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**Review Article** 

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# AN OVERVIEW ON PRINCIPLE, DIAGNOSIS AND TREATMENT OF AYURVEDA

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#### **ABSTRACT**

Ayurveda is considered by various analysts to be the most settled repairing science. In Sanskrit, Ayurveda connotes "The Science of Life." Ayurvedic data began in India more than 5,000 years earlier and is habitually called the "Mother of All Healing." It begins from the old Vedic culture and was told for quite a while in an oral practice from accomplished specialists to their allies. A segment of this data was set to print a few thousand years earlier, yet a great deal of it is far off. The principles of countless the trademark repairing structures now conspicuous in the West have their establishments in Ayurveda, including Homeopathy and Polarity Therapy, the review article and

attempt has been made to provide general information pertaining to different aspects of the system, the different aspects in this review include information about basic principles, diagnosis, treatment aspects, types of treatment, different aspects of Panchamahabhuta and relationship between Tridoshas and Panchamahabhuta.

**KEYWORDS:** Ayurveda, panchmahabhuta, Tridoshas, Diagnosis and treatment.

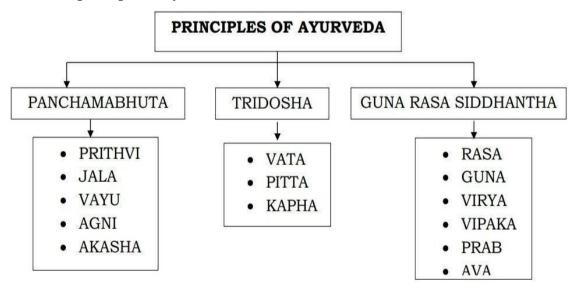
#### INTRODUCTION

Ayurveda (the Science of life) is one of the pieces of vedas. It is seen as upaveda of rigveda or atharva-veda but, really speaking, it is a flood of the data dropping starting with one age then onto the next since perpetuation comparing to the vedic composing that is the explanation its ascent has should be from the creator (Brahma) himself before the creation. It is called never-ending since nobody knows when it was not there. This shows its long custom and significant association with the Indian culture.<sup>[1]</sup>

Ayurveda is most world's oldest medical system and remains one of the India's traditional health caresystem & incertain cases, it is even supposed to be the most effective than modern medicine. Ayurvedic treatment carry ayurvedic product which are mainly produced from plant but may also include animal, metal, minerals and it also combined diet exercise and lifestyle. Avurveda is also called as ancient Indian medical system. [2] newly 20,000 medicinal plant species has been reported and around 500 traditional communities use about 800 plant species for treatment of version elements. according to the world health organisation(WHO) investigation report about 70% of Indian population use traditional and alternative medicines for healing different diseases. There are to distinct types of dosage form in ayurvedic system, which are Arista(fermented decortion) and Asava (fermented infusion)are considered as highest to other dosage form due to their easy palatability, accelerated therapeutic actions and increase the drug concentration. Asava and Arista are included in Ayurveda by Charaka Samhita, Sushruta Samhita, Astanga Hridaya, Bhaisajya Ratnavali, Sarangadhara Samhita, Khadan-igragam, Arsaschikitsha, Yogaratnagaram, Asavarishtasangragam Astangasangraham.<sup>[3]</sup>

# Principal

Table no 01: principal of Ayurveda.



#### PANCHA BHUTA

According to this theory, universe are made up of five elements (Pancha Bhuta) and they are present in the human body,

- Earth (PRITHVI)
- Water (JALA)

- Fire (AGNI)
- Air (VAYU)
- Space/Ether (AKASHA)

There is no separation between nature and you. A key ayurvedic concept is that of the fundamental union between macrocosm (the whole universe) and the microcosm (the universe within you). We are all connected through the five great components (panchamahabhutas). These elements comprise our individual bodies and minds and the whole world around us.<sup>[4]</sup>

These are consists of five basic elements (Panchamahabhutas) namely, earth, water, fire, air and vacuum (ether). These elements in different proportions are in a balanced state to suit the needs and requirements of different structures and functions of the body matrix and its parts. The growth and development of the body matrix depends on its nutrition, i.e., on food. Food, in turn, is composed of the five elements, which replenish or nourish the like elements of the body after the action of bio-fire (Agni). The tissues of the body are the structural entities whereas humours are physiological entities, derived from the different combinations and permutations of the Panchamahabhutas.<sup>[5]</sup>

Table no 02: philosophy of panchmahabhuta.

