते हैं। यहां दर्शन (Philosophy) का अवसर उपस्थित होता है।परम सुख की प्राप्ति करना मानवमात्र की स्वाभाविक इच्छा होती है।स्वलक्ष्य की प्राप्ति के लिये चेष्टा ज्ञानमूला ही होती है।सुख और उसके कारणों का वास्तविक ज्ञान प्राप्त करने हेतु पूर्व और पूर्वतर मनुष्यों द्वारा श्रवण, मनन और निदिध्यासन आदि के द्वारा परम प्रयत्न किया गया है।उसके परिणामस्वरूप जो प्राप्त हुआ, वह तत्त्व है और उसका बोध पूर्वाचार्यों द्वारा जिस मार्ग या उपाय से किया जाता है, वह दर्शन (Philosophy) कहा जाता है।स्थूल एवं दृश्य कार्यजगत विनश्वर है। सूक्ष्म, कारणरूप, अदृश्य, अनिर्देश्य द्रव्य कर्मानुमेय होते हैं तथा अविनाशि, स्थिर और नित्य होते हैं। इन सूक्ष्म कारणद्रव्यों से ही सृष्टि की उत्पत्ति होती है और विनाश के समय इन्ही सूक्ष्म कारण द्रव्यों में लय होता है, यह भी सर्वसम्मत है। विनाशि को छोडकर स्थिर वस्तु के ज्ञान और प्राप्ति के लिये प्रयत्न करना चाहिए, वही तत्त्वज्ञान या तत्त्व-दर्शन है। उस अविनाशि स्थिर तत्त्व के बारे में भी बह्त मत देखे जाते हैं4। यथा-

अद्वैतवाद- इस मत के विद्वान् एक चेतन तत्त्व (ब्रह्म) को ही स्वीकार करते हैं।

द्वैतवाद- इस मतानुसार चेतन एवं अचेतन दो तत्त्व होते हैं। त्रैतवाद- इस मतानुसार परमेश्वर तथा जीव ये दो चेतन तत्त्व और एक अचेतन तत्त्व अर्थात् तीन तत्त्व होते हैं।

बहुतत्त्ववाद- इस मतानुसार तत्त्व बहुत हैं। यथा- परमेश्वर, जीव, अचेतन में पञ्चभूत। इस मत के अन्तर्गत षट्पदार्थवादी, षोडशपदार्थवादी, चतुर्विंशति तत्त्ववादी, पञ्चविंशतितत्त्ववादी प्रभृति आते हैं।

इनमें से जो दर्शन आत्मा एवं परमेश्वर को चेतन होने से स्वीकार किये हैं, कर्मी का शुभाशुभ फल और इन फलों के अधीन ही जगत् होता है ये स्वीकार किये हैं , वे आस्तिक दर्शन माने गये हैं। यथा- वेदान्त, सांख्य, योग, न्याय, वैशेषिक एवं मीमांसा दर्शन। इनके अतिरिक्त जो परमेश्वर, आत्मा, कर्म, कर्मफल आदि को नहीं मानते हैं, वे नास्तिक दर्शन माने गये हैं। ये भी मुख्यतः छः हैं-चार बौद्ध प्रस्थान (माध्यमिक, सौत्रान्तिक, वैभाषिक तथा योगाचार), आर्हत और चार्वाक दर्शन। आयुर्वेद - एक स्वतन्त्र दर्शन दर्शन शब्द दृश् धातु के साथ ल्युट् प्रत्यय के योग से बनता है, जिसके विविध अर्थ हैं। यथा- देखना, दर्शन करना, जानना, समझना, दृष्टि, नेत्र, निरीक्षण करना, विवेक, बुद्धि, शास्त्र में व्याख्यात कोई नियम या सिद्धान्त, दर्शन-शास्त्र आदि<sup>5</sup> । जिससे देखा जाता है वह तथा जिसे देखा जाता है, समझा जाता है, वे

दोनो दर्शन कहलाते हैं।

न्याय-वैशेषिक प्रभृति विविध दर्शनों का दर्शन संज्ञा से उल्लेख मिलता है किन्तु आयुर्वेद का आयुर्वेददर्शन नाम से कहीं पर भी नामोल्लेख न तो देखा जाता है और न ही सुना जाता है। अतः शंका होती है कि परमार्थतः आयुर्वेददर्शन नाम से स्वतन्त्र प्रस्थान होता भी है या नहीं ?

इस विषय में दो तरह के विचार प्राप्त होते हैं। प्रथम 'नास्ति पक्ष' है जो यह मानते हैं कि आयुर्वेद का स्वतन्त्र दर्शन नहीं है। इस मत के अनुयायियों का मानना है कि आत्मा, कर्म, परमात्मा विषयक जो विवेचन आयुर्वेद में है, वह सब सांख्य, न्याय, वैशेषिक आदि आस्तिक दर्शनों में अन्तर्भाव योग्य है। नास्ति-पक्ष के कुछ मतावलम्बी आयुर्वेद के स्वतन्त्र दर्शन को अस्वीकार ही नहीं करते अपितु कहते हैं कि आयुर्वेद में परतन्त्र के सिद्धान्तों के रूप में यथावश्यक विभिन्न दर्शनों के सिद्धान्तों को अंगीकार किया गया है। दूसरा 'अस्ति-पक्ष' है, जो यह मानता है कि आयुर्वेद का एक स्वतन्त्र दर्शन है। इस मत को मानने वालों का विचार है कि आयुर्वेद का विशिष्ट एवं स्वतन्त्र दर्शन है। इनका मानना है कि अन्य दर्शनों से कुछ विषयों का साम्य होने पर भी स्वतन्त्र चिन्तन भी आयुर्वेदशास्त्र में दृष्टिगोचर होता है, अतः पृथक् दर्शन गिनने योग्य है<sup>6</sup>।

पक्ष तथा विपक्ष में मतों के उपलब्ध होने से ऊहापोहपरक विमर्श करना यहां प्रासंगिक है। अतः इतर दर्शनों से तुलनात्मक अध्ययन कर आयुर्वेद का स्वतन्त्र दार्शनिकत्व स्थापित करने वाले महत्त्वपूर्ण तथ्य यहां प्रस्तुत किये जा रहे हैं-

जगत् एवं पुरुष की उत्पत्ति- इस विषय का इतर दर्शनों के समान आयुर्वेद में भी यज्जःपुरुषीय अध्याय<sup>7</sup>, कतिधापुरुषीयशारीर अध्याय<sup>8</sup>,सर्वभूतचिन्ताशारीर अध्याय<sup>9</sup> आदि में विवेचन किया गया है।आयुर्वेद में इस सन्दर्भ में वर्णित विषय मात्र मोक्षप्राप्ति हेतु नहीं अपितु चिकित्सा प्रयोग हेतु भी उपयोगी सिद्ध किये गये हैं, जो इसका वैशिष्ट्य है।

अव्यक्त-विवेचन- अव्यक्त सभी उत्पाद्यमान तत्त्वों का मूल होते हुए सांख्य मत से प्रकृति एवं जड है, जबकि आचार्य चरक के

दर्शन के अनुसार अव्यक्त क्षेत्रज्ञ पद से भी वाच्य है। वह क्षेत्रज्ञ सांख्य दर्शन के मतानुसार त्रिगुणरहित है जबकि आचार्य चरक के अनुसार त्रिगुणयुक्त है।

क्षेत्र-क्षेत्रज्ञ विवेचन- आयुर्वेद तथा इतर दर्शनों में क्षेत्रज्ञ को नित्य माना गया है, किन्तु आयुर्वेद में क्षेत्र को भी अनादि तथा उत्पत्ति-विनाश धर्मयुक्त होने पर भी परम्परा-न्याय से नित्य माना गया है<sup>10</sup>। यह क्षेत्रत्व स्थापना सिद्धान्त भी आयुर्वेद का विशिष्ट है। प्रकृति-विकार विवेचन- अष्ट-प्रकृति की गणना भी आयुर्वेद में सांख्य से भिन्न है। सांख्य में अव्यक्त, महान्, अहंकार एवं पञ्चतन्मात्रा को अष्ट-प्रकृति में परिगणित किया है, जबकि आयुर्वेद

में आचार्य चरक ने पञ्चतन्मात्रा की जगह सूक्ष्म खादि पंचभूतों

को अष्ट-प्रकृति में निर्दिष्ट किया है<sup>11</sup> । षोडश विकार में आचार्य चरक एकादश इन्द्रियों तथा शब्दादि पञ्च अर्थों को परिगणित करते हैं<sup>12</sup>, जबकि सांख्य- दर्शन में शब्दादि अर्थों की जगह पंचभूतों को परिगणित किया है। अतः प्रकृति एवं विकार की गणना में भी आयुर्वेद का अपना विशिष्ट मत है।

इन्द्रिय-विवेचन-सांख्य दर्शन में इन्द्रियां आहंकारिक मानी गई है, जबकि आयुर्वेद में तो आचार्य चरक एवं सुश्रुत दोनों ने इन्द्रियों को भौतिक माना है<sup>13</sup>।

प्रयोजन-भेद- इतर दर्शनों का निःश्रेयस् प्राप्ति ही एकमात्र प्रयोजन है, आयुर्वेद तो पुरुषार्थ-चतुष्टय की अनुपालना हेतु आरोग्य को प्रमुख साधन मानता है<sup>14</sup>, जीवन्मुक्ति तो अन्त में साधनीय है, अतः इतर दर्शनों से प्रयोजन भेद भी है।

कार्यशैली भेद- प्रायः सभी दर्शन् विचारविमर्शपरक, अध्यात्मचिन्तनपरक एवं मोक्षप्रतिपादक हैं जबकि आयुर्वेद इसके अलावा प्रयोग किंवा चिकित्सा व्यवहार द्वारा प्रत्यक्षफलदायक है। धातुसाम्य के अनुवर्तन या स्थापना हेतु आवश्यक कर्तव्यों का पालन इसका प्रमुख कार्यक्षेत्र है<sup>15</sup> ।

पदार्थ-गणना क्रम में भेद- आत्रेय दर्शन (चरक-संहिता) में षट्पदार्थों की गणना इतर दर्शनों की तरह द्रव्यादि-क्रम से नहीं की है अपितु सामान्य-विशेषादि क्रम से की गई है। क्योंकि सामान्य-विशेष सिद्धान्त अनुसार ही रोगों की उत्पत्ति और उनकी चिकित्सा होती है, यह आयुर्वेदानुमत है। आयुर्वेद में कारण-द्रव्यों के नौ भेद तथा कार्य द्रव्यों के भी चेतन और अचेतन दो भेद लक्षणसहित निर्दिष्ट किये गये हैं<sup>16</sup> । कार्य द्रव्यों के भेद एवं लक्षण इतर दर्शनों में अनुपलब्ध है। गुणों की गणना भी आयुर्वेद में वैशेषिकोक्त गुणों से भिन्न एवं अधिक है। द्रव्यादि के लक्षण भी स्वतन्त्र रूप से किये हैं , अन्य दर्शनों मे वर्णित लक्षणों के अनुवाद मात्र नहीं है। प्रज्ञा-विवेचन- सम्यक् दर्शन करना बुद्धि का प्राकृत लक्षण है, यह वर्णन करके धी, धृति एवं स्मृति का भेद वर्णन, प्रज्ञापराध का सभी अहितों की उत्पत्ति में हेतुत्व प्रतिपादित करना<sup>17</sup> तथा अहंकार, संग, संशय आदि से बुद्धि का आवरणत्व<sup>18</sup> भी आयुर्वेद में वर्णित है, जो इतर दर्शनों से विशिष्ट है।

प्रमाण-विवेचन- प्रमाणों में प्रमुख प्रत्यक्ष, अनुमान एवं आसोपदेश का आयुर्वेद में वर्णन है। इनके अतिरिक्त चरकसंहिता में युक्ति को स्वतन्त्र प्रमाण रूप में स्वीकार किया गया है, जो परलोक-सिद्धि तथा चिकित्सा व्यवहार में महत्वपूर्ण है। कमलशील तथा शान्तरक्षित द्वारा युक्ति प्रमाण के प्रस्तावक रूप में चरक मुनि का नामोल्लेख किया गया है<sup>19</sup>, इससे आयुर्वेद का दार्शनिकत्व किंवा स्वतन्त्र दर्शन विदवत्सुप्रसिद्ध था , यह ज्ञात होता है। अन्य प्रमाणों को मुख्य प्रमाण रूप में स्वीकार नहीं किया गया है। **समग्रदर्शिता किंवा पृथुदर्शिता**- आयुर्वेद के आचार्यों ने इतर दर्शन के आचार्यों के समान किसी एक वाद का आश्रय लेकर व्याख्यान नहीं किया है, अपितु अनेकान्तवाद, परिणामवाद, आरम्भवाद, स्वभाववाद, स्वभावोपरमवाद आदि विविध वादों को अपने विषय

विवेचन में यथावश्यक स्थान दिया है, जो इनकी समग्रदर्शिता किंवा पृथुदर्शिता का सूचक है।

इस प्रकार उपरिनिर्दिष्ट तुलनात्मक विवेचन से यह स्पष्ट होता है कि प्रमाण-प्रमेय का स्वतन्त्र प्रस्थान होने से आयुर्वेद एक विशिष्ट एवं स्वतन्त्र दर्शन है।

विमर्श: दर्शन आध्यात्मिक वस्तु विवेचनपरक, मोक्षप्रतिपादक एवं जगत के मूल तत्त्वों के निश्चायक होते हैं। विज्ञान सुविचारित प्रयोग, संयोग-विभाग, कारण-कार्य प्रभाव तथा शुभ-अशुभ प्रभाव के उत्पादन द्वारा प्रत्यक्ष उपयोगी ज्ञान का विवेचन करता है। यह भेद होने पर भी एक साम्य भी इन दोनो विधाओं में देखा जाता है और वह है- वस्तु-तत्त्व का निश्चय। यह अलग विषय है कि दर्शन प्रमुखतः जगत के मूल तत्त्वों के निश्चायक या ज्ञान कराने वाले हैं तथा विज्ञान प्रमुखतः लौकिक कार्यकारी द्रव्यों का कार्यकारणवाद के आधार पर प्रयोग, परीक्षण कर लौकिक द्रव्यों के वस्तुतत्त्व का निश्चय कराता है। इस प्रसंग में लेखक की यह विनम सम्मति है कि दर्शन और विज्ञान ये दोनो एक दूसरे के पूरक हैं। दर्शन शब्द को यदि व्यापक अर्थ में देखें तो यह आध्यात्मिक तत्त्व विवेचनपरक ही न होकर लौकिक विषय विवेचनपरक भी होते हैं, क्योंकि हर एक विषय का अपना एक पृथक् दर्शन (वस्तुतत्त्व को देखने एवं समझने का तरीका) होता है। यही बात आयुर्वेद पर भी लागू होती है। कुछ तत्त्वों का अन्य दर्शनों से साम्य होने पर भी कई विषयों में दर्शन भेद भी अवश्य है, जो आयुर्वेद को स्वतन्त्र दर्शन सिद्ध करता है। विशेषतः चरकसंहिता में "अन्यशास्त्रेभ्यः अर्थाः उपनीताः" अर्थात् अन्य शास्त्रों से अर्थ इसमें लाये गये हैं ऐसा नहीं कहा गया है। युक्ति के प्रमाणान्तर के समर्थन के अवसर पर शान्तरक्षित एवं

कमलशील द्वारा चरक मुनि के अनुसार युक्ति एक प्रमाण है यह कहना यह सिद्ध करता है कि दार्शनिक परिषद् में आचार्य चरक का मत अन्य विधा के विद्वानों द्वारा भी गौरव एवं सम्मान के साथ उपस्थित किया गया है।

जो लोग इस मत के अनुयायी हैं कि आयुर्वेद में वर्णित विभिन्न दार्शनिक विषय अन्य अन्य दर्शनों में अन्तर्भाव योग्य हैं, उनका मत इसलिये सर्वात्मना ग्राह्य नहीं है कि जो विशिष्ट दर्शन या चिन्तन आयुर्वेद का है , उसका अन्तर्भाव किसी भी दर्शन में नहीं किया जा सकता है। सांख्य दर्शन से आयुर्वेद का निकटतम साम्य है, किन्तु सांख्य दर्शन से जो भेद है, वह ही इस शोध-पत्र में प्रदर्शित किया गया है। सांख्य भी प्राचीन एवं नवीन

सांख्य भेद से प्रमुखतः दो प्रकार का है। भागवत में सांख्यों के बहुत भेद हैं, यह भी कहा गया है। चरकसंहिता में "आद्यैः सांख्यैः" यह उल्लेख प्राप्त होता है। पुनर्वसु आत्रेय सांख्यों में मान्यतम थे, यह बात " सांख्यैः संख्यातसंख्येयैः सहासीनं पुनर्वसुम्" इस उद्धरण से सिद्ध होती है<sup>20</sup>।