	Akasha (Ether)	Vayu (Air)	Teja (fire)	Jala (Water)	Prithvi (Earth)
Properties	Light, Minute, Clear, Soft & Inactive	Light, Rough, Minute & Clear	Light, Rough, Minute, Clear & Sharp	Heavy, Fluid, Slimy, Soft & inactive	Heavy, Rough, Firm, Hard & inactive
Relation with senses/sense organs	Sound (Ear)	Touch (Skin)	Vision (Eye)	Taste (Tongue)	Smell (Nose)
Relation with Body	Body Cavities & passages	Body Cavities, all movements & pulsation in the body	Whole body is concerned	Body fluids	Body organs
Taste responsible	Not any	Predominantly, astringent, slightly bitter	Predominantly, pungent, slightly sour & salty	Predominantly sweet, slightly, astringent, salty & sour	Predom- inantly sweet, slightly astringent

#### Genesis of Panchamahabhuta

The Panchamahabhuta is composed of three words i.e. Pancha, Maha and Bhuta, & Panchamahabhuta is a Sanskrit word. The bhuta means that having their own existence &

bhuta is derived from the word "bhu". The bhuta is not generated by others, but bhuta causes the generation of mahabhuta. Bhuta is the inherent character of mahabhuta. With out the help of bhuta Mahabhuta cannot be generated. that cannot be perceived by sense organ also & it is so minute. It is very minute and With the help of mana (mind) it transformed from one person to other. So it is very clear that bhuta can be considered as causative factor & internal, very minute and not perceived by any sense organs but transferable from one form to another. Bhuta can be considered as quantum (unit f energy). It is knowledgeable by inference. Regarding the Genesis of bhuta, there are many more different theories of philosophy described. Ayurveda accepts Vedant view, mainly Samkhya view and Nyaya Vaisheshika view. [6]

#### Naming a material on the basis of its Panchamahabhuta constitution

Everything in the creation is made up of 5 basic elements of nature Or Panchamahabhuta. Every object or material on earth is made up of these elements. But that particular material must called by the name of the predominant Mahabhuta. By means of this tell that, though all materials are made up of 5 Mahabhuta's, they will have the predominance of only one Mahabhuta and they will be called by that name. Example, a stone will be made up of all the 5 elements but it still be called Parthiva (predominantly Earth) because of having the Earth element in excess amount in comparison to the other elements. Likewise we can think of bone tissue in the body as Parthiva. The another elements in these materials will be dormant and will not manifest themselves. The classification of all the things and all the materials in the universe (and all tissues and organs in the body) has been classified on this concept.

- Parthiva Those predominant in Prithvi or Earth element
- Aapya or Jaleeya Those predominant in Jala or Water element
- Taijasa or Agneya Those predominant in Agni or Fire element
- Vayaveeya Those predominant in Vayu or Air element
- Aakaasheeya or Naabhasa Those predominant Akasha or Ether (Space) element

This clarifies our hesitation and makes things clear that no substance or material is made up of single Mahabhuta.

The mass or weight of each and every material is due to the presence of Prithvi Mahabhuta or Earth element.

The integrity and attachment of the particles or cells brought about by the Jala Mahabhuta or Water component in that material.

The temperature of every material is a contribution of Agni Mahabhuta or Fire element contained.

The motion of particles contained in each and every material is brought about by Vayu Mahabhuta or Air element.

The space between every single particle (space within also) of a material is caused by the Akasha Mahabhuta or Ether (Space) element.<sup>[7]</sup>

#### Earth (PRITHVI)



Fig no 01: Earth (Prithvi).

Earth is the first element & it is solid, very hard, gross, dense. It is related to the all solid & hard structure that show shape - eg. Nails, bones, muscles, teeth. The earth elements is responsible for giving shape, structure and strength to the body.

The tanmatra for Earth element is Gandha (smell). The small particles of earth are scattered all over the palce gives us the sense of smell. Nose is related sensory organ. Nose is more hard compared to other sensory organ. Heavy, dull, dense hard and gross are qualities of earth element.<sup>[8]</sup>

Human beings have a natural and emotional affinity with the Earth. The Earth revolves around the Sun and has gravitational and magnetic force. Scientists have proved that earth is a huge magnet with two poles-North pole and South pole. It has also been proved that the human body is a magnetisable object with a large percentage of iron in the blood. As we all know, opposite poles of a magnet attract each other and similar poles of a magnet repel each other. The Vaastu principle of placing the head in South direction while sleeping is based on

earth's magnetic property.<sup>[9]</sup>

#### **Synonyms**

Prithvi, Kshma, kshiti, bhumi, bhu, dhara, dharati, dharitri, dharani, vasudha, vasundhara, urvi, achala, avani, avanee, jagat.<sup>[10]</sup>

**Types:** Prithvi mahabhuta are in two forms 1) Nitya (eternal) and

2) Anitya (ephemeral).

The paramanu (minute/subtle) form of prithvi mahabhuta is nitya (eternal). The secondary forms by combination of these paramanu are anitya (ephemeral).<sup>[11]</sup>

# Function of PRITHVI<sup>[12]</sup>

• Upachaya: Growth

Sanghata : Compactness

• Gourava: Heaviness

Sthairya: Steadiness

• Bala: Resistance

• Dharana: Retention

# $Comparison^{[13]} \\$

#### • Panchamahabhuta and Earth - Structural level

The instant perceptible form of Prithvi i.e. form of solidity is earth. Since Prithvi contains all the functions & properties of preceding mahabhuta, The earth should posses all the properties and functions of all mahabhuta. According to Modern Science, The earth is made up of five parts like Atmosphere, Hydrosphere, Lithosphere, Mantle and Core. So the qualities of five parts of the Prithvi and five parts of earth (Akasha, Vayu, Agni, Jala and Prithvi) should be comparative. The layers present in Prithvi and earth can be compared as shown in table No 3.

Table No 03: Showing comparative layers in Prithvi and Earth.

Sr.no	Layers in prithvi	Layers on earth
1.	Akasha	Atmosphere
2.	Vayu	Makes motion in all layer
3.	Agni	Mantle and core
4.	Jala	Hydrosphere
5.	Prithvi	Lithosphere

Accordance to one view of Ayurveda Prithvi mahabhuta has the qualities of all previous mahabhuta and finally contains five components. Likewise earth i.e. perceptible form of Prithvi also contains five components as shown in above table. All the layers present in earth and Prithvi basically have almost similar properties, functions and structure.

#### • Panchamahabhuta and Earth - Property level

The genesis order of Panchamahabhuta is that, at first Akasha is originated, after that Vayu, Agni, Jala and Prithvi respectively. After Akasha mahabhuta, each succeeding mahabhuta contained the quality of preceding mahabhuta. So Prithvi, the latest one has the quality of all the four preceding mahabhuta.

#### • Earth and Human body - Structural level

In this Universe the Human body is one form of existence. Which may contains the earthly matter. So, naturally all the elements present in earth will be present in varied amount in human body. The sum of elements present in earth is 112. Out of these only 26 elements are present in human body. 26 elements present in earth are responsible for the all structure of the human body.

# Structural components of Earth and Human body at elemental level

Table 04: Showing Structural components of earth and human body at elemental level.