पुनः आयुर्वेदावतरण के समय समवेत महर्षियों में न्यायप्रवर्तक -गौतम, वेदान्त प्रवर्तक- बादरायण, वैशेषिकप्रवर्तक- कुशिक अर्थात् कणाद का नाम आया है। यह स्थिति होने पर दो सम्भावनाएं हैं- या तो आत्रेय दर्शन के साथ ही अन्य दर्शनों का भी स्रोत कोई वेदरूप स्वतन्त्र दर्शन हो या फिर आत्रेय दर्शन एवं इतर दर्शन के आचार्यो के समकालीन होने से परस्पर मतों का प्रभाव पडा हो। इसमें पूर्वपक्ष (वेदरूप स्रोत) ज्यादा उचित प्रतीत होता है, अतः विद्वानों को स्वीकार्य है। अतः आयुर्वेद प्रवर्तक आचार्यों का दर्शन स्वतन्त्र एवं विशिष्ट है। यदि कही से विषय संग्रहीत भी किया है तो समकालीन दर्शनों से नहीं प्रत्युत् प्राचीन पूर्वाचार्यों से किया होगा जिनका वर्तमान में नाम भी उपलब्ध नहीं होता है। इस प्रकार आयुर्वेदीय दर्शन स्वतन्त्र एवं प्राचीन है, यह मुख्य पक्ष स्पष्ट होता है।

उपसंहार:

अस्तु, यह निस्सन्देह कहा जा सकता है कि आयुर्वेद चिकित्साविज्ञान होने से इसका अपना एक स्वतन्त्र एवं विशिष्ट दर्शन है। आयुर्वेद दर्शन आध्यात्मिक तथा लौकिक दोनो प्रकार के तत्त्वों का चिन्तक एवं निश्चायक है। यही इसकी समग्र-दृष्टि का परिचायक भी है।

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# Role of Panchavalkala in Promotion of Wound Healing

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ABSTRACT: Panchavalkala i.e. combination of five valkal plants, is one of the ideal combination for а vast range of therapeutics in Ayurvedic text such asVranaropana, Vranashodhan, Shothahara, Graahi, etc. Researches in recent evaluated properties like anthelmintic, antimicrobial, wound healing etc. of these plants in combination and individual too. Panchavalkala is widely used in different form like Kwath, Churna and Malahara etc. The advantages of different innovative Kalpanas as compare to traditional one have increased self life, ready to use, better acceptability and ease of application. Panchvalkala is the combination of five drugs having properties like Shodhana (Purification) and Ropana (Healing). Individual drugs and in combination have Kashava rasa (Astringent) and SheetaVirva which is dominent and useful in the management of Vrana (Wounds) as well as Shotha (inflammations).

Keywords- Panchavalkala, Vranaropana, Antimicrobial, Kalpanas, Kashaya.

Ethical Clearance: Not applicable. Conflict of Interest: None

**INTRODUCTION:** Ayurveda is a medical science as well as literature of life. In ayurveda a single drug is enough to cure signs and symptoms of a disease. But combination of drugs according to same related Guna and Karma is one of the best formulation used in Ayurveda stream for treating various diseases. These herbal medicines seem tohave same potential according to their mode of action. That's why ancient Acharyas made some simple combinations of drugs known as "Mishrakagana" according to their properties (Guna and Karma). The science behind the wound healing is advancing rapidly, particularly as a result of new therapeutic approaches. The wound healing effect of different herbal drugs have been enormous and are in wide practice these days. Panchavalkala, a combination of five astringent drugs named -

- Nyagrodha/vata (Ficusbenghalensis L.),
- Udumbara (*Ficus racemose L.*),
- Ashvattha (*Ficusreligiosa L.*),
- Parisha (*Thespesiapopulnea L.*),
- Plaksha (*Ficuslacor L.*)

It shows properties like antiseptic, wound purifying and healing, astringent properties, antiinflammatory, immunonodulatory, antioxidant, antimicrobial etc.

• **1. NYAGRODHA -** (*Ficusbenghalensis L.*)

# • **DESCRIPTIONS**

#### a) Macroscopic

BARK - Mature stern bark grey in colour, thin, closely adhered, , light bluish-green or grey patches, bark flat or slightly curve, thickness varies with age of tree.Externally rough bark due to presence of horizontal furrows and lenticels, mostly circular and prominent fracture short in outer two thirds of bark while inner portion shows a fibrous fracture.<sup>1</sup>

• Rasa-Astringent.

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# • b) Microscopic

• Transverse section of mature bark shows compressed cork tissue and dead elements of secondary cortex consisting of mostly stone cells and thin walled, compressed elements of cortex, cork cells rectangular, thick-walled and containing brownish content, secondary cortex wide, forming more than half of thickness of bark, composed of large groups of stone cells and parenchymatous cells, stone cells vary in shape, parenchymatous cells thin walled and somewhat cubical to oval few in number and occur between groups of stone cells, some of cells contain prismatic crystals of calcium oxalate, starch grains and tannin.<sup>1</sup>

CONSTITUENTS: Tannins, glycosides and flavonoids.

# **PROPERTIES AND ACTION<sup>2</sup>**:

Rasa:Kashaya, Guna:Guru, Ruksha, Virya:Sheeta, Vipaka:Katu Karma: Kaphapittahara, Mutrasangrahaniya, Stambhana, Vranaropan

THERAPEUTIC USES: Daha, Prameha, Raktapitta, Trishna, Visarpa, Vrana, Raktapradar.

**2. UDUMBARA -** (*Ficusracemosa* L.): It is an evergreen, moderate to large-sized spreading, lactiferous, deciduous tree. 15-18 meter high. *Ficus* is an exceptionally large pan-tropical genus with over 700 species distributed widely throughout the warmer parts of Asia, Africa, America and Australia. It is retained as a single, large genus because it is well defined by its unique reproductive system, involving synconia fig and specialized pollinator wasps. *F. racemosa* is commonly known as 'Gular' and all parts of this plant are regarded medicinally important in Ayurveda.

#### **PROPERTIES AND ACTION<sup>3</sup>**

Rasa – Kashay Guna – Guru, Rukshna Vipak – Katu Virya - Sheeta **THERAPEUTIC USES:** Biliary disorders, Jaundice, Dysentery, Diabetes, Diarrhoea ,Vrana, :Pradar etc.

**3. ASHVATTHA** - (*Ficusreligiosa L.*): Ayurveda explains how every part of the sacred fig tree can be used for holistic wellbeing. It works powerfully on Kapha (Water) and Pitta (Fire) Dosha imbalance. The manner in which various parts of the ashvattha eliminate water and phlegm (sweating, therapeutic vomiting, diuretic action and expectorant effects) as well as heat (skin surface and internal purgation, antipyretic/temperature reduction) has a beneficial and balancing impact on digestive and skin health.

#### **PROPERTIES AND ACTION<sup>4</sup>**

Rasa - Kashay, madhur Guna - Guru, Rukshna Vipak – Katu Virya – Sheeta

#### The bark of the Ashvattha tree-

Rich in vitamin K, is an effective complexion corrector and preserver which makes bark extractions valuable for-

- Strengthening blood capillaries and minimizing inflammation
- Healing skin bruises faster and increasing skin resilience
- Treating pigmentation issues, wrinkles, dark circles
- Lightening surgery and pregnancy marks, scars, and stretch marks.

#### **4. PARISHA** - (*Thespesiapopulnea L*.)

The Parisha Plant, scientifically known as *Thespesiapopulnea* is also popularly called the Indian Tulips Tree. The Parisha Plant is categorized under the Panchavalkala group, which is a group of herbs and plants that are characterized by astringent barks and AcharyaCharaka mention it under "MutraSangrahaniyaMahakashaya".

# **PROPERTIES AND ACTION<sup>5</sup>**

Rasa – Kashya Guna – Guru, Rukshna Virya – Katu Vipak - Sheeta *Some of the major actions of Parisha include-*<sup>11</sup>

Anthelminthic, Analgesic, Antidote, Antioxidant, Anti Inflammatory, Anti Ulcer, Astringent *Some of the major effective chemicals and nutrients found in Parisha include-*

TanninsSteroidsSesquiterpenesFlavonoids

6. **PLAKSHA** - (*Ficuslacor L.*)

#### **DISCRIPTIONS:**

**a) Macroscopic:** Rough, flat to curved, external surface ash or whitish grey, transversely arranged lenticels common, lip shaped and exfoliating, internal surface rough, fibrous, longitudinally striated, reddish brown, fracture, fibrous, astringent.

**b) Microscopic:** 5-8 layered cork consisting of thin walled, rectangular cells, a few external layers exfoliating, secondary cortex very wide consisting of compactly arranged, rectangular, thick-walled, pitted cells, patches of circular to elongated, lignified, elliptical stone cells with

striations, a few prismatic crystals of calcium oxalate and reddish brown contents found scattered throughout the secondary cortex, secondary phloem very wide consisting of mostly stratified layers of collapsed cells, group of fibres, phloem parenchyma, laticiferous cells, traversed by 2-5 seriate phloem rays.

Drugs	Rasa	Guna	Virya	Vipaka
Vata(F. benghalensis L.)	Kashaya	Guru, Ruksha	Sheeta	Katu
Udumbara ( <i>F.racemosa L.</i> )	Kashaya	Laghu, Ruksha	Sheeta	Katu
Asvattha (F. religiosa L.)	Kashaya, Madhura	Guru, Ruksha	Sheeta	Katu
Plaksha(F. lacor L.)	Kashaya	Guru, Ruksha	Sheeta	Katu
Parisha ( <i>T. populnea L.</i> )	Kashaya	Laghu, Ruksha	Sheeta	Katu

Rasa-Panchaka of Panchavalkala

**MODE OF ACTION OF PANCHAVALKALA PAIN:**Considering the mode of action by the *Rasa- Kashay*, *Panchavalkala* must have been *Vatakara* and hence increase the *Ruja* (pain) which is predominantly due to *Vata*. But the effect of the drug on *Ruja* is found to be highly significant. This might due to the action of the *Guna* (Property). Having *Guru* (heavy) *Guna* it is supposed to be *Vatahara* and thus might have decreased the *Ruja*.

**DISCHARGE:***Panchavalkala* is a drug with *Kashaya Rasa* (astringent taste) and by the action of the *Rasa*, it acts as a *Stambhaka* (arresting) and *Grahi* (that holds). It also must be *twakPrasadaka* (cleanses the skin and removes all the dirt from here).Due to all these properties, it must have reduced the *Srava* (discharge). The *Stambhana* effect might also be attributed to the *SheetaVirya* (cold in potency) of the drug.

**REDNESS:** *Panchavalkala* is considered to be *Pittaghna*property, that is both by the action of *Rasa* (taste) and *Virya* (potency). They are *Pittahara* and therefore they must decrease the *Raga* (redness), which is mainly due to *Pitta*. By virtue of its *Kashaya Pradhana Rasa*, it must have acted as *RaktaShodhaka* (blood purifier). *Pitta Shamana*, *Varnya* (giving color) and *TwakPrasadana* (purity of skin) actions aided to improve the skin color by improving the local blood circulation.

**SWELLING:** In case of *Panchavalkala*, which is considered to be good *Shothahara* (that which reduces swelling), due to the *Kashaya Rasa* of the drug it acts with *Peedana* (act of squeezing), *Ropana* (healing) and *Shodhana* (curative effect) property. Due to these properties, it destroys or liquefies the accumulated substances and hence minimizes the swelling. Furthe more, the drug is *Ruksha* (dry) and *Kaphahara*. Even due to this, *Shopha* which is *Kaphaja*, gets reduced.

Moreovethe *Lekhana* (scraping), *Kledahara*(arrestingDampness), *Chhedana* (destroying /removing) and *Raktashodhaka* (blood purifier) properties of *Kashaya Rasa* also will facilitate the debridement of the slough.

Pharmacological action of *Panchavalkala* proves that all the five drugs of *Panchavalkala* are found to have anti-inflammatory, analgesic, antimicrobial, and wound healing properties.[6,7,8,9,10]

**CONCLUSION:** In Ayurveda classic *Panchavalkala* i.e. the bark of five trees viz. Vata (*Ficusbengalensis L.*), Udumbara (*Ficusrecemosa L.*), Ashvattha (*Ficusreligiosa L.*), Parisha (*Thespesiapopulnea L.*) and Plaksha (*Ficuslacor L.*) mentioned in the treatment of Vranashotha (inflammations and abscess) and Vrana (wounds). All the ingredients present in the *Panchavalkala* has Kashaya rasa (Astringent properties) which helps in the Shodhan (cleaning) (*Dr.DhammanandaKhadkutkar et al. International Journal of Medicinal Plants and Natural Products (IJMPNP) Page 10 Vrana.*) Individual drugs also have Shothahara (anti-inflammatory), Vedanasthapana (pain reliever), Vranaropaka (wound healing), Stambhana (striping action), Raktashodhaka (blood purifier) etc. properties.

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## Clinical Study of Godantyadi Yog as an Analgesic in the management of Post Operative Pain in Anorectal Surgery

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**Abstract:** Although there have been great advances in the field of pain management with a greater number of analgesic agents and techniques available, studies show that a significant number of patients still experience moderate or severe pain post-operatively

In *Ayurvedic* texts many drugs have been mentioned as analgesic (Vednahar or Shoolaghna) and are being used for management of pain. The Ayurvedic compound *Godantyadi Yog* was selected for present study to evaluate its efficacy for relief of postoperative pain after ano-rectal surgery under spinal anesthesia.

Twenty eight patients of either sex with narrow age and weight distribution posted for Ano-rectal surgery under spinal anaesthesia were selected. All patients were randomly divided into two groups, consisting of fourteen patients in each group Patients of Group-I (Control Group) were given Diclofenac Sodium 50 mg orally with a sip of water 8 hrly for three doses and Group-II patients (Trial Group) were given *Cap. Godantyadi Yog* 250 mg with a sip of water 8 hrly for three doses. The patients were assessed for adequate post-operative analgesia on visual analogue scale (VAS) Analgesic property of both groups of drugs was statistically significant on Visual Analogue Scale. Though Tab. Diclofenac sodium did produce a little better analgesia on VAS but intergroup comparison suggested that the effects were statistically insignificant

#### **INTRODUCTION**

In patients undergoing surgery, post-operative pain is an anticipated and often feared consequence<sup>1,2</sup>. As pain is a subjective experience, it should be treated according to what the patient feels and not what their attendants think<sup>3,4</sup>. Effective post-operative analgesia has been associated with decreased stress responses to surgery, and improved pulmonary and cardiovascular function<sup>5,6,7</sup>. All of these factors have an impact on patient recovery<sup>8,9</sup>. Post-operative pain differs from other types of pain in that it is usually transitory, with progressive improvement over a relatively short time course. Typically, the affective component tends towards an anxiety state also.

The effective pain control is essential for optimal benefit of surgery. Worldwide attempts are going on to come out with an ideal analgesic. The commonly used analgesics in modern medicine have many side effects & contraindication and thus a need for a safe *Ayurvedic* analgesic agent continues. Present study is an attempt in this direction.

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# प्राकशस्त्रकर्मणश्चेष्टं भोजयेदातुरं भिषक। मद्यपं पायेयेनमद्यं तीक्ष्णं यो वेदनासह:।।सु सू १७/११

For this twenty eight patients of both sex with narrow age and weight distribution coming under ASA grade I were selected. The patients were randomly divided into two groups, Group I and Group II. Group I was control group and the patients of this group was given three doses of Diclofenac Sodium 50 mg. orally 8 hrly, when patients reported pain post-operatively. Patients of Group II were given three doses of *Godantyadi yog 250 mg* orally at 8 hr interval. We opted to study the analgesic effect of our trial drugs over the first 24 hr only as post-operative pain in Ano-rectal surgery is most intense in the first 24 hr and a randomised study of Diclofenac administered rectally has shown that by 48 hr Diclofenac analgesic effect is no better than to placebo<sup>10</sup>. There have been problems with oral analgesia for patients undergoing surgery with general anesthesia in which there is interference with gastrointestinal activity and variable absorption<sup>11</sup>. The patients in our study, undergoing ano-rectal surgery under spinal anesthesia, were in a subgroup of patients with low risk of gastric stasis and who normally tolerate oral fluids within hours of surgery<sup>12</sup>. Oral Diclofenac is as effective and has the same adverse effects as when administered rectally and we concur with Moore and McQuay who advocate that if the patient can swallow, give the drug by mouth<sup>13</sup>.