S.N	Elements	Symbol	Atomic weight	Approximate % in earth crust.	Approximate % in Human body.
1.	Oxygen	О	8	46.6	65
2.	Hydrogen	Н	1	14	9.5
3.	Carbon	C	6	0.03	18.5
4.	Nitrogen	N	7	Trace	3.3
5.	Calcium	Ca	20	3 6	1.5
6.	Sodium	Na	11	2.8	0.2
7.	Potassium	K	19	2.6	0.04
8.	Magnesium	Mg	20	2.1	0.1
9.	Phosphorous	P	15	0.07	1
10.	Sulphur	S	16	0.03	0.3
11.	Chlorine	Cl	17	0.01	0.02
12.	Iron	Fe	26	5	0.005
13.	Silicon	Si	14	27.7	Trace
14.	Aluminum	Al	13	6.5	Trace
15.	Manganese	Mn	25	0.1	Trace
16.	Fluorine	F	9	0.07	Trace
17.	Tin	Sn	50	Trace	Trace
18.	Vanadium	V	23	0.01	Trace

19.	Chromium	Cr	24	0.01	Trace
20.	Copper	Cu	29	0.01	Trace
21.	Boron	В	5	Trace	Trace
22.	Cobalt	Co	27	Trace	Trace
23.	Zinc	Zn	30	Trace	Trace
24.	Selenium	Se	34	Trace	Trace
25.	Molybdenum	Mo	42	Trace	Trace
26.	Iodine	I	53	Trace	Trace

These 26 elements are members in the periodic table, and they belong to S - block, P - block and d - block.

## Importance in clinical practices<sup>[14]</sup>

#### • Application in Diagnosis

The development of mass, compactness, binding, heaviness, and stability/firmness in the body are decided by Prithvi Mahabhuta. Abnormalities in these function are used to assess the bearing proportion of Prithvi Mahabhuta in the body.

#### • Application in treatment

The substances which are heavy (guru) to digest or metabolite have a predominance of prithvi and jala mahabhuta. Its extra use result in hampering the agni. By inherent nature of food quantity of food is determined. (light or heavy to digest) depends on fundamental panchabhautik composition and digestive capacity of an individual.

Prithvi mahabhuta is one among the material substance in the manifestation & differentiation of rasa (taste). It is the origin for all earthen elements. between the six types of tastes (rasa), madhura (sweet), amla (sour) and kashaya (astringent) have predominance of prithvi mahabhuta. By carefully prescribing the drugs having these rasas, one can treat various abnormal conditions of doshas.

Medicines for therapeutic clarification (virechana) have predominance of prithvi mahabhuta with jala mahabhuta. It causes the downward movement of these medicines leading to purgation due to Inherent property of gurutva (heaviness). So it helps in expelling the doshas through rectal route.

Drugs predominant in standard of prithvi and jala mahabhuta are nourishing (brimhana) in nature. commonly they are used in diseases due o under-nutrition.

The panchabhautika composition of kapha dosha is jala and prithvi mahabhuta The substances possessing prithvi mahabhuta pacifies vata and pitta dosha due to its properties. It increases kapha dosha. Hence the diet and medicine with prithvi mahabhuta is prescribed in disorders due to vitiation of vata and pitta dosha.

The parthiva bhutagni perticularly carries out digestion and metabolism of food substances having dominance of prithvi mahabhuta. It nourishes the corresponding constituents in the body, hence in case of any disequilibrium or abnormalities of prithvi components in the body, this agni needs to be corrected.

#### Water (Jala)

The second element is water. It is also called as Jala or Apa. Everytime we think of water qualities like liquidity or fluidity comes to our mind. What exhibit important quality of binding – e g. If we say dry soil, we can't come from a ball out of it. But if we add water to it, then we can



Fig no 02: Water (Jala)

easily produce mud balls. This binding nature help in producing different structure in the body as it binds the two cell together hence this element is a constructive force. Rasa (taste) is the tanmantra of water element. The ability to taste and sense of taste depend on the liquidity that exist within in the mouth in the form of saliva. Dry mouth along with dry tongue is cannot give sense of test. The water element show qualities like cool, liquid, Dull soft, and sliminess. Its main action are cohesiveness and adhesiveness.<sup>[8]</sup>

After Earth, the most important element is water. Is connected to our sense of taste, touch, sight and hearing. More than 80% in our body and two-third of Earth's surface contain water. Vastu provides important information about the placement of water source like Wells, underground water tank, boring, overhead water tank etc, while planning the house. Position

of septic tanks, drains, sewerage etc, are to be decided attentively to optimize the benefit of water element. Therefore, it is suggested to have a well, or bore or sump in north- East corner of the plot<sup>[14]</sup> Water is considered to be "Jeeva" Prince life in ayurvedic concept. Water is madhura (sweet), Ruchikaraka (tasty) and Sheetala means (cold). Water is favourable as it has all the 6 tests (Rasas) which are madhura (sweet), Amla (sour), Lavana (salty), Katy (pungent), Tikta (bitter) and Kashaya (astringent). It has tasa, Tula, sparsha, drava and snigdha gunas, it relieves Alasya (laziness), Daha (thirst), Moha (loss of mental block), Bhrama (giddiness), Nidra (sleepy feeling), Vishal (toxins); it act as Jeernakari (effectively digest food), Truptikara (provide immense satisfaction to thirsty person), Veerya (ability to function), provides Buddhi (intelligence), Bala (strength), Tushti (satisfaction), Pushti (energy) to Nashta anga (debilitated part of the body). In Jala Mahabhuta Tama guna and satwa are in predominance. Based on place of origin and availability Ayurveda categories different types of water. Quality of water flown in distinct river is also told to have different properties.<sup>[15]</sup>

## Qualities of good water<sup>[16]</sup>

The qualities of good water which is Odourless, Tasteless, Cold, Reduces thirst, Pure, Clear /transparent, Pleasant/good for heart, Light in nature is considered as good for the consumption.

# Synonym of jala<sup>[17]</sup>

Payasa water nurturing like milk, Jeevana Giving life, paniya water intended to drink, Salila Good, Nira Clear liquid, Kilaala Heavenly drink, Aapa water, Superior quality of liquid, Water having qualities Similar to milk, free flowing water, Ambhu water from clouds, Pushkarambhu water with lotus, Pathya Wholesome for everyone, Vari free flowing water, Kamalaambhu Water where lotus are grown. (Bh. Ni.- Varivarga).

# **Types of Jala**<sup>[18] [19]</sup>

Our literatures has explained different types of Jala.

#### a) Based on Occurance

- 1. Antarikshajala or Divya Jala.
- 2. Bhuma Jala
- 3. Nadijala
- 4. Dushtajala
- 5. Hamsodaka

#### b) Based on kala

- 1. Sarojata Jala
- 2. Tadagaja jala
- 3. Nairjara Jala
- 4. Divya Jala
- 5. Sarva Jala
- 6. Audbhida Jala
- 7. Kaupasambhuta Jala
- 8. Caundya Jala
- 9. Kaupa Jala

#### C) Based on property

- 1. Sitajala
- 2. Ushnajala

#### A. Based on Occurance

#### 1. Antariksha Jala

Antariksha Jala is the water that falls from sky or from the clouds. Antarikshajala have avyakta rasa, it is considered to be dharana, ashwaasajanana, amrita, Jeevana, tarpana, pathyatama and which alleviates shrama, moorcha, klama pipasa, mada, tandra and Nidra and dahaprashamana.<sup>[20]</sup>

# Types of Antariksha Jala<sup>[21]</sup>

- a. Dhara (Rain water)
- b. Kaara (formed from Hail stones)
- c. Thaushara (fog)
- d. Haima (Snow)

#### a. Dhara jala

Continuously falling rain water from the sky is known as Dhaara. Because of its laghutva property it is considered to be the best among the all four varieties.