For the assessment of results of the therapy, the patients were examined subjectively and objectively for 24 hrs post-operatively. Signs and symptoms were assessed by adopting suitable scoring methods as mentioned in materials and methods. The results obtained were statistically analyzed using SPSS statistical software and mean change in percentage S.D, S.E, 't' value, p value were calculated for each criteria of assessment in both the groups. The values obtained in Gr. I and Gr. II were compared statistically.

#### **Materials and Methods**

Atkins (1966) in his presidential address to the Royal College of Surgeons of England said that "There are many paths which lead to the acquisition of Clinical Knowledge that might profitably be explored but there is only one high road to increase the therapeutic knowledge and that is the controlled clinical trial". Godanti is a known anti-pyretic analgesic drug. Tagar, Nirgundi also have analgesic property, where as Bhanga has analgesic and sedative effects. So the plan to study Godantyadi Yog<sup>14</sup> as an analgesic, was taken up on ASA grade I patients undergoing Ano-rectal surgery .This is a Novel drug and only one clinical study by P Bharti etal was done on this earlier.

**STUDY DESIGN** – It is a Single Blind Randomised Controlled clinical study.

#### PREPARATION OF DRUG (Godantyadi Yoga)

The plants *Bhanga, Nirgundi* and *Tagar* were collected locally, identified and authenticated by experts in *Dravya Guna* department. Fresh leaves were taken of *Bhanga, Nirgundi* and for *Tagar* the roots were taken. *Godanti Bhasma* which is the main ingredient was obtained from a pharmaceutical company. After collection and identification, the ingredients were properly cleansed with fresh water and their *swarasa* was extracted with the help of Juicer. *Shudha Godanti Bhasma* was given three *Bhavana* with *Swarasa* of leaves of *Bhanga (Cannabis sativa)*, leaves of *Nirgundi (Vitex negundo)* and *Tagar mool (Valeriana wallichi)* separately. On one day only one *bhavana* was given. Total no. of *Bhavana* given were nine. After this the drug was dried in shade and filled up in capsules. The capsules were filled in such a manner that each had 250mg of '*Godantyadi yog'*.

The complete procedure was undertaken in the Pharmacy of Dept. of *Rasa Shastra* R.G.G.P.G.Ayurvedic College Paprola. Its quality was checked and verified by Department of *Dravya Guna*, Department of *Rasa Shastra* and Drug testing laboratory Joginder Nagar Himachal Pradesh.

### **DRUG PRESENTATION**

It was presented in the form of capsule containing 250mg of Godantyadi Yog.

#### DOSE

One Capsule (250 mg) with a sip of water 8 hourly. Three doses were given.

Group I Diclofenac Sodium 50mg

Group II Godantyadi Yoga 250 mg

**Study Duration**: 2years

**STUDY POPULATION** – Patients were selected irrespective of caste creed and religion. It consisted of 28 adult patients of both sexes for ano-rectal surgery in the Dept of *Shalya tantra* R.G.G.P.G. Ay. College Paprola, H.P.

Ethical committee clearance from ethical committee of RGGPG Ay College Paprola H.P. was obtained.

*Inclusion criteria* Adult patients between the age of 18 and 60 years under ASA grade I undergoing elective ano-rectal surgery (in Haemorrhoids, Fistula in Ano and Fissure in Ano) in the Department of Shalya Tantra, R.G.G.P.G.A.C, Paprola H.P.

#### **Exclusion Criteria of Clinical Trial**

- 1. Patients outside the ASA grade I.
- 2. Patients in whom nil orally by mouth post operatively was not a pre-requisite criteria.

- 3. Patients allergic to Diclofenac sodium or other NSAIDs.
- 4. Pregnant or lactating women.
- 5. Patients with history of peptic ulceration
- 6. Patients refusal for LSAB.
- 7. Patients suffering from Respiratory, Cardiac, Hepatic, Renal disease, Hormonal disorders.
  - 8. Patients with pre existing neurological deficit.
  - 9. Patients receiving regular medication containing any analgesic drug.

The drugs were given at 8 hr intervals for a total of three doses

. Clinical assessment of this study consisted of evaluation (after institution of drugs in both the groups) as an analgesic at intervals of 30mins, 1hr, 2hr, 4hr, 8hr, 12hr and 24 hrs on the following.

- 1. Physiological parameters like Pulse Rate, Respiratory Rate and Blood Pressure.
- 2. Visual analogue scale
- 3. Desirable effects and adverse effects of the drugs.

### Subjective criteria

Pain on 10 point Visual analogue scales was evaluated by taking 0 for no pain and 10 for worst pain imaginable. VAS pain relief satisfaction score was also marked as 0 for total dissatisfaction and 10 for complete satisfaction.

0	10
1	
No Pain	Worst Pain ever

- Sedation was recorded on a 4 point ordinal scale
- 0 Awake.
- 1 Awake but drowsy.
- 2 Asleep but responsive to verbal stimuli.
- 3 Asleep and arousable only by painful stimuli.
- \* Nausea & Vomiting
- 0 No nausea/Vomiting.
- 1 Mild nausea but no vomiting.
- 2 Moderate nausea followed by vomiting.
- 3 More than one episode of Vomiting.

### ✤ Headache

- 0 No headache.
- 1 Occasional headache but patient able to do usual work.
- 2 Continuous headache which hampers routine work.
- 3 Patient is unable to do any work.

#### ✤ Pruritus/rash

- 0 No pruritus
- 1 Mild pruritus with no rash
- 2 Moderate pruritus and localized rash
- 3 Severe pruritus and generalized rash

#### **Observation and Results**

### I. <u>TYPE OF SURGERY</u>

### **Table No. 1: Surgical procedures**

Type of surgery	Gr. I	%age	Gr. II	%age	Total patients	Total %age
Haemorrhoidectomy	11	78.57	9	64.28	20	71.42
Fistulectomy	1	7.14	2	14.28	3	10.71
Fissurectomy	2	14.28	3	21.42	5	17.85

#### II. MEAN SURGICAL TIME

### Table no. 2: Mean intra-operative time period for surgery.

Group	Mean±S.D.	Inter-g Compo		Remarks
-		't' value	p value	
Ι	46.43± 9.49	-0.71	>0.05	N.S.
Π	48.92± 9.03	-0.71	-0.05	11.0.

## III. <u>EFFECT OF THERAPY ON REQUIREMENT TIME OF FIRST DOSE OF</u> <u>THERAPY</u>

Table No-3 shows that statistical comparison of mean requirement time (in min) of 1<sup>st</sup> dose of analgesic between the groups is insignificant.

Group	Mean ± S.D	Inter group n ± S.D Comparison		
		't' value	p value	
I	$47.64 \pm 8.16$	1.37	>0.05	N.S.
Π	$43.50 \pm 7.86$			

### Table No 3 – Requirement time of first dose of Therapy

## IV EFFECT OF THERAPY ON MEAN VAS

Statistical comparison of mean VAS:- (A) at onset of pain, (B) after 30min of therapy, (C) after 1hr of therapy, (D) after 2 hrs of therapy, (E) after 4 hrs of therapy, (F) after 8 hrs of therapy,(G) after 12 hrs of therapy,(H) after 24 hrs of therapy.

G		Mean VAS (mean± S.D.)								
Groups	A	В	С	D	E	F	G	H		
Ι	6.71 ± 0.82	5.07 ± 1.26	$\begin{array}{c} 3.78 \\ \pm \ 0.80 \end{array}$	2.71 ± 0.99	2.14 ± 0.77	3.14 ± 1.23	2.28 ± 1.06	$\begin{array}{c} 1.28 \\ \pm \ 0.82 \end{array}$		
II	7.21 ± 0.80	5.64 ± 0.74	3.85 ± 0.66	3.21 ± 0.57	3.02 ± 0.51	3.34 ± 0.53	2.64 ± 0.49	1.42 ± 0.93		

Table No. 4A: Statistical comparison within groups of

Mean VAS (Paired 't' test)

Groups	Comparison	Mean diff	S.D	S.E	ʻť'	p value	Remarks
	A vs B	1.18	±1.02	0.20	6.60	< 0.001	H.S
	A vs C	2.78	$\pm 0.80$	0.21	13.00	<0.001.	H.S
	A vs D	4.00	±1.78	0.47	8.41	< 0.001	H.S
Group I	A vs E	4.50	±1.85	0.49	9.10	< 0.001	H.S
	A vs F	2.50	±1.01	0.26	9.26	< 0.001	H.S
	F vs G	2.85	±0.63	0.16	16.93	< 0.001	H.S
	F vs H	2.92	±0.91	0.24	12.01	< 0.001	H.S
	Avs B	1.57	±0.17	0.17	9.18	< 0.001	H.S
	A vs C	3.35	±0.22	0.22	15.10	<0.001.	H.S
	A vs D	3.92	±0.19	0.19	19.82	< 0.001	H.S
Group II	A vs E	3.64	±0.24	0.24	14.8	< 0.001	H.S
	A vs F	2.92	±0.22	0.22	12.70	< 0.001	H.S
	F vs G	1.07	±0.19	0.19	5.41	< 0.001	H.S
	F vs H	2.57	±0.85	0.22	11.31	< 0.001	H.S

This table No-4 A shows that statistical comparison of mean VAS within the groups is statistically highly significant throughout the study period. F is the point of institution of second dose of the drug and hence the comparisons between F vs G and F vs H in all the tables after Comparison of A with others.

Groups	Comparison	Unpaired 't'	p value	Remarks
	A vs B	0.71	>0.05	N.S
	A vs C	-1.85	>0.05	N.S
CI	A vs D	0.16	>0.05	N.S
Group I vs	A vs E	1.56	>0.05	N.S
vs Group II	A vs F	-1.18	>0.05	N.S
Group II	F vs G	6.85	< 0.05	S
	F vs H	1.05	< 0.05	S

 Table No.4B: Statistical Intergroup Comparison of Mean VAS

**Table No 4B** shows that variation in mean VAS was found statistically insignificant in all the steps of study except 12- 24 hrs of therapy when compared between the groups where it was statistically significant, but the significant scale varied only nearly 0.5 on VAS. Though statistically it shows significance, clinically 0.5 difference in VAS is not much in terms of patient satisfaction.

### Table No 4C. Intergroup comparison Showing Percentage of Relief in

G		Relief Percentage on mean VAS							
Groups	В	С	D	E	F	G	H		
Ι	24.44%	43.66%	59.60%	68.10%	53.20%	66.02%	80.92%		
II	21.77%	46.60%	55.47%	58.56%	52.57%	63.38%	80.30%		

#### Post-op pain on Mean VAS with time.

Statistical inter-group comparison showing Prlief Percentage of mean VAS:- (B) Post-Op Pain after 30min of therapy, (C) after 1hr of therapy, (D) after 2 hrs of therapy, (E) after 4 hrs of therapy, (F) after 8 hrs of therapy,(G) after 12 hrs of therapy,(H) after 24 hrs of therapy.

### V. DESIRABLE AND UNDESIRABLE EFFECTS OF THERAPY

		Mean	score			Pair- ed 't'	Two tailed P	Inter group comparison	
Desirable / Undesirable effects	Gr.	BT	AT SD-	<i>SD</i> ±	S.E±			Unpa -ired 't' Value	Two tailed, P
	Ι	0.00	0.07	0.27	0.07	0.98	>0.05		
Sedation	Π	0.00	0.21	0.42	0.11	1.88	>0.05	1.07	>0.05
Nausea /	Ι	0.07	0.28	0.42	0.11	1.94	>0.05	1.00	>0.05
vomiting	II	0.07	0.14	0.26	0.07	1.01	>0.05	1.08	
	Ι	0.00	0.14	0.36	0.09	1.48	>0.05	0.(1	> 0.05
Headache	II	0.07	0.00	0.26	0.07	0.56	>0.05	0.61	>0.05
Gastric	Ι	0.00	0.14	0.36	0.09	1.48	>0.05	0.61	>0.05
discomfort	II	0.14	0.07	0.26	0.07	0.98	>0.05		<i>≥</i> 0.05
Pruritus /	Ι	0.00	0.00						
Rash	II	0.00	0.00			r Trootn			

### Table No V – Desirable and Undesirable effects of therapy

**BT**: Before treatment

**AT**: After Treatment

#### Discussion

### I) Type of Surgery

**Group I** - Majority of patients 11(78.57%) had undergone haemmorrhoidectomy, followed by fissurectomy 2(14.28%) and 1 (7.14%) was of fistulectomy.

**Group II** - Majority of patients 9(64.287%) had undergone haemmorrhoidectomy, followed by fissurectomy 3(21.42%) and 2 (14.284%) were of fistulectomy. (*Table No 1*)

### **II)** Surgical time

In **Group I** the mean surgical time was 46.43 min and in **Group II** was 48.92 min. Inter group difference in mean surgical time was not significant. (*Table No 2*)

#### III) Requirement time of first dose of Therapy

In **Group I**, 47.64 min was the mean requirement time of first dose of therapy. In **Group II** the mean requirement time for first dose of therapy was 43.50 min

Intergroup statistical comparison of mean requirement time (in min) of 1<sup>st</sup> dose of analgesic between the groups is insignificant (*Table No 3*)

### IV) Effect of therapy on VAS

Statistical comparison of mean VAS within the groups was statistically highly significant from the base value of onset of pain throughout the study period. (*Table No. 4*)

The average pain grading done on visual analogue scale was 6.71 and 7.21 in the **Group** I & II respectively before administration of control and trial drugs. The average

pain grading came down to 1.28 and 1.42 in **Group I** & **II** respectively after the completion of trial. The analgesic effect of *Godantyadi Yog* can be attributed to *Vednahara* (analgesic) property of *Godanti, Nirgundi* and *Tagar mool*.

Pain is specifically due to vitiation of *Vata Dosha. Tagar*, due to its *snigdha* and *Ushna guna* is *Vatashamaka. Nirgundi* is *Vatashamak* due to its *Ushna guna*. So we can say combined action of ingredients of *Godantiyadi Yog* is capable of relieving pain produced by surgical trauma. Also the effect of Analgesia after the first dose of medicine in Gp I lasted for approx 6 hours while it lasted for approx 5 hrs in Gp II

#### V) Desirable and undesirable effects of therapy

#### (a) Sedation

**Group I** - Sedation before treatment was zero and after treatment it was found in 1 patient (mean 0.07).

**Group II** - Sedation before treatment was zero and in 3 patients (mean 0.21) after treatment.

Udweghar property of Tagar and Bhanga subdues excitement and calms the patients without inducing sleep.

#### (b) Nausea and vomiting

**Group I** - Nausea was observed before treatment in 1 (mean 0.07) patient and after treatment it was found in 3 patients (mean 0.28).

**Group II** - Nausea was found in 1(mean 0.07) patient before treatment and 2 patients (mean 0.14). It suggests less gastric irritation with *Godantiyadi Yog*. There was no incidence of vomiting in both groups. And none of the patients required to be given rescue antiemetic. Bhanga has anti-emetic properties and besides sheet guna of Godanti bhasm may be the factors responsible for reduction in nausea.

### (c) <u>Headache</u>

**Group I** - Headache before treatment was zero and after treatment mild headache was found in 2 patients (mean 0.14).

**Group II** - Mild Headache before treatment was found in 1(mean 0.07) patient after treatment no patient complained of headache.

Similar incidence of headache (6.7%) with tab. Diclofenac 50 mg was also reported by **Soo Soo** Lim et al<sup>15</sup>. In Gr. II the headache of one patient was reduced to zero after giving *Godantyadi Yog* which proves the *shirah shoolhar* property of *Godanti bhasm*<sup>16</sup>. Sheet guna, *madhur vipak* of *Godanti Bhasm* and *Vedanashaman*, vatahar *guna* of Nirgundi, *Bhanga* may have been the probable reasons for reduction in headache.

### (d) Gastric Discomfort

**Group I** - Gastric discomfort before treatment was zero and after treatment gastric discomfort was found in 2 patients (mean 0.14).

**Group II** - Gastric discomfort before treatment was found in 2 patients (mean 0.14) after treatment 1 patient (mean 0.07) complained of gastric discomfort.

*Godantyadi yog* was helpful in reducing gastric discomfort in 1 patient which may be due to *pittahara* property of *godanti bhasm* and anti-emetic, anti-spasmodic effects of *Bhanga*.

### (e) <u>Pruritus/Rash</u>

None of the patients reported any incidence of pruritus/ rash in both the groups.

(Table no 5).

Inter group comparison for all the above desirable/adverse effects were insignificant proving that *Godantyadi yog* is nearly as effective as Diclofenac sodium but with added advantages in having lesser side effects..

. We could not exclude severe side effects if any, as our study size and duration were not adequately empowered.

### PROBABLE MODE OF ACTION OF GODANTYADI YOG

To make any hypothesis regarding the action of drug it is important to know the *Samprapti* i.e. aetiopathogensis of the disease and prepared formulation must have the property to break down the *Samprapti* of the disease. In A*yurvedic texts* the action of a drug is based upon the *rasapanchak* of the drug.

Although each constituent drug in *Godantyadi Yog* has several pharmacological actions on different organs/organ systems of the body and act by way of several mechanisms in the management of various disorders but here as we are concerned only with the pharmacological properties and clinical actions related to post-operative pain. A critical analysis of different *Ayurvedic classics* reveals that each of the constituent drugs plays a very important role in the wholesome management of pain. A calculative study was done to conceptualize and deduce the dominance of *Ras, Guna, Virya, Vipak Prabhav* and *dosha karma* of individual components of *Godantyadi Yog* so that the mode of action of this formulation can be apprehended.

Name of Drug	Ras	Guna	Virya	Vipaka	Doshaghnata
Bhang	Katu, Tikta	Laghu, Ruksha	Ushna	Katu	Kapha, Vatahara
Nirgundi	Katu, Tikta	Laghu, Ruksha	Ushna	Katu	Vata, Kapha
Tagar	Katu, Kashaya	Laghu, Snigdha	Ushna	Katu	Kapha, Vatashamaka
Godanti Bhasm	Kashaya	Laghua	Sheeta	Madhura	Pittahara

*"Sarvaritushu Shuleshu Prayen pavana prabhu*<sup>17</sup>

*Vata* is the main vitiated *Dosha* responsible for *Vedna/shool* as is quoted by *Acharya Madhav* and *Acharya Sushruta*. As *Acharya Charaka* has mentioned, though there is predominance of one *dosha* in a disease other *doshas* may also get vitiated<sup>18</sup>. Due to *avaran* of *marg /srotas* there is *vata prakopa<sup>18</sup>*. This *avarana* may be due to *Kapha dosha* vitiation.

Hence mainly *Vatashamak* drugs are used in the management of Pain. Due to their *ushna virya Bhang, Nirgundi* and *Tagar* may act to suppress vitiated *Vata Dosha*. Besides they are having *katu, tikta ras* which may help in breaking the pathogenesis of *avaran* by vitiated *kapha dosha*, thus aiding in analgesic activity of *Godantyadi Yog*. Similarly *Godanti bhasm* because of its *Madhura vipaka* is *Vata Shamaka* Also Jhon G.J et al (1988) have shown that *Godanti bhasm* possesses Analgesic, anti-pyretic, and anti-inflammatory activity<sup>19</sup>.

If we look from modern medical science point of view, the main constituent of *Bhang* is THC which has analgesic activity in both nociceptive and neuropathic pain<sup>20,21</sup> and both THC and Cannabidiol exhibit analgesic activity in vivo<sup>22</sup>. Cannbinoids and olivetol have been shown to inhibit prostaglandins mobilization<sup>23,24</sup> and systhesis<sup>22</sup> as well as inducing an inhibiton of cyclooxygenase and lipoxygenase<sup>22</sup>. It has been shown that analgesic activity of *bhanga* leave extracts mediate this action through arachidonate metabolism. The analgesic and anti-inflammatory activity of VLE (Vitex Negundo Leaf Extract) can be attributed to its flavonoid content which is known to act through inhibition of prostaglandin biosynthesis<sup>25</sup>. According to **Vishal R Tandon** et al *Vitex negundo Linn* (VN) leaf extract is used as an adjuvant therapy to standard anti-inflammatory and analgesic drug<sup>26</sup>. Antispasmodic and blood pressure lowering effects of *Tagar (Valleriana wallichii)* are mediated through K<sup>+</sup> channel activation. Valerian effects are mediated through brain Gamma-amino butyric acid (GABA) receptors in rat brainstem preparation. The combined action of these properties of the constituents of *Godantyadi Yog* may have been the cause of significant relief in post-operative pain.

#### **Conclusion:**

Thus it can be concluded that *Godantyandi Yoga possesses analgesic properties without any side effects*. Though Diclofenac sodium did produce a little better analgesia on VAS but intergroup comparison suggested that the effects were statistically insignificant and hence *Godantyadi Yog* is nearly as effective when compared with Tab. Diclofenac Sodium. The duration of action after the first dose of Diclofenc Sodium was approx one hour longer than the trial drug. However, this is a preliminary study and requires more comprehensive observations and investigations to reach the final conclusion. Godyantyadi yog is Novel drug and further

studies in pharmacodyanamic and pharmokinetic effects should be done to see its analgesic as well as beneficial/adverse effects over prolonged use in larger sample data. It is currently recommended that analgesic regimens that operate through different mechanisms (multimodal analgesia) be combined<sup>12,13</sup>. Hence the concomitant effects of Godantyadi yog with opiates/ NSAIDs may need to be evaluated for future studies.

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## **Relevance of Radiological Services in Ayurvedic Hospital**

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**Abstract:** - It is very difficult to diagnose a disease on the basis of Ayurvedic principles or if they manage to diagnose, they still may not more satisfied.. It is essential to get the direct training from the Guru in order to become perfect in Ayurvedic diagnosis. Aptopadesha, Pratyaksha and Anumana Pramana are the methods used for the understanding the stage, state and site of Dosha; state of Doshya and the site of Dosha-Dooshya Sammurchana. Complete knowledge cannot be obtained by knowing the fragmentary knowledge. Ayurveda advises to examine the person as a whole, treat as a whole and use the drug as a whole.

Diagnosis is a continue process in which the physician responds to information garnered from the patient and others, from a physical comparing and contrasting their clinical findings is called differential diagnosis. Today with the advancement in the Medical field, the diagnosis of disease can be done from the beginning and the progress of the diseases can be stopped. But sometimes the patient cannot afford expensive imaging techniques like CT scan, MRI etc. Once the physician has completed the diagnosis, he explains the prognosis to the patient and proposes a treatment plan which includes therapy and follow-up (further consultations and tests to monitor the condition and progress of the treatment, if needed), usually according to the guidelines provided by the medical field on the treatment of the particular illness.

Various leading Vaidya describes the downfall of Ayurvedic clinical diagnosis due to non availability of Radiological Services in their hospital. Because present scenario Ayurveda treats various type of Surgical and Non Surgical diseases with the help of Radiological Diagnosis. So importance of services of Radiology does not overlook.

**Keywords:** Ayurveda, physician, Surgical, Non Surgical and Radiological Diagnosis. **Conflict of interest**: None. **Ethical clearance**: Approved by Ethical committee.

**Introduction:** Ayurveda is a science of life. Ayurvedic diagnosis is based on etiological factors. The approach of diagnosis involves investigation of causes and their correlation with sign and symptoms. Ayurveda considers *Madhav Nidan* as the classical textbook for approach of diagnosis which describes more than 5,000 signs and symptoms for the identification of diseases.

Diagnosis<sup>1</sup> in Ayurveda mainly depends on the *prakriti* of an individual and progression of the diseases. Another important aspect of diagnosis (*Vikriti Pariksha*) is consideration of *Dosha* movement and pathology of *Dhatu & Mala*<sup>2</sup>.

Ayurveda suggests some points which are needed to be considered as diagnostic tools, known as *Pancha Nidana*; these are the cause (*Nidana*), prodromal signs and symptoms (*Purva Rupa*), main clinical features (*Rupa*), investigative methods (*Upashaya*) and disease pathogenesis (*Samprapti*).

The *Pancha Nidana* utilizes causative factor (*Nidana*) as a part of *Dosha* imbalance. It is also important to identify type of *Dosha*.

## A. Pancha Nidana

## A1 Nidana:

*Nidana* considers the disease causing factors like; diet, life style, environmental factors and injuries as sources of any diseases which overall leads the imbalance of *Doshas*.

## A2 Purva Rupa:

*Purva Rupa* considers initial sign and symptoms of disease. These symptoms may term as warning symptoms for any particular disease.

## A3 Rupa:

*Rupa* considers main sign and symptoms of a disease. The *rupa* can be considered as advanced form of the warning signs (*Purva Rupa*).

## A4 Upashaya :

The investigational and treatment options involve utilization of proper diet, herbal remedies or physical therapies. Dietary changes may be recommended to confirm suspected diagnosis<sup>5</sup>.

## A5 Samprapti:

This provides complete knowledge of the disease development stages, starting from the causes to the final stage of investigation;

## B. Methods of Examination described in Ayurveda

The decision regarding disease must be established only after complete examination. For this purpose, Ayurveda describes some methods under the following category<sup>6-7</sup>:

## a. Trividh Pariksha:

**1. Darsana Pareeksha:**diagnosis of disease through patient observation including physical signs like skin colour, eyes appearance and behaviors etc.

- 2. Sparshana Pareeksha diagnosis by using touching sensation, palpation and percussion
- 3. *Prashna* diagnosis of disease through obtaining the information from patients.

### b. Ashtavidh Pariksha:

Ashtavidh Pariksha considers eight various aspects for diagnosis purpose advocated by Acharya Yog Ratnakar<sup>8-9</sup>

1.Nadi Pariksha (Pulse examination) 2.Jihva Pariksha (Tongue examination)

3.Shabda Pariksha (Voice examination)4.Sparsha Pariksha (Skin examination)

5.Drka Pariksha (Eyes examination)6.Akruti Pariksha(General appearance examination)

7. Mutra Pariksha (Urine examination) 8. Mala Pariksha (Stool examination)

## c. Dashvidh Pariksha:

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Acharya Charaka described following ten factors for making decision regarding  ${\rm disease}^{10}$ 

a.Prakriti (Physical constitution)b.Vikruti (Pathological condition)c.Sara (Conditions of tissue)d. Samhanana (Body frame work)e.Pramana (Limbs and elements)f.Satmya (Homologation)g.Sattva (Mental constitution)h.Ahara shakti (Agni)

*i.Vyayama shakti* (Capacity of exercise) j.Vaya (Age)

## Importance of Radiological Diagnosis:

The physician should examine the patient thoroughly and make the diagnosis and then treat the patient skillfully<sup>11</sup>. Radiology is now the key diagnostic tool for many diseases and has an important role in monitoring treatment and predicting outcome. In Ayurveda, various surgical diseases needs urgent radiological imaging for diagnosis of disease like Baddhgudodar, Chidrodar, Ashmari, Mudhgarbh and various type of Asthibhagna. It is also helpful to know the advanced stages of arbuda (cancer). In these advanced diseases, radiological technique is adopted not only for diagnosis but also for treatment.

Benefits and utility of radiological diagnosis may be summarized as follows:

- a. Early diagnosis helps in prevention of complications.
- b. Early diagnosis helps in complete and faster recovery.
- c. The accurate diagnosis helps in planning precise treatment for destroying the root cause of disease and thus prevents recurrence of disease.
- d. Early and correct diagnosis saves money and reduces mental stress of the patient.

A common misconception is that Radiologist is the doctor who only performs Radiological investigation. It's true that this is part of their job, but it's only a small part!

A Radiologist is actually a physician. He is responsible for patient care throughout the surgical experience i.e. before, during and after the surgery itself.

## Conclusion:

Ayurveda suggests various techniques for Rog-Nidana (diagnosis of disease) including Pancha Nidana and various types of Pariksha which help to identify the cause and type of disease. However, to know the basic anatomical changes related to pathogenesis of disease, Radio diagnostic approach becomes essential. In Ayurveda also, various surgical and critical diseases have been defined which require urgent radiological imaging and intervention during diagnosis and treatment. Each and every Ayurvedic hospital should follow the B.H.U. model for treatment of various diseases where the treatment and procedures are done on the basis of Ayurveda with the help of advanced radiobiological tools.

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### ROLE OF PRAKRUTI ON WIPE OUT PERIOD OF SPINAL ANAESTHESIA IN HAEMORRHOIDECTOTMY Dr. Sudheer Kumar Pandey

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**Abstract:** In practice maximum number of haemorrhoidectomy is performed under spinal anesthesia but the effect of spinal anesthesia varies from person to person due to change in their physical and psychological properties which is well explained in Ayurveda as Prakruti. In this study we have tried to establish the relation between wipe out period of spinal anesthesia and different prakruti.

Keywords: Wipe out period, Prakriti, spinal anesthesia, heamorrhoidectomy

#### **Conflict of interest: None.**

#### Ethical Clearance: Received recommendation.

**Introduction:** In day to day clinical life, it is noticed that a number of patients behave differently with same anesthetic even with the adoption of uniform technique and surgical procedure. Normally this difference in response to anaesthesia is related to physical and psychological status of the patient which is gained by clinical experience. This has been recognized by many physicians of modern times also. (Eysenk 1957, Schultz 1957, and Norris).

It is widely noticed in clinical practice that a number of patient behave differently in relation to spinal anesthesia. The hemodynamic statuses of some patients change remarkably in relation to others though the surgical procedure, position remains uniform. In some patients, incase of spinal anesthesia, time of post-operative pain varies from person to person. Even though the amount of drug (LOX 5%) is also same in all patients. So starting time of postoperative pain is in clinical practice led this study to find out a definite relationship regarding the wipe out period of spinal anesthesia. The research on wipe out period of spinal anesthesia relation to prakruti is carried out for findings the physiological and psychological relationship that is happened in the three categories of people e.g. Vattik, Pattik and Shlesmic.

The work presented here describes the clinical and physiological changes in patientsbelongs to three Doshaj groups Vataja, Pittaja and Kaphaj. All the patients of age groups between (20-50) years Prakruti will will be assessed as per standard prakruti assessment chart prepared for the study preoperatively and same subjects are observed for wipe out effect of spinal anesthesia postoperatively.

The object was to see the response of the three constitutional groups of patients after spinal anesthesia starting time of post-operative pain. The physical and chemical properties and the pharmacologic action of Lignocaine 5% are administered under all most all clinical circumstances. Now the tremendous advances in science related to anesthesiology made possible the metabolism and excretion study of Lignocaine 5%.

Knowledge gained has been applied to clinical practice to advantage. However, much about Lignocaine 5% as well as in spinal anesthesia remains remains to be investigated.

As the state of Spinal anesthesia by definition involves a change in vital function at least those of Respiratory system and Cardiovascular system perhaps, knowledge and experience are most important considerations. So the result of this study may open out certain finer avenues for selecting time of Analgesic and effect of drug (Lignocaine 5%) in a particular individual belonging different prakruti.

### MATERIAL & METHOD:

Source of data: IPD patients of Shalyatantra ward from KLEU Ayurvedic Hospital Shahapur Belagavi.

**Study Participants:** Patients undergone heamorrhoidectomy under spinal anesthesia were selected from KLE's Ayurveda Hospital Shahapur Belagavi.

Study design: An Observational Study

Study period: 18 months.

**Method of collection data:** 30 subjects undergoing Haemorrhoidectomy were selected for the study who's prakruti was assessed as per standered prakruti assessment proforma and Wipe out period of Spinal Anesthesia was assessed in Patients post operatively as the onset of pain.

#### **Inclusion Criteria:**

- American society of anesthesia grade 1 and 2 patient
- Age group between 20 to 50 years.
- Subject selected for heamorrhoidectomy
- A) Exclusion Criteria:
- Patients suffering from severe systemic diseases such as Bronchial asthma, Cardiac diseases, Renal Failure etc.
- Known cases of Diabetes and Hypertension.
- Patients on Anti-depressant and Anti-psychotic drugs.
- Any addiction e.g. alcohol, tobacco, narcotics

## B) Assessment Criteria: C1)Pain Assessment

VAS (Visual analogue scale)

### C2) Prakruti Assessment:

Standard prakruti assessment chartthat was taken from CCRAS web site.

C) Duration And Follow Up: Post operatively till wipe out effect of spinal Anesthesia.

**OBSERVATION AND RESULTS:** 30 patients undergoing haemorrhoidectomy was observed in this study in relation with prakruti. The patients were observed for Wipe out period of spinal Anesthesia. The distribution in this study was as follows,

**Age groups** – Age wise distribution of 30 patients of haemorrhoidectomy showed that maximum 23.3% was belonging to the age group of 20-25 years followed by20% were in the age group36 to 40 years& 46 to 50 years and 13.3% were in the age group of 31 to 35 years & 41 to45 years. Remaining 10% patients were belonging to the age group of 26-30 years (Table No 5)

Age Group in Years	No. of patients-n	PERCENTAGE %
20-25	7	23.3
26-30	3	10
31-35	4	13.3
36-40	6	20
41-45	4	13.3
46-50	6	20
Total	30	100

Table No. 5: Age wise distribution of 30 Patients of Haemorrhiodectomy

**Weight**- Weight wise distribution of 30 patients of haemorrhoidectomy showed that maximum 43.3% was belonging to the weight group of 61-70 kg followed by 23.3% were in the weight group of 40-50 kg & 51 to 60 kg and 9.9% were in the weight group of 71 to 80 kg. (Table No 6)

Table No 6: Weight wise distribution of 30 patients of haemorrhoidectomy

Weight groups in kg	No of Patients-n	Percentage
40-50	7	23.3
51-60	7	23.3
61-70	13	43.3
71-80	3	9.9

**Sex-** Sex wise distribution of 30 patients of haemorrhoidectomy showed that maximum 70% was belonging to the Male followed by 30% was in the Female. (Table No 7)

 Table No 7: Sex wise distribution of 30 patier
 emorrhoidectomy

 43.3
 emorrhoidectomy

Sex		No of	f Patients-n	Percentage %
Male		20		70
Fema	23.3	0	23.3	30
				9.