- Dhara Jala is again divided in two types.
- 1. Gaanga and
- 2. Samudra

there is no change in colour of shali after one muhoortha, it should be taken as Gaanga. It

should be considered as Saamudra If there is any change in the consistency or colour of Shaali (ie, it becomes snigdha or vivarna). The qualities of Gaangajala are Jeevana, Tarpana, Hridya, Hlaadi, Budhiprahodana, Avyakatha Rasa, Mrishta, Sheeta, Laghu, and equal to Amruta. [22]

#### Aindra Jala<sup>[23]</sup>

Aimdra Jala is the Rain Water which is collected in vessel before it comes in contact with the soil. It is best from of all types of Jala and are supposed to be consumed by the Kings.

#### b. kaara Jala

Kaara is the water which is formed out of the hail stones.

#### C. Toushaara jala

Thoushaaramavashyaayamnishajalam. The water which falls from sky during the end of the night and water which is having foggy appearance is known as Toushaara Jala.

#### d. Haima Jala

Hima is water that forms after the liquefaction of ice.

# 2. Bhauma Jala<sup>[24] [25] [26]</sup>

Bhuma Jala is the water that comes in contact with earth after falling from the sky.

#### **Types of Bhauma Jala**

- 1. Kaupa: (well water)
- 2. Tadaga Jala: (pond water)
- 3. Vapya Jala: (water of small pond)
- 4. Nairjara Jala: (spring water)
- 5. Sarasa Jala: (lake water)
- 6. Caundya Jala: (water of big well)
- 7. Kaidara Jala: (water of Field)
- 8. Palvala Jala: (water of Small pond)
- 9. Audbhida Jala: (piercing earth water).
- 10. Nadeya Jala: (river water)

Table 05: Bhuma Jala are divided into several type, according to it's place.

Sr.no	Tyep of jala	Rasa	Guna	Karm	Dosaghnata
1.	Kaupa Jala : (well water)	Madhura	Laghu	Deepana	Tridosahara, taste of water is Ksara (alkaline) if aggravates pitta and decrease vata & kapha
2.		Madhura, Kasaya	Guru	Its aggregates vayu and useful in blood disorders	Pitta kaphahara
3.	Vapya Jala : (water of small pond)	Madhura	Laghu	If it is madhura Kaphakrit, Vatapittahara	Pittahara If it is Ksara (alkaline), it aggravates Pitta and decreases Vata – Kapha
4	Nairjara Jala : (spring water)	Madhura	Laghu	Dipana, Ruchikara, Vatakara	Kaphahara
5.		Madhura, Kasaya	Laghu, Ruksa	Balya, Rocana, Trsnaghna,	Malamutrabandhaka
6.	Caundya Jala: (Water of big well)	Madhura	Laghu, Visada	Dipana, Pacana	Pitta Kaphahara
7.	of field)		Guru,	Abhisyandi	Tridosakara
8.	Palvala Jala : (Water of Small Pond)	Madhura	Guru.	Abhisyandi	Tridosakara
9.	Audbhida Jala : (Piercing earth Water)	Madhura	Laghu,	Prinana, Balya, Dahahara, Vatakara	Pittahara
10.	Nadeya Jala (River water)	Katu	Ruksa, Laghu, Visada	Dipana, Vatakara	Kapha Pittahara

#### 3. NadiJala (river water)

From the Himalaya and Malaya mountains water of rivers arising, and which get churned up well by dashing against rocks are very good for the health, whereas the same water if gets stagnated and gets contaminated gives rise to worms (intestinal parasites), Filariasis, diseases of the heart, head and throat.