**Prakruti** -Prakruti wise distribution of 30 patients of Haemorrhoidectomy showed that maximum 36.6% were belonging to the VATA-PITTA Prakruti followed by 20% were from VATA-KAPHA Prakruti, 16.6% were found PITTA-KAPHA & PITTA-VATA Prakruti, rest 10% were belonging to the KAPHA-PITTA Prakruti. (Table No 8)

Table No 8: Prakruti wise distributions of 30 patients:

Types of Prakruti	No of Patients-n	Percentage %
VATA -PITTA	11	36.6
VATA- KAPHA	6	20
KAPHA -PITTA	3	10
PITTA- KAPHA	5	16.6
PITTA- VATA	5	16.6

S. No	Prakriti		Duration (min) Mean <u>+</u> Std Dev
1	Vata-Pitta	(n=11)	161.8 <u>+</u> 12.3
2	Vata-Kapha	(n=6)	253.3 <u>+</u> 12.52
3	Pitta-Kapha	(n=5)	205 <u>+</u> 14.58
4	Pitta-Vata	(n=5)	178.8 <u>+</u> 14.13
5	Kapha-Pitta	(n=3)	228.7 <u>+</u> 35.64

Table No 9: Showing the Mean + Stdev of Wipe out Duration for Haemorrhoidectomy

Table no 9 shows the wipe out period in different prakrutis i.e highest wipe out period was observed in vata-kapha where mean & SD was  $253.3 \pm 12.5$ , next moderate wipe out period was observed in Kapha-Pitta & Pitta-Kapha where mean & SD was  $228.7 \pm 35.64$ ,  $205 \pm 14.58$ , and lowest wipe out period was observed in Pitta-Vata & Vata-Pitta where mean & SD was  $178.8\pm14.13$ ,  $161.8\pm12.3$  minutes respectively.

	1	e · · · · · ·	D 1 1/1
Table No 10: Showing One-way	/ analysis of variance	e for wine out duration and	Prakrifi
Table 10 10. Showing One-way	analysis of variance	ion whice out duration and	1 1 4 1 1 1 1 1

P value	< 0.0001
P value summary	***
Are means sign if. different? ( $P < 0.05$ )	Yes
Number of groups	5
F	36.27
R square	0.853

ANOVA Table	SS	df	MS
Treatment (between columns)	37640	4	9410
Residual (within columns)	6486	25	259.5
Total	44126	29	

Tukey's Multiple Comparison Test	Mean Diff.	Q	Significant? P < 0.05?	Summary	95% CI of diff
VP vs VK	-91.52	15.83	Yes	***	-115.5 to - 67.49
VP vs PK	-43.18	7.029	Yes	***	-68.71 to - 17.65
VP vs PV	-16.98	2.764	No	ns	-42.51 to 8.545
VP vs KP	-66.85	9.011	Yes	***	-97.68 to - 36.02
VK vs PK	48.33	7.008	Yes	***	19.67 to 76.99
VK vs PV	74.53	10.81	Yes	***	45.87 to 103.2
VK vs KP	24.67	3.063	No	ns	-8.800 to 58.13
PK vs PV	26.2	3.637	No	ns	-3.733 to 56.13
PK vs KP	-23.67	2.845	No	ns	-58.23 to 10.90
PV vs KP	-49.87	5.995	Yes	**	-84.43 to - 15.30

There is a significant difference between Vata-Pitta & Vata-Kapha, Vata-Pitta & Pitta-Kapha, Vata-Pitta & Kapha-Pitta, Vata-Kapha & Pitta-Vata and Pitta-Vata & Kapha-Pitta.

There is no Significance difference between Vata-Pitta & Pitta-Vata, Vata-Kapha & Kapha-Pitta, Pitta-Kapha & Kapha-Pitta, and Pitta-Kapha & Pitta-Vata.

The mean value of VK, KP, and PK was 253.3, 228.7 and 205 respectively. There duration of wipe out period was more in the individuals where Kapha prakriti was involved. This study shows that Kapha involvement increases the wipe out period post Haemorrhoidectomy.

 Table No 11: Sowing the wipe out period and sex

Unpaired t test		
P value	0.7635	
P value summary	ns	
Are means sign if. different? ( $P <$		
0.05)	No	
One- or two-tailed P value?	Two-taile	ed
Т	df	t=0.3039 df=28
How big is the difference?		
Mean $\pm$ SEM of column A	$3.033 \pm 0$	.1774 N=18
Mean $\pm$ SEM of column B	$3.113 \pm 0$	.1753 N=12
Difference between means	-0.07917	± 0.2605
95% confidence interval	-0.6127 to	o 0.4543

There was no significant difference found between the male and female population on wipe out period. This implies that both the sex respond equally to wipe out period.

Table No 12	Showing	the wine	out neriod	according to Age
1 abic 1 to 12	Showing	the wipe	out periou	according to rige

	20 to 25	26 to 30	31 to 35	36 to 40	41 to 45	46 to 50
Mean	2.575	2.680	2.938	3.043	3.925	3.308
Std. Deviation	0.3959	0.3559	0.2658	0.7767	0.4291	0.7902
Std. Error	0.1616	0.2055	0.1329	0.3171	0.2146	0.3226

Tukey's Multiple Comparison Test	Mean Diff.	q	Significant? P < 0.05?	Summary	95% CI of diff
20 to 25 vs 26 to 30	-0.1050	0.3574	No	ns	-1.395to 1.185
20 to 25 vs 31 to 35	-0.3625	1.352	No	ns	-1.540to 0.8151
20 to 25 vs 36 to 40	-0.4683	1.952	No	ns	-1.522to .5849
20 to 25 vs 41 to 45	-1.350	5.034	Yes	*	-2.528to1724
20 to 25 vs 46 to 50	-0.7333	3.057	No	ns	-1.787to 0.3199
26 to 30 vs 31 to 35	-0.2575	0.8115	No	ns	-1.651 to 1.136
26 to 30 vs 36 to 40	-0.3633	1.237	No	ns	-1.653to 0.9266
26 to 30 vs 41 to 45	-1.245	3.924	No	ns	-2.638to 0.1483
26 to 30 vs 46 to 50	-0.6283	2.139	No	ns	-1.918to 0.6616
31 to 35 vs 36 to 40	-0.1058	0.3946	No	ns	-1.283 to 1.072
31 to 35 vs 41 to 45	-0.9875	3.361	No	ns	-2.277to 0.3025
31 to 35 vs 46 to 50	-0.3708	1.383	No	ns	-1.548to 0.8067
36 to 40 vs 41 to 45	-0.8817	3.288	No	ns	-2.059to 0.2959
36 to 40 vs 46 to 50	-0.2650	1.105	No	ns	-1.318to 0.7883
41 to 45 vs 46 to 50	0.6167	2.299	No	ns	-0.5609to 1.794

There was no significant difference between the different age groups on wipe out period. This shows that there is no correlation between age groups and wipe out period.

	40 to 50	51 to 60	61 to 70	71 to 80	
Mean	2.671	3.136	3.200	3.600	
Std. Deviation 0.3592		0.9057	0.6901	0.4770	
Std. Error	0.1358	0.3423	0.1914	0.2754	
ANOVA Table		SS	df	MS	
Treatment (between columns)		2.175	3	0.7249	
Residual (within columns)		11.87	26	0.4564	
Total		14.04	29		

Table No 13: Showing the wipe out period on weight of the patients

Tukey's Multiple Comparison Test	Mean Diff.	Q	Significant? P < 0.05?	Summary	95% CI of diff
40 to 50 vs 51 to 60	-0.4643	1.818	No	ns	-1.456 to 0.5270
40 to 50 vs 61 to 70	-0.5286	2.360	No	ns	-1.398 to 0.3409
40 to 50 vs 71 to 80	-0.9286	2.817	No	ns	-2.208 to 0.3512
51 to 60 vs 61 to 70	-0.06429	0.2871	No	ns	-0.9337 to 0.8052
51 to 60 vs 71 to 80	-0.4643	1.408	No	ns	-1.744 to 0.8155
61 to 70 vs 71 to 80	-0.4000	1.307	No	ns	-1.588 to 0.7879

There was no significant difference between the age of the patients and the wipe out period post haemorroidectomy. This implies that there is no correlation between wipe out period and weight of the patients.

S. No	Prakriti	Time	
		Mean <u>+</u> Std Error	Significance
1	Vata-pitta VS Vata-Kapha	0.13 <u>+</u> 3.98	1
2	Vata-pitta VS Pitta-Kapha	6.36 <u>+</u> 4.23	0.57
3	Vata-pitta VS Pitta-Vata	6.43 <u>+</u> 4.23	0.56
4	Vata-pitta VS Kapha-Pitta	1.63 <u>+</u> 5.11	0.99
5	Vata-kapha VS Pitta-Kapha	6.5 <u>+</u> 4.7	0.65
6	Vata-kapha VS Pitta-Vata	6.3 <u>+</u> 4.7	0.67
7	Vata-kapha VS Kapha-Pitta	1.5 <u>+</u> 5.5	0.99
8	Pitta-kapha VS Pitta-Vata	12.8 <u>+</u> 4.96	0.10
9	Pitta-kapha VS Kapha-Pitta	8 <u>+</u> 5.73	0.63
10	Pitta-vata VS Kapha-Pitta	4.8 <u>+</u> 5.73	0.91

Table No 14: Showing the Time of the Procedure related to prakruti of patients

There is no significant result seen in prakruti when assessed in time duration. Since it was a small study, large samples are required to arrive for proper result.

**DISCUSSION:** The duration of local anesthesia mainly depends on the site of application, type, dose, physicochemical properties, and additional drugs and with physio-pharmacological conditions of an individual. Amide local anesthetics are much more stable in blood than esters. The plasma binding of lidocaine is dependent on drug concentration and metabolism.<sup>94</sup>Lidocaine is metabolized rapidly by the liver and approximately 90% of lidocaine is excreted in the form of various metabolites and less than 10% is excreted unchanged. For any drug if metabolisms are fast wipe out period will be lesser.

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Wipe out is highest in Vata-Kapha (253.3) followed Kapha-Pitta (228.7), Pitta-Kapha (205), Pitta-Vata (178.8) and last is in Vata-Pitta (161.8) minute. In Pitta Prakruti Agni will be Teekshna hence the faster metabolism leading to lesser wipe out period.

The study shows that in pitta pradhana person ie Pitta-Kapha & Pitta-Vata groups wipe out period is 205 & 178.8 minute respectively which is lesser than other groups except Vata-Pitta group.

The least wipe out period is observed in Vata-Pitta group is 161.8 minute. This may be due to association of pitta (anubandha) with vata, as in vata Agni will be vishama (varying i.e. either high or low). Here in this group agni is high because of Pitta and its Vata association leading more teekshagni thus faster metabolism leading to lesser wipe out period among all groups.

High wipe out period is found in persons having association with kapha prakruti. Highest wipe out period is found in vata-kapha prakruti. Agni will be manda in Kapha and further become more manda due to association of Vata thus leading to lesser metabolism of drug hence highest wipeout period.

The study shows that vishama agni in Vata is acting based on dosha, if it is associated with Pitta it is increasing agni and with Kapha it is decreasing agni hence changing the wipeout period.

Next, wipe out period groups having 228.7 & 205 minutes are kapha-pitta & Pitta-kapha respectively.

Wipe out period is high to moderate because of pitta is suppressed by the kapha, and association of kapha prakruti hence metabolism is lowest so wipe out period is moderate.

Present study has revealed that wipe out period of drug which is used in this study was fast in vataja and pittaja prakriti and slow in Kaphaj prakruti. The descriptions in ayurveda indicate that individuals with pitta prakruti are fast metabolizers and while those of kapha prakriti are slow metabolizers may be comprehend to the extent.

Similar results are also observed of association of pitta with faster metabolism in other studies. It is strengthened by the study of Yogita ghodke et al; they observed significant association between cyp2c19 genotype and major classes of prakruti types. The extensive metabolizer genotype was found to be predominant only in pitta prakruti and the poor metabolizer genotype was highest in kapha prakruti.<sup>95</sup> **CONCLUSION:** 

Wipe out period is less in Vata-Pitta & Pitta-Vata Prakruti wipe out period is highest in Vata-Kapha Prakruti and moderate wipe out period is found in Kapha-Pitta & Pitta-Kapha prakruti.

There is a significant difference between Vata-Pitta & Vata-Kapha, Vata-Pitta & Pitta-Kapha, Vata-Pitta & Kapha-Pitta, Vata-Kapha & Pitta-Kapha, Vata-Kapha & Pitta-Vata and Pitta-Vata & Kapha-Pitta.

There is no Significance difference between Vata-Pitta & Pitta-Vata, Vata-Kapha & Kapha-Pitta, Pitta-Kapha & Kapha-Pitta, and Pitta-Kapha & Pitta-Vata.

Pitta Prakruti and association with Vata Prakruti is having low wipe out period because of increase metabolism.

Kapha prakruti and association with Vata having high wipe out period because of low metabolism.

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## कोरोना विषाणु से बचाव का प्राथमिक सोपान : त्रिकाल संध्या-गायत्री

# प्रो० हरीश्वर दीक्षित, वेद विभाग, संस्कृतविद्या धर्मविज्ञान संकाय, काशी हिन्दू विश्वविद्यालय, वाराणसी-221005,

Mob. No.: 9450085521, S: 7651881439, E-mail : hareeshwarhod@gmail.com सारांश (Abstract) :वर्तमान वैश्विक परिदृश्य कोरोना विषाणुजन्य महामारी से ग्रसित है। आज तक इससे बचाव की कोई प्रभावी चिकित्सा अथवा कोई टीका (Vaxin) नहीं उपलब्ध हो सकी है। ऐसी स्थिति में हम भारतीय चिन्तकों का ध्यान प्राचीन भारतीय जीवनशैली, तत्त्वदर्शी ऋषियों की आचार-संहिता की तरफ एकाएक चला जाता है। प्राचीन भारतीय जीवनशैली इस प्रकोप को रोकने में कितनी प्रभावी सिद्ध हो सकती है? इसी विषय का निदर्शन इस शोध पत्र में किया गया है। प्राचीन भारतीय वैदिक जीवनशैली, वैदिक आचारसंहिता, ऋषियों का जीवनदर्शन बहुत व्यापक है। यहाँ हमने जीवन पर्यन्त चलने वाली प्राचीन भारतीय वैदिक दिनचर्या त्रिकाल-संध्या-गायत्री का अतिसूक्ष्म संकेत मात्र किया है जिसके पालन से हम कोरोना विषाणु से अपनी, अपने परिवार की, समाज की, राष्ट्र की और विश्व की रक्षा कर सकते है।

कुंजिका (Keywords) : त्रिकाल, संध्या, प्रात: संध्या, मध्याह्न संध्या, संध्याकाल, गायत्री मंत्र

## **Conflict of Interest : Non**

## Ethical Clearance : N/A

प्राचीन भारतीय जीवन-दर्शन धर्मप्रधान है। भारतीय जीवन-दर्शन का मूल आधार वैदिक जीवन-दर्शन है। वैदिक जीवन-दर्शन से तात्पर्य जीवन जीने की कला से है। **"जीवेम् शरद: शतम्"** की भावना से भारतीय जीवन शैली अनुप्राणित है। **"आयुर्यज्ञेनकल्पताम्, प्राण: यज्ञेनकल्पताम्"** से प्रमाणित है कि आयु और प्राण की रक्षा की कल्पना यज्ञ से की गयी है। यज्ञ से तात्पर्य **"यज्ञोवैश्रेष्ठतमं कर्म"** से है अर्थात् श्रेष्ठतम् कर्म करने वाला ही पूर्ण आयुपर्यन्त जीवन जीने का अधिकारी है। श्रेष्ठ कर्म से तात्पर्य वे सभी लोकोपकारक कर्म हैं जो वैश्विक जीवनरक्षा में सहायक हैं।

**"स्वस्थस्य स्वास्थ्यरक्षणम्, आतुरस्य विकारप्रशमनञ्च" (चरकसंहिता सूत्र 30/36)** आयुर्वेद का उद्देश्य है। इस सूत्र से यह स्पष्ट है कि आयुर्वेद का प्रथम उद्देश्य यह है कि कोई अस्वस्थ होने न पाये। दूसरा उद्देश्य यह है यदि किन्हीं कारणों से कोई अस्वस्थ हो जाता है तो उस अस्वस्थ रोग से ग्रसित पीड़ित मानव की आयुर्वेदिक चिकित्सा द्वारा रोग का शमन अथवा रोगनाश के द्वारा पीड़ित व्यक्ति को स्वस्थ करना। इन दो प्रधान उद्देश्यों की पूर्ति में ही सम्पूर्ण आयुर्वेदिक चिकित्साशास्त्र संकल्पबद्ध है। कायचिकित्सा से लेकर शल्य चिकित्सा तक मानव मात्र को स्वस्थ रखने हेतु सम्पूर्ण आयुर्वेदिक चिकित्साशास्त्र सतत प्रयत्नशील है। वर्तमान वैश्विक परिदृश्य कोरोना विषाणु अथवा कोरोना महामारी से ग्रस्त है। ऐसा प्रतीत हो रहा है कि कोरोना नामक कोई काल-दुत विविध रूपों में सम्पूर्ण विश्व को संत्रस्त करने में लगा

हुआ है। यह सत्य है कि कोई भी रोग अनायास ही नहीं होता, कोई भी महामारी, कोई भी वैश्विक संकट अनायास ही नहीं आ जाता। किसी भी कार्य के प्रति कोई न कोई कारण होता है। आज कोरोना महामारी के प्रति भी वैश्विक मानव समाज ही कारण है। क्या कारण है? और कैसे कारण है? यह एक स्वतन्त्र शोध का विषय है। यहाँ अत्यन्त संक्षेप में यह संकेत कर देना आवश्यक है कि कोई भी महामारी तब आती है जब धर्म की हानि और अधर्म का उत्थान होने लगता है तो प्राकृतिक या दैवी शक्ति स्वयं धर्म के संरक्षण एवं अधर्म (पाप के नाश के लिए) किसी न किसी रूप में प्रकट होती है। यह स्वयं भगवान् श्रीकृष्ण ने श्रीमद्भगवदगीता में कहा है-

> यदा यदा हि धर्मस्य ग्लानिर्भवति भारत। अभ्युत्थानमधर्मस्य तदात्मानम् सृजाम्यहम।।<sup>1</sup> परित्राणाय साधूनां विनाशाय च दुष्कृताम्। धर्मसंस्थापनार्थाय सम्भवामि युगे युगे।।<sup>2</sup> (श्रीमद्भगवद्गीता 04/07-08)

श्री विष्णु पुराण के अनुसार दुःख (रोग) और वेदना (दर्द) ये दोनों अधर्म की फलश्रुति हैं। हिंसा, झूठ, भय, नरक, माया, वेदना (दर्द), मृत्यु, नरक, दु:ख, व्याधि (रोग), जरा, शोक, तृष्णा और क्रोध ये सभी अधर्म के विविध रूप हैं।

> हिंसा भार्यात्वधर्मस्य ततोजज्ञे तथानृतम्।<sup>2</sup> कन्या च निकृतिस्ताभ्यां भयं नरक मेव च।।३२।। माया च वेदना चैव मिथुनं त्विदमेतयो:। तयोर्जज्ञेऽथ वै माया मृत्युं भूतापहारिणम्।।३३।। वेदना स्वसुतं चापि दुःखं जज्ञेऽथ रौरवात्। मृत्योव्र्याधिजराशोकतृष्णाक्रोधाश्च जज्ञिरे।।३४।। दुःखोत्तराः स्मृता ह्येते सर्वे चाधर्मलक्षणा:। नैषां पुत्रोऽस्ति वै भार्या ते सर्वे ह्यूर्ध्वरितस:।।३५।।

- श्री विष्णुपुराण, कोड-४८, ०१/०७/३२-३५, पृष्ठ ३१, गीता प्रेस गोरखपुर।

वैश्विक स्तर पर आज उच्च कोटि के चिकित्सा वैज्ञानिकों द्वारा इस कोरोना माहामारी से बचने का उपाय सामाजिक, शारीरिक, भौतिक दूरी (Social Distance) साबुन से बार-बार हाथ धोना, सेनेटाईज करना, पैर धुलना, मास्क लगाना, छानी हुई वायु का, छने हुए पानी का, उबला पानी का उपयोग करना बताया जा रहा है। यही बात तत्कालीन वैदिक कालीन जीवनदर्शन में बतायी गई है। शौच अर्थात पवित्रता के प्रकरण में हाथ-पैर धुलना, स्नान करना, त्रिसंध्या पूजन के प्रकरण में तीन बार स्नान, आचमनीकरण- जलस्पर्श, बार-बार करना होता था। आज भी यह परम्परा उसी रूप में चली आ रही है। बाहर से आने पर स्वयं हाथ-पैर धुलना, किसी पूज्य व्यक्ति, ऋषि, गुरु अथवा अतिथि के आने पर पांव पखारना अर्थात् पैर धुलना (प्रक्षालन करना) वैदिक जीवनशैली का अनिवार्य अंग था। हाथ-पैर धुलना और सेनेटाईज करना, वैदिक जीवनशैली की यही बात दूसरे शब्दों में आज कही जा रही है। त्रिकाल संध्या के अन्तर्गत प्रातःकालीन सूर्योदय के समय सूर्य को अर्घ्य देना, सूर्य के सामने बैठकर आदित्य हृदय स्तोत्र का पाठ एवं गायत्री मंत्र का जप करना आज के कोरोना विषाणु के दौर में वैदिक कालीन सेनेटाईजेशन का उदाहरण है। सूर्य की किरणें बहुत सारे हानिकारक विषाणुओं को समाप्त कर देती है।

त्रिकाल संध्या को यदि चिकित्सकीय दृष्टि (Medical View) से देखा जाए तो यह कहने में कोई संकोच नहीं कि चिकित्सा शास्त्र में जिस प्रकार कोई औषधि (Medicine) दिन में तीन बार प्रात:, दोपहर और शाम अथवा दिन में दो बार सुबह और शाम ली जाती है, उसी प्रकार वैदिक जीवनचर्या में त्रिकाल संध्या भी औषधि के रूप में की जाती है। प्रात:, मध्याह्न और सायं तीन बार अथवा प्रात: और मध्याह्न दो बार आवश्यकतानुसार शास्त्रनिर्दिष्ट दृष्टि से संध्योपासन का महत्व है। यह संध्योपासन मानव-जीवन में चिकित्सा का कार्य करता है। त्रिकाल संध्या के क्रम में तीन बार स्नान, आचमन, पवित्रीकरण, शिखाबन्धन, प्राणायाम, न्यास, संध्योपासन (गायत्री उपासना) ये सभी जीवनधायक तत्त्व वैदिक जीवनशैली में चिकित्सा की दृष्टि से शक्तिवर्धक दवा के रूप में और शरीर के लिए सुरक्षा-कवच का काम करते हैं।

यहाँ वैदिक जीवन-दर्शन, वैदिक आचार-संहिता कोरोना विषाणु से बचाव में कैसे समर्थ है? इस पर संक्षिप्त दृष्टि डालते हैं –

भारतीय जीवनशैली या यों कहें कि भारतीय आचार-संहिता का प्रारम्भ प्रतिदिन प्रात: जागरण से रात्रि शयनपर्यन्त होता है और इसी क्रम में सम्पूर्ण जीवन की परिकल्पना की गयी है। प्रात: जागरण से लेकर रात्रि शयनपर्यन्त, पूरे दिन में भारतीय मानव की आचार-संहिता निर्धारित है। इसी भारतीय आचार-संहिता का प्रथम सोपान है **"त्रिकाल संध्या गायत्री"।** त्रिकाल संध्या गायत्री नित्यकर्म का प्राथमिक सोपान है इसके करने से लाभ और न करने से प्रत्यवाय भी होता है। यहाँ एक-एक शब्द की विस्तृत विवेचना के लिए अवकाश नहीं है। क्योंकि मुख्य प्रतिपाद्य कोरोना विषाणु से बचाव में त्रिकाल-संध्या किस प्रकार उपयोगी और प्रभावी है, इसका विवेचन करना है।

त्रिकाल संध्या करने से लाभ और न करने से हानि क्या है? इसको संक्षेप में जान लेना आवश्यक है। जिस प्रकार शारीरिक नित्यकर्म के अन्तर्गत- मल-मूत्र त्याग, दन्त धावन (मंजन), स्नान इत्यादि आवश्यक है और इसके न करने से जो दुष्प्रभाव शरीर पर पड़ेगा उसी तरह का दुष्प्रभाव त्रिकाल संध्या न करने से मानव-जीवन पर पड़ता है। इसे दूसरे शब्दों में कहें कि जिस प्रकार ये शारीरिक क्रियाएँ प्रात:काल अथवा सायंकाल अथवा शारीरिक आवश्यकतानुसार दिन-रात में कभी भी मानव दिनचर्या की अनिवार्य आवश्यकताएँ है अथवा इन्हें रोका नहीं जा सकता उसी प्रकार त्रिकाल संध्या गायत्री भारतीय मानवीय जीवन-दर्शन अथवा भारतीय वैदिक जीवन-दर्शन की

अनिवार्य दिनचर्या है। इसे रोकने से या इसे न करने से उसी तरह का प्रतिकूल प्रभाव पड़ता है, जैसे शारीरिक दिनचर्या न करने से शरीर पर प्रतिकूल प्रभाव पड़ता है। यहाँ यह प्रश्न स्वाभाविक है कि संसार में बहुत से ऐसे व्यक्ति है जो इस वैदिक जीवनचर्या का पालन नहीं करते तो भी वे स्वस्थ है और अपना जीवन ठीक तरह से जी रहे है। इसके उत्तर में यह बता देना आवश्यक है कि हम उनके प्रत्यक्ष और वाह्य जीवन को देख रहे हैं। वास्तव में उनके व्यक्तिगत जीवन, पारिवारिक जीवन, सामाजिक जीवन में कितनी समस्याएँ हैं इसे हम नहीं जानते और न ही हम इसे जान सकते है, जब तक वे स्वयं न बताएँ। इसी प्रकार चिकित्सा विज्ञान के क्षेत्र में किसी मानव को हम ऐसे नहीं पहचान सकते कि इसके शरीर में, इसके परिवार में और इसके मित्रों को कौन सा रोग है? जब तक कि वह रोगग्रस्त हो करके चिकित्सक के पास नहीं जाता। कहने का तात्पर्य यह है कि रोगी स्वयं अपना रोग बताता है तब उसकी चिकित्सा प्रारम्भ होती है। ठीक इसी प्रकार त्रिकाल संध्या न करने का दृष्प्रभाव तत्काल नहीं दिखाई देता क्योंकि प्रत्येक मानव पूर्व जन्म का कुछ संचित पुण्य लेकर जन्म लेता है और जब तक वह पुण्य उसके जीवन में शेष रहता है तब तक वह मानव जीवन की दिनचर्या, त्रिकाल संध्या, ईश्वरोपासना करे या न करे उस पर कोई बहुत असर नहीं पड़ता क्योंकि पूर्व जन्म का पुण्य उसके लिए कुछ समय के लिए दैवी औषधि (Divine Medicine) का काम करता है किन्तु ज्यों ही पूर्व जन्म का पुण्य समाप्त हो जाता है त्यों ही त्रिकाल संध्या, देवोपासना न करने का दुष्परिणाम उसके जीवन में दिखाई देने लगता है।

यहाँ यह ध्यातव्य है कि हो सकता है कि चिकित्सा वैज्ञानिक इस धार्मिक तथ्य को कपोलकल्पित बताएँ, किन्तु उन्हें नहीं भूलना चाहिए कि **चिकित्साशास्त्र के देवता भगवान् धनवन्तरि** हैं और भगवान् धनवन्तरि वैदिक देवता विष्णु और चिकित्सकीय वैदिक देवता अश्विनौ- जुड़वें अश्विनी कुमार, एक फिजिशियन और एक सर्जन के समन्वित रूप है।<sup>3</sup> (वैदिक देवशास्त्र- डॉ० सूर्यकान्त एवं वैदिक देवता उद्भव एवं विकास- डॉ० गयाचरण त्रिपाठी) आयुर्वेद चिकित्साशास्त्र के जनक आचार्य चरक ऋषि एवं सुश्रुत ऋषि ये दोनों ऋषि वैदिक ऋषियों की श्रेणी में आते हैं। वेद और आयुर्वेद का अत्यनत घनिष्ठ अन्तर्सम्बन्ध है। मानव जीवन अत्यन्त पुण्य के फलस्वरूप मिलता है। अन्यथा पुण्य कम होने की स्थिति में जीव अन्यान्य विविध योनियों में भटकता रहता है और उसे मानव योनि नहीं मिलती। वैदिक शास्त्रों से लेकर पुराणों तक **पुनर्जन्म और अवतारवाद** इसकी पुष्टि करते हैं।

प्राचीन भारतीय वैदिक जीवनचर्या में त्रिकाल संध्या करने वाला व्यक्ति कभी भी विपत्तिग्रस्त नहीं होता, वह रोगग्रस्त भी नहीं होता, पाप उसे स्पर्श भी नहीं कर सकता, भूत-प्रेत, पिचास, राक्षस, सिंह, व्याघ्र, काल, विषधर, सर्प, दावानल, अकालमृत्यु उसे स्पर्श तक नहीं कर पाते।

> राक्षसाश्च पिशाचाश्च महासर्पाश्च भीषणा:। जपितान्नोपसर्पन्ति दूरादेव प्रयान्ति ते।।

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जपेदहरहज्ञात्वा गायत्रीं मनसा द्विज:।
सहस्रपरमां देवीं शतमध्यां दशावराम्।।
गायत्रीं यो जपेन्नित्यं स न पापेन लिप्यते।।4
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- लघुहारीतस्मृति:, ४/४६-४९

त्रिकाल संध्या गायत्री के इस क्रम में गायत्री मंत्र का जप न्यूनतम से अधिकतम की तरफ होना चाहिए। न्यूनतम ०३ बार, ०८ बार, २४ बार, १०८ बार अर्थात् एक माला, ०३ माला, ०६ माला और १२ माला अर्थात् १००० (एक हजार) जप प्रशस्त माना गया है। अधिकतम के क्रम में तीन हजार, आठ हजार, चौबीस हजार, गायत्री जप प्रशस्त माना गया है।

प्रतिदिन त्रिकाल संध्या करने से दीर्घायु, प्रज्ञा, यश, कीर्ति और ब्रह्मवर्चस्व की प्राप्ति होती है। प्रात:काल की संध्या करने से रात्रि का पाप और सायं संध्या करने से दिन का पाप भस्म हो जाता है। इस प्रकार त्रिकाल संध्या से व्यक्ति निष्पाप होकर दीर्घायु और श्रेयस को प्राप्त करता है।

> ऋषयो दीर्घसंध्यत्वाद्दीर्घमायुरवाप्नुयु:।<sup>5</sup> प्रज्ञां यशश्च कीर्तिञ्च ब्रह्मवर्चसमेव च।। - मनुस्मृति, ४/९४ पूर्वां संध्यां जपंस्तिष्ठन् नैशमेनो व्यपोहति। पश्चिमां तु समासीनो मलं हन्ति दिवाकृतम्।। - मनु २/१०२ सायमधीयानो दिवसकृतं पापं नाशयति। प्रातरधीयानो रात्रिकृतं पापं नाशयति।। सायं प्रात: प्रयुञ्जानो अपापो भवति।<sup>6</sup>

> > - श्रीदुर्गासप्तशती, श्रीदेव्यथर्वशीर्षम्

ब्राह्मण, क्षत्रिय तथा वैश्यो को संध्या अवश्य करनी चाहिए। संध्या न करने से शुभ कार्यों का पूर्णफल प्राप्त नहीं होता।

> संध्याहीनोऽशुचिर्नित्यमनर्ह: सर्वकर्मसु। यदन्यत्कुरुते कर्म न तस्य फलभाग्भवेत्।।

ब्राह्मण, क्षत्रिय, वैश्य आदि संध्या नहीं करते तो वे अपवित्र हैं और उन्हें किसी पुण्यकर्म का फल नहीं मिलता। जिसने संध्या का ज्ञान नहीं किया, जिसने संध्या की उपासना नहीं की, वह (द्विज) जीवित रहते शूद्र-सम रहता है और मृत्यु के बाद कुत्ते आदि की योनि को प्राप्त करता है-

# संध्या येन न विज्ञाता संध्या येनानुपासिता।

जीवमानो भवेच्छूद्रो मृत: श्वा चाभिजायते।।<sup>7</sup>

- देवीभागवात ११/१६/७

ब्राह्मण, क्षत्रिय, वैश्य आदि संध्या नहीं करें, तो वे अपवित्र हैं और उन्हें किसी पुण्यकर्म के करने का फल प्राप्त नहीं होता।

# संध्याहीनोऽशुचिर्नित्यमनर्ह: सर्वकर्मसु। यदन्यत् कुरुते कर्म न तस्य फलभाग्भवेत्।।<sup>8</sup>

## - दक्षस्मृति २/२७

त्रिकाल संध्या के क्रम में पवित्रीकरण के मंत्रों द्वारा शरीर को पवित्र करते हैं। इससे आन्तरिक और वाह्य शुचि एवं दैवी सुरक्षा दोनों प्राप्त होती है। शिखाबंधन के द्वारा हम अपने को द्युलोकस्थ देवताओं के दैवी तेज से संयुक्त करते हैं। प्राणायाम के द्वारा श्वास ग्रहण कर हम दैवी प्राण शक्ति को अन्दर प्रवेश कराते हैं और शरीर के अपने दुर्भावनाएँ एवं दुर्गुणों को श्वास छोड़ते समय बाहर निकालते हैं। न्यास के द्वारा हम शरीर के प्रत्येक अंगों को मंत्रों द्वारा दैवी कवच से सुरक्षित कर लेते हैं। शरीर सुरक्षित हो जाने पर उसके बाहर और अन्दर किसी प्रकार के रोग या विकारी शक्तियों का प्रकोप नहीं हो पाता। जिस तरह बुलेटप्रूफ जैकेट पहन लेने पर किसी बन्दूक या रायफल की गोली शरीर पर असर नहीं करती उसी प्रकार मंत्र शक्ति से अभिमंत्रित शरीर में किसी प्रकार का रोग प्रवेश नहीं कर सकता। न्यास क्रिया द्वारा मंत्रों की शक्ति से सम्पूर्ण शरीर को बुलेटप्रूफ जैकेट की तरह हम सुरक्षित कर लेते हैं।

संध्या, जप, देवताओं का पूजन, वैश्व देव और अतिथि सत्कार ये छ: कर्म माने गये हैं-

# संध्या स्नानं जपश्चैव देवतानाञ्च पूजनम्। वैश्वदेवं तथाऽऽतिथ्यं षट् कर्माणि दिने दिने।।<sup>9</sup> - बृहत् पाराशरस्मृति- संध्या प्रकरण

संध्या से तात्पर्य संध्याकाल, संध्याकर्म और संध्याकालीन प्रत्यक्ष देवता सूर्योपासन से है।

अहोरात्रस्य या: संधि: सूर्यनक्षत्रवर्जिता । सा तु संध्या समाख्याता मुनिभिस्तत्त्वदर्शिभि:।। - आचार भूषण -89

## प्रात: संध्या –

प्रात: संध्या का श्रेष्ठ समय सूर्योदय के पूर्व माना गया है, इसमें भी उत्तम काल वह माना गया है जिस समय आकाश में तारे भरे हुए हैं अर्थात् ब्राह्म मुहूर्त का उत्तरार्ध प्रात: ४ से ५ बजे। ताराओं के छिपने से सूर्योदय तक मध्यम श्रेणी की संध्या और सूर्योदय के बाद की संध्या अधम मानी गयी है। इसमें विद्वानों में मतमतान्तर भी है। कुछ विद्वान प्रात: सूर्योदय से दो घटी अर्थात् ४८ मिनट पूर्व का काल उत्तम और सूर्योदय से दो घटी अर्थात् ४८ मिनट का काल मध्यम बताते है। इसके बाद का काल अधम बताते हैं। व्यावहारिक दृष्टि से आधुनिक विद्वान प्रात: संध्या का काल सूर्योदय से एक घण्टे पूर्व और सूर्योदय से एक घण्टे बाद तक का काल प्रात: संध्या के लिए उपयुक्त बताते है। उत्तमा तारकोपेता मध्यमा लुप्ततारका। अधमा सूर्यसहिता प्रात: संध्या त्रिधा स्मृता।। - धर्मसार, विश्वामित्रस्मृति १/२२, देवीभागवात ११/१६/४ उत्तमा सूर्यसहिता मध्यमा लुप्तसूर्यका। अधमा तारकोपेता सायं संध्या त्रिधा स्मृता।।

- धर्मसार, विश्वामित्रस्मृति १/२४

प्रात:काल में तारों के रहते हुए, मध्याह्नकाल में जब सूर्य आकाश के मध्य में हों, सायंकाल में सूर्यास्त के पहले ही इस तरह तीन प्रकार की संध्या कररनी चाहिए-

> प्रात: संध्यां सनक्षत्रां मध्याह्ने मध्यभास्कराम् । ससूर्यां पश्चिमां संध्यां तिस्र: संध्या उपासते।। - देवीभागवात ११/१६/२-३

सूर्य और तारों से रहित दिन-रात की संधि को तत्त्वदर्शी मुनियों ने संध्या काल माना है-

अहोरात्रस्य या संधि: सूर्यनक्षत्रवर्जिता। सा तु संध्या समाख्याता मुनिभिस्तत्त्वदर्शिभि:।।<sup>10</sup>

- आचारभूषण ८९

प्रात: संध्योपासन के क्रम में सूर्य को अर्घ्य देना, आदित्य हृदय स्तोत्र का पाठ, गायत्री-जप, पितृ-तर्पण और बलिवैश्वदेव का क्रम मानते हैं। पितृ-तर्पण केवल वे ही लोग कर सकते है, जिनके पिता, माता अथवा माता-पिता दोनों नहीं है। कुछ विद्वान सूर्यार्घ्यदान, गायत्री-जप और देवोपासना तथा पितृ तर्पण को ही प्रात:कालीन संध्या का अंग मानते हैं। कुछ विद्वान सूर्यार्घ्य दान, गायत्री-जप और देवोपासना तक ही प्रात: संध्या के अन्तर्गत मानते हैं। प्रात: संध्या के अन्तर्गत गायत्री मंत्र जप का विशेष महत्त्व है। गायत्री मंत्र इस प्रकार है-

'ॐ भूर्भुव: स्व: तत्सवितुर्वरेण्यं भर्गो देवस्य धीमहि।

**धियो यो न: प्रचोदयात्।**'<sup>11</sup> - शुक्लयजुर्वेदसंहिता ०३/३५, ३६/०३

## मध्याह्नसंध्या –

मध्याह्नसंध्या का काल दिन का मध्यकाल कहा जाता है। कुछ विद्वान इसे दिन में ११:३० से १२:३० बजे का समय मानते है कुछ विद्वान इसे दिन में ११:०० से ०१:०० बजे का समय मानते हैं। कुछ विद्वान इसे मध्याह्न १२:०० से १२:३० बजे तक का ही समय मानते है।

सायं संध्या –

सायं संध्या का समय दिन की समाप्ति और रात्रि के प्रारम्भ के बीच का संधि काल सायं संध्या कहलाता है। कुछ विद्वान इसका समय सूर्यास्त से दो घटी अर्थात् ४८ मिनट पूर्व और कुछ विद्वान सूर्यास्त के दो घटी अर्थात् ४८ मिनट बाद तक मानते है।

त्रिकाल संध्या में सभी प्रक्रिया प्रात:कालीन संध्या की भाँति ही होती है। सायं काल की संध्या में केवल पितृ तर्पण नहीं होता।

सायं काल में पश्चिम की तरफ मुँह करके जब तक तारों का उदय न हो तब तक जप करना प्रशस्त माना गया है।

## तपन्नासीत सावित्रीम्प्रत्यगातारकोदयात्।

## संध्यां प्राक् प्रातरेवं हि तिष्ठेदासूर्यदर्शनात्।।12

- याज्ञवल्क्यस्मृति २/२४-२५

समय पर की गयी संध्या इच्छानुसार फल देती है और बिना समय की गयी संध्या वन्ध्या स्त्री के समान होती है-

## स्वकाले सेविता संध्या नित्यं कामदुघा भवेत्।

## अकालेर सेविता सा च संध्या वन्ध्या वधूरिव।।

- नित्यकर्मपूजाप्रकाश – संध्या प्रकरण, पृष्ठ ५१

प्राचीन भारतीय वैदिक जीवनशैली बहुत व्यापक है यहाँ केवल संक्षिप्त त्रिकाल संध्या के द्वारा कोरोना विषाणु से बचाव का संकेतमात्र किया गया है। आज आवश्यकता है प्राचीन वैदिक जीवनशैली को अपनाने की। आईये! अपने स्वर्णिम अतीत की तरफ लौटे ऋषियों द्वारा आचरित प्राचीन भारतीय जीवन-पद्धति, वैदिक जीवन-पद्धति को अपनाएँ और कोरोना विषाणु महामारी से सुरक्षित रहें।

## वयं राष्ट्रे जागृयाम: पुरोहिता:।

## सन्दर्भ ग्रन्थ सूची-

 श्रीमद्भगवद्गीता- (क) कोड सं० २, टीकाकार- जयदयाल गोयन्दका, प्रकाशक एवं मुद्रक- गोविन्द भवन कार्यालय, गीता प्रेस गोरखपुर, संवत् २०५६, ईस्वी सन् १९९९.

श्रीमद्भगवद्गीता- (ख) कोड सं० ०६, टीकाकार- स्वामी रामसुखदास, प्रकाशक एवं मुद्रक- गोविन्द भवन कार्यालय, संवत् २०६९, ईस्वी सन् २०१२.

- श्रीविष्णुपुराण कोड ४८, अनुवादक- श्रीमुनिलालगुप्त, प्रकाशक एवं मुद्रक, गोविन्द भवन कार्यालय, गीता प्रेस, गोरखपुर, संवत् २०६९, ईस्वी सन् २०१२.
- (क) वैदिक देव शास्त्र- डॉ० सूर्यकान्त, प्रकाशक एवं मुद्रक- मेहरचन्द लक्ष्मणदास, नयी दिल्ली, ईस्वी सन् १९८२.

(ख) वैदिक देवता उद्भव एवं विकास- डॉ० गयाचरण त्रिपाठी, प्रकाशक एवं मुद्रक- भारतीय विद्या प्रकाशक, दिल्ली, ईस्वी सन् १९८१.

- लघुहारीतस्मृति- बीस स्मृतियाँ, सम्पादक- पंडित श्रीराम शर्मा आचार्य, प्रकाशक- संस्कृति संस्थान, बरेली, मुद्रक- जगदीश प्रसाद भरतीया, बम्बई भूषण प्रेस, मथुरा प्रथम संस्करण, ईस्वी सन् १९६६.
- मनुस्मृति, टीकाकार- पण्डित श्री हरगोविन्दशास्त्री, हरिदास संस्कृत ग्रन्थ माला-२२६, चौखम्बा संस्कृत सीरीज ऑफिस, के ३७/९९ (गोपाल मन्दिर लेन) गोलघर (मैदागिन के पास) वाराणसी, ईस्वी सन् १९९८.
- श्री दुर्गासप्तशती कोड-१२८१, प्रकाशक एवं मुद्रक, गोविन्द भवन कार्यालय, गीता प्रेस, गोरखपुर, संवत् २०७२, ईस्वी सन् २०१५.
- ७. देवी भागवत्- प्रकाशक एवं मुद्रक, गोविन्द भवन कार्यालय, गीता प्रेस, गोरखपुर, संवत् २०५६, ईस्वी सन् १९९९.
- ८. दक्षस्मृति- बीस स्मृतियाँ, सम्पादक- पंडित श्रीराम शर्मा आचार्य, प्रकाशक- संस्कृति संस्थान, बरेली, मुद्रक- जगदीश प्रसाद भरतीया, बम्बई भूषण प्रेस, मथुरा प्रथम संस्करण, ईस्वी सन् १९६६.
- बृहत् पाराशरस्मृति- बीस स्मृतियाँ, सम्पादक- पंडित श्रीराम शर्मा आचार्य, प्रकाशक- संस्कृति संस्थान, बरेली, मुद्रक- जगदीश प्रसाद भरतीया, बम्बई भूषण प्रेस, मथुरा प्रथम संस्करण, ईस्वी सन् १९६६.
- १०. नित्यकर्मपूजा प्रकाश, कोड-५९२, पंडित लाल बिहारी मिश्र, प्रकाशक एवं मुद्रक, गोविन्द भवन कार्यालय, गीता प्रेस, गोरखपुर, संवत् २०६१, ईस्वी सन् २००४.
- ११. शुक्लयजुर्वेद संहिता, हिन्दी व्याख्याकार- डॉ० रामकृष्ण शास्त्री, प्रकाशक- चौखम्बा विद्याभवन, चौक (बैंक ऑफ बड़ौदा बैंक के पीछे), वाराणसी।
- १२. याज्ञवल्क्यस्मृति, सम्पादक- डॉ० उमेश चन्द्र पाण्डेय, चौखम्बा संस्कृत सीरीज ऑफिस, के ३७/९९ (गोपाल मन्दिर लेन) गोलघर (मैदागिन के पास) वाराणसी, ईस्वी सन् १९६९.

# वैदिक सूर्य देवता द्वारा शारीरिक चिकित्सा

# डॉ० पुष्पा दीक्षित, योग प्रशिक्षिका, काशी हिन्दू विश्वविद्यालय, वाराणसी-221005 Mob. No.: <sup>©</sup> 8887690387, E-mail : drpushpa07@gmail.com सारांश (Abstract) –

सम्पूर्ण विश्व को प्रकाशित करने वाला सूर्य ही वैदिक सूर्य देवता के रूप में प्रतिष्ठित है। सूर्य सम्पूर्ण चराचर जगत् की आत्मा और नियन्ता है आज सूर्य की किरणों से विभिन्न प्रकार की विविध रोगों की चिकित्सा की जा रही है। सूर्य अपने विविध रूपों में सम्पूर्ण वैश्विक प्राणियों के स्वास्थ्य के लिए किस प्रकार उपयोगी है इसी का वैदिक मंत्रों द्वारा प्रामाणिक विवेचन इस शोध पत्र में किया गया है।

कुंजिका (Keywords) : आत्मा, सप्तरश्मि, आरोग्य, शरद: शतम्, त्रयायुषम्, उपासना

## **Conflict of Interest : Non**

## Ethical Clearance : N/A

वैदिक संहिताओं के अनुसार सम्पूर्ण विश्व को प्रकाशित करने वाले अखण्ड ऊर्जा के स्रोत सर्वशक्तिमान, प्रत्यक्ष रूप में दिखाई देने वाले और सम्पूर्ण विश्व की सांसारिक गति को नियंत्रित करने वाले भौतिक सूर्य देवता ही वैदिक सूर्य देवता हैं। वे दूरद्रष्टा है, सर्वद्रष्टा है, और सम्पूर्ण लोकों के रक्षक हैं। सूर्य की किरणें ही उनके घोड़े हैं। **"सप्तरश्मिभि"** इस शब्द के द्वारा सूर्य की सात किरणें ही अरूण सारथी को आगे कर आगे-आगे चलती है। सृष्टि की संरचना काल से ही सूर्य ऊर्जा का एक प्रमुख स्रोत रहा है। सूर्य की किरणें प्राणदायिनी भी कही जाती है। इसके बिना सृष्टि के सम्पूर्ण विकास की कल्पना ही नहीं की जा सकती। जीवन का कोई भी ऐसा क्षेत्र नहीं है जो सूर्य के परिरक्षण और संचालन से अछूता हो।

सूर्य जड़ और चेतन जगत की आत्मा है।

## "सूर्य आत्मा जगतस्तस्थुषश्च" (ऋग्वेद संहिता- 1.115.1)

सूर्य के बारह स्वरूपों की स्तुति वेदों में ऋषियों ने की है। सूर्य के इन बारह स्वरूपों का नामोल्लेख इस प्रकार है- इन्द्र, धाता, पर्जन्य, त्वष्टा, पूषा, अर्यमा, भग, विवस्वान, विष्णु, अंशुमान, वरूण एवं मित्र। अथर्ववेद में सात सूर्यों का उल्लेख है। ये सातों सूर्य साथ रहते हैं। तैत्तिरीय आरण्यक में इन सातों का नामोल्लेख हुआ है- आरोग, भ्राज, पटर, पतंग, स्वर्णर, ज्योतिषमान तथा विभास।

दिव्य सूर्य सम्पूर्ण विशेष रूप से महत्वपूर्ण है। वैदिक साहित्य में सूर्य को जीवनदाता व जीवन रक्षक कहा गया है। सूर्य एक प्राकृतिक चिकित्सालय है। सूर्य को आरोग्य प्रदान करने वाला कहा गया है अतः आरोग्य की कामना भगवान सूर्य से करनी चाहिये। **'आरोग्यं भास्करादिच्छेदित्'**।

सूर्य की किरणों द्वारा अनेक प्रकार के पोषक तत्व प्राप्त होते है। सूर्य की सप्तरंगी किरणों में अद्भुत रोग नाशक शक्ति हैं। सूर्य की किरणें जहाँ होती है वहाँ रोगाणु स्वतः नष्ट हो जाते हैं। सूर्य की किरणों में औषधीय गुणों का भण्डार है ऐसी दिव्य गुणों वाली किरणों का दान सूर्य प्रातः से सांयकाल तक करता रहता है। उगते हुए सूर्य की पहली किरण को न सिर्फ मानव अपितु पशुओं और वनस्पतियों के स्वास्थ्य के लिए महत्वपूर्ण माना गया है। **ऋग्वेद के अनुसार उगते हुए सूर्य की पहली किरण हृदय रोग, पीलिया तथा अनीमिया आदि को ठीक करती है।** इसी प्रकार अथर्ववेद में भी सूर्य की इन किरणों को हृदय सम्बन्धी बीमारियों तथा अनीमिया आदि रोगों से ग्रस्त व्यक्ति के लिए बहुत लाभदायक माना गया है। अथर्ववेद में वर्णित है कि सूर्य की किरणों में रहना अमृत के संसार में रहने के समान है। अथर्ववेद के अनुसार सूर्य में मृत्यु के बन्धनों को काटने की क्षमता होती है-

## "उन्नत्सूर्यो नुदतां मृत्युपाशान्

## सूर्यस्त्वाधिपति र्मृत्योरूदायच्छतुरश्मिभिः" (अथर्ववेद १७.१.३०)

मृत्यु का भय समाप्त करके सभी रोगों से मुक्ति पाने के लिए सूर्य के प्रकाश से सम्पर्क बनाए रखना चाहिए। आधुनिक चिकित्सा विज्ञान ने भी सूर्य की स्वास्थ्य प्रदायिनी शक्ति को स्वीकार किया है। वैज्ञानिकों ने चिकित्सा की दृष्टि से सूर्य का अनेक प्रकार से प्रयोग किया है।

प्रातःकालीन सूर्योदय के समय सूर्य को अर्घ्य देना, सूर्य के सामने बैठकर आदित्य हृदय स्तोत्र का पाठ एवं गायत्री मंत्र के जप से सूर्य की किरणें हमारे शरीर के अंदर प्रविष्ट होकर शरीर के आंतरिक एवं बाह्य के बहुत सारे हानिकारक विषाणुओं को समाप्त कर देती है।

अथर्ववेद के एक सूक्त के २२ मंत्रों में विस्तार से यह वर्णन किया गया है कि किस प्रकार उदय होता हुआ सूर्य शरीर के सारे अंगों के रोगों को दूर करता है। सिर दर्द, सिर के सभी रोग, कान-दर्द और सभी प्रकार के शिरोरोगों को बाहर निकालता है। इस सूक्त में आँख, नाक, कान, मुँह, पेट और हृदय आदि के सभी रोगों की चिकित्सा सूर्य की किरणों से बतायी गयी है। आयुर्वेद में तो कहा गया है कि- "आरोग्यं भास्करादिच्छेत्" अर्थात् जो नीरोग रहना चाहता है, वह सूर्य की शरण में जावे। इसकी सरलतम विधि यह है कि सूर्योदय के समय खड़े होकर या आसन पर बैठकर सूर्य की किरणों को छाती पर लें। उस समय मौन होकर गायत्री मंत्र या ओम् का जप करते रहें। कम से कम आधा घंटा सूर्य की लालिमायुक्त किरणों को छाती पर लें। इससे हृदय और सिर की सभी बीमारियाँ दूर होती हैं। हृदय के रोगियों के लिए यह रामबाण है। पेट आदि के दर्द के लिए विभिन्न रंग की बोतलों में पानी सूर्य की किरणों में रखा जाता है। पानी की तरह चीनी आदि को भी सूर्य की किरणों में रखकर उसका दवा के रूप मे प्रयोग होता है। यही कारण है कि प्राचीन काल में विद्यार्थी पूर्वाभिमुख होकर संध्या और यज्ञ करते थे। स्वभावत: सूर्य की किरणें उनकी छाती पर पड़ती थीं। अतएव वे बिना किसी दवा या रसायन के सदा नीरोग और हृष्ट-पुष्ट रहते थे। सूर्योदय के समय सूर्य की किरणों का सेवन एक रसायन और अमृत है जो नीरोग हैं, उनको दीर्घायु देता है और जो रोगी हैं, उनको नीरोग करता है। अथर्ववेद के इस सूक्त में रोगों की बहुत लम्बी सूची दी गई है जो सूर्योदय के समय सूर्य की किरणों को छाती पर लेने से उन रोगों का नष्ट होना बताती है। मंत्र में कहा गया है कि उदय होता हुआ सूर्य सिर के सभी रोगों को दूर करता है।

- (१) शीर्षत्तिंâ शीर्षामयं कर्णशूलं विलोहितम्। सर्वं शीर्षण्यं ते रोगं बहिर्निर्मन्त्रयामहे।। -अथर्ववेद ९.८.१
- (२) सं ते शीष्र्ण: कपालानि,
   हृदयस्य च यो विधु:।
   उद्यन्नादित्य रश्मिभि:,
   शीष्र्णो रोगमनीनशोऽङ्गभेदमशीशम:। -अथर्ववेद ९.८.२२

ऋग्वेद, अथर्ववेद और यजुर्वेद के अनेक मंत्रों में यह प्रार्थना की गई है कि हम १०० वर्ष तक जीवें, सुख से रहें, वैभव से संपन्न रहें, सूर्य की किरणों के सेवन से दीर्घायु हों, यज्ञ के द्वारा दीर्घायु बनें, हमारा शरीर १०० वर्ष देखे, सुने। हम उन्नति करते रहें और हृष्ट-पुष्ट हों। इतना ही नहीं, अपितु १०० वर्ष से आगे भी जीवित रहें।

- (१) पश्येम शरद: शतम्, जीवेम शरद: शतम्।
   रोहेम शरद: शतम्, भूयसी: शरद: शतात् अथर्ववेद १९.६७.१-८
- (२) मदेम शतहिमा: सुवीरा:। ऋग्वेद ६.१३.६
- (३) शतं जीव शरदो वर्धमान:,
   शतायुषा हविषाऽहार्षमेनम्। अथर्ववेद २०.९६.९

- (४) तुचे तनाय तत् सु नो, द्राघीय आयुर्जीवसे, आदित्यास:....कृणोतन। -ऋग्वेद ८.१८.१८
- (५) पश्येम शरद: शतं जीवेम शरद: शतम्। ऋग्वेद ७.६६.१६

अथर्ववेद में कहा गया है कि सूर्य की किरणों से जीवनीशक्ति और दीर्घायु प्राप्त होती है। सूर्य अपनी किरणों से मृत्यु के बन्धनों को नष्ट करे और हमारे अन्दर सहस्रों प्रकार से प्राणशक्ति या जीवनीशक्ति आवे। इसका अभिप्राय यह है कि उदय होता हुआ सूर्य सभी प्रकार के रोगों को नष्ट करता है। उदय होते हुए सूर्य की लालिमायुक्त किरणें रोगनाशक होती हैं। सूर्य की ये ओषधि गुण वाली किरणें प्राय: सूर्योदय से एक घण्टे बाद तक रहती हैं। ये किरणें सिर, हृदय और शरीर के सभी अंगों की किरणों को छाती पर लेने वाला व्यक्ति कभी बीमार नहीं पड़ता है और न उसे कोई रोग सताता है। प्रात: कालीन सूर्य प्राणशक्ति अर्थात् जीवनी शक्ति देता है। यह जीवनीशक्ति मनुष्य को हृष्ट-पुष्ट और नीरोग बनाए रखती है।

# उद्यन् सूर्यो नुदतां मृत्युपाशान्। सहस्रं प्राणा मय्या पतन्ताम्। (अथर्ववेद १७.१.३०)

यजुर्वेद यहाँ तक कहता है कि जमदग्नि एवं कश्यप ऋषि की तरह हमें भी ३०० (तीन सौ) वर्ष की आयु प्राप्त हो।

# त्र्यायुषं जमदग्ने: कश्यपस्य त्र्यायुषम्। यद् देवेषु त्र्यायुषं तन्नो अस्तु त्र्यायुषम्।। (यजुर्वेद ३.६२)

वाल्मीकि रामायण के अन्तर्गत राम-रावण युद्ध के प्रसंग में श्री आदित्यहृदय स्तोत्र भी चिकित्सा के क्षेत्र में विविध रोगों में लाभकारी है-

## ततोयुद्धपरिश्रान्तं......सुरगणमध्यगतोवचस्वरेति।।

- (आदित्यहृदय स्तोत्र, ०१-३१, गीताप्रेस, गोरखपुर)

## रोग नाशक अग्नि के रूप में सूर्य देवता -

ऋग्वेद और अथर्ववेद में कहा गया है कि अग्नि सारे रोगों की चिकित्सा है। इसका अभिप्राय यह है कि अग्नि के प्रयोग से सब रोगों को दूर किया जा सकता है। अग्नि-चिकित्सा से अभिप्राय है कि अग्नि के द्वारा तपाए हुए जल, औजार आदि के प्रयोग से रोगों को दूर किया जा सकता है। अग्नि-चिकित्सा में सूर्य की किरणों से प्राप्त ऊष्मा से ठीक होने वाले रोगों को भी लिया जाएगा। अग्नि के द्वारा जलाना, सेंकना और तपाना आदि इस चिकित्सा में हैं। अतएव ऋग्वेद में कहा गया है कि अग्नि सारे रोगों को दूर करती है।

## सूर्य देवता के मंत्र (गायत्री मंत्र) द्वारा फिजियोथिरेपी -

## हस्त स्पर्श/फिजियोथिरेपी (Physiotherapy)-

इसमें रोगीं को बैठाकर या लिटाकर उसके रोगग्रस्त अंग पर हाथ रगड़कर 'गायत्री' या 'विश्वानि देव' मंत्र का जप करते हुए रोगग्रस्त अंग पर हाथ फेरते हैं। १० या २० बार अंग पर हाथ फेरने से वह रोग-ग्रस्त अंग ठीक हो जाता है। अलग-अलग रोगों की फिजियोथेरेपी के दौरानसम्बन्धित रोग के लिए अलग-अलग मंत्र एवं देवता हैं। अलग-अलग अर्क-रस-तेल-काढ़ा इत्यादि है जिससे रोगी के अंगों की मालिस की जाती है।

इसकी ही अन्य विधि है कि रोगग्रस्त व्यक्ति के अंगों को न छूकर केवल मंत्र पाठ करते हुए रोगग्रस्त अंग को ध्यान से देखते हैं या रोगी व्यक्ति को आदेश दिया जाता है कि वह ठीक हो रहा है। इस प्रकार देखने या आदेश के द्वारा यह इलाज या चिकित्सा की जाती है। इसके लिए निरन्तर अभ्यास करने की आवश्यकता है। व्यवधान होने पर वह ऊर्जा अपने आप समाप्त हो जाती है। इसमें मंत्रजनित दृष्टि से प्रकाशयुक्त मंत्र की किरणें चाक्षुष प्रत्यक्ष द्वारा रोगी के रोगग्रस्त अंग की मंत्र से सेंकाई होती है। उत्कृष्ट सिद्ध साधक ही इसे कर सकता है।

- (१) अयं मे हस्तो भगवानयं मे भगवत्तर:।
   अयं मे विश्वभेषजोऽयं शिवाभिमर्शन:।। अथर्ववेद ४.१३.६
- (२) हस्ताभ्यां दशशाखाभ्यां जिह्वा वाच: पुरोगवी।
   अनामयित्रुभ्यां हस्ताभ्यां ताभ्यां त्वाभि मृशामसि।। -अथर्ववेद ४.१३.७

अन्त में सूर्य देवता से यह प्रार्थना की गयी है कि- हे सूर्यदेवता! हम सौ वर्षों तक देखें, सौ वर्षों तक जीवित रहें, सौ वर्षों तक सुन सकें, सौ वर्षों तक बोल सकें, सौ वर्षों तक अदीन हों और इसी तरह सौ-सौ वर्षों की संख्या में अनन्त काल तक स्वस्थ रहते हुए जीवित रहें।

> पश्येमशरद: शतञ्जीवेमशरद: शतम् शृणुयामशरद: शतंप्रब्ब्रवामशरद: शतमदीना: स्यामशरद: शतम्भूयश्च शरद: शतात्।।

> > - (शुक्लयजुर्वेद रुद्राष्टाध्यायी ०९/२४)

अथर्ववेद में सूर्य की सुवर्ण के समान तीक्ष्ण किरणों को सैकड़ों शस्त्रों के समान भयंकर वर्णित किया गया है। सूर्य ही अन्न-भक्षी हिंसक रोग कृमियों का नाश करता है।

तत् परेता अप्सरस: प्रतिबुद्धा अभून। (अथर्ववेद ४/३७/३)

सूर्य एक ऐसा प्राकृतिक देवता है जो जल में फैलने वाले कृमियों को अपनी तीक्ष्ण किरणों के द्वारा नष्ट करता है, जो रोगकृमि आँख, नाक एवं दाँतों में जाता है उसको भी सूर्य ही नष्ट करता है।

## दंतां यो मध्ये गच्छति तं क्रिमिं जंभयामसि।

उत्पुरस्तात्सूर्य एति विश्व दृष्टो अदृष्टहां,

## **दृष्टांश्च घन्नदृष्टाश्च सर्वान् च प्रमृणनृ क्रिमीन्।** (अथर्ववेद ४/२३/३)

सबको दिखने वाले और न दिखने वाले सभी प्रकार के कृमियों को मारने वाला सूर्स उदित होकर कृमियों को मार डालता है।

## उत् सूर्यो दिव एति पुरो रक्षांसि निजूर्वन्। (अथर्ववेद ६/५२/१)

रोगकृमियों को नष्ट करता हुआ सूर्योदय होता है। सूर्य की किरणों की अग्नि से रोगकृमि नष्ट होता है। सूर्य कुष्ठ रोग निवारक हैं। पुराणों में यह आख्यान भी मिलता है कि ऋषि दुर्वासा के शाप से कुष्ठ रोग ग्रसित श्री कृष्ण पुत्र साम्ब ने सूर्य आराधना से इस भयंकर रोग से मुक्ति पा ली थी। मयूर भट्ट ने अपनी रचना सूर्य शतक में भगवान सूर्य की महिमा का वर्णन किया है। आख्यान प्राप्त होता है कि जब मयूर को कुष्ठ रोग हो गया तो इससे मुक्ति पाने के लिए उन्होंने सूर्य की स्तुति की, जिससे प्रसन्न होकर भगवान सूर्य प्रकट हुए तथा कवि मयूर को निरोग होने का वररान दिया।

## **आदित्यादेर्मयूरादीनामिवानर्थ निवारणम्।** - (आचार्य मम्मट- काव्यप्रकाश, काव्यप्रयोजन प्रकरण)

सूर्य की ऊर्जा स्नायु की कमजोरी को समाप्त करती है। माँस पेशियों को मजबूत बनाती है। कैल्सियम, फास्फोरस संतुलित करके हड्डियों को मजबूत करती है। सूर्य से मिलने वाली ऊर्जा का मानव के स्वास्थ्य से बहुत गहरा सम्बन्ध है।

ऋग्वेद के एक मंत्र में सूर्य की स्तुति पाप नाशक के रूप में की गई है। प्रदीप्त सूर्य की रश्मियाँ सूर्योदय होने पर पाप और निन्द्य कर्मों से हमें बचाएँ ।

## "अद्या देवा उदिता सूर्यस्य निरंहसः पिपृता निरवद्यात्"। (ऋग्वेद संहिता- १.११५.६)

इस प्रकार वैदिक सूर्य देवता वैदिक काल से लेकर आज तक हम सभी का स्वास्थ्य संरक्षक एवं पोषक है। अत: हम सभी को सूर्योपासना अवश्य करनी चाहिए। सन्दर्भ गला सत्ती

## सन्दर्भ ग्रन्थ सूची-

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- 9. सूर्याङ्क- गीताप्रेस, गोरखपुर 1979

al o	f Bharatiya Sangyaharak Association (A.A.I.M.)						
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	Varanasi – 221005						
:	Bi-annual						
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I, Devendra Nath Pande, hereby declare that the particulars given above are true to the best of my knowledge and belief.

Sd/-Devendra Nath Pande Signature of Publishe