The water of the rivers which flood into the western ocean (Arabian sea), which have pure water is good for health, where as the water of rivers which flood into the eastern ocean (Bay of Bengal), which are slow and this water is contaminated and which is bad for health.<sup>[27]</sup>

Those water arising from Parvata Pariyatra, (the western part of the Vindhya mountains) mitigate the doshas, bestow strength and sexual vigor, the water of the sea causes vitiation of all the three doshas. [28]

#### 4. Dushtajala: (polluted water)

Dirty water is being mixed with slush (sludge), algae weeds and leaves, the water which is not exposed to sunlight and wind, which is a mixture of old and fresh, The water which is thick, containing worms, hot (by nature), heavy (not easily digestible), frothy, causes tingling of teeth by being very cold, that rain water which is unseasonal or though seasonal that of the first rain, (before the appearance of *Agastya naksatra*), that contaminated with the webs, saliva, urine, feaces of spider etc., and such other poisonous materials, should not be used for drinking.<sup>[28]</sup>

#### 5. Hamsodaka

In the Sharath rutu, the water which gets heated by the hot sun rays during day, cooled by the cool rays of the moon during night, for many days consistently which has been depoisoned by the rise of the star Agastya, which is uncontaminated, pure and capable of mitigating the doshas is known as *Hamsodaka*. It is either *abhishyandi* (producing more secretion or moisture inside the minute channel so as to block them) nor dry, such water is like *amrita* (nectar) for drinking and other purpose.<sup>[29]</sup>

# B) Based on kala<sup>[26]</sup>

Bhavprakasa described different types of Jala according to different Kala (months) such as;

Table no 06: types of Jala according to different kala.

Sr. no	Tyeps of jala	Kala(Rutu)	Months
1.	Sarojata Jala	Pusya rutu	December
2.	Tadagaja Jala	Magha rutu	January
3.	Nairjara Jala	Vaisakha rutu	April
4.	Audbhida	Jyaistha rutu	May
5.	Divya Jala	Shravana rutu	July
6.	Sarva Jala	Kartika & Margasirsa	October & November
7.	Kaupasambhuta Jala	Phalguna & Bhadarapada	February & August
8.	Caundya Jala	Chaitra & Ashwin	March & September
9.	Kaupa Jala	Asadha	June

#### C) Based on property

# 1. Sitajala<sup>[30]</sup>

Sitajala means cold water which can relieves alcoholic intoxication, fainting, vomiting, exhaustion, thirst, burning sensation of heat and aggravation of pitta, rakta and toxins.

#### 2. Ushnajala

Ushnajala means warm water. warm water help in increase digestion, stimulates hunger, released throat pain, easily digestible, clean urinary tract, relieves hiccup, flatulence, aggravation of water and subsides kapha; is ideal on the days of Panchakarma (purificatory) therapy and for those who suffering from fevers, cough, ama (accumulation of undigested material), running -nose, dyspnoea and pain in the flanks. Generally warm water is recommended for drink in condition of throat infection and also advised in purification therapy (panchakarma)<sup>[30]</sup> firstly water which has been boiled and then cooled is not going to increase the moisture inside the body, is not easily digestible and is not ultimate for the doshas associated with *pitta*. If water which has been kept overnight (so become stable) causes aggravation of all the three dosas.<sup>[31]</sup>

# Importance of intake of water (Jala) as per Ayurveda (Panchakarma)[32]

For various reasons water is very important for our body. Our body is basically made up of 50 to 70% of water.

- 1. Some important facts about the water content in our body:
- 2. Blood contains 83% of water
- 3. Lean muscles are made up of 75% of water
- 4. Bones are made up of 22% of water
- 5. Brain contains 74% of water

Water is required for all the organs in our body to hydrate the call and tissues that the organs are made up of. Water helps to regulate the body temperature at the normal. Water consumed is used during the various processes of the body like breathing, sweating, absorption of minerals and nutrients, etc.

Rehydration of the body is very important for the normal functioning of the entire body. As per the research, the daily intake of water according to gender is,

- Men 2.5 litter per day.
- Women 2 litter per day.

#### Contra indication or principal to avoid ingestion of water (Jalapana varjya)

Water should not be consumed in more quantity or consumed on low quantity by a person who is suffering from Anemia, poor digestion problem, piles, Irritable bowel syndrome, Swelling all over the body and also Ascitis, tumors of the abdomen, enlargement of abdomen,

hemorrhoids. If it is inevitable, one can take processed water. (Processed with jeera or ginger etc. for which one can take help from the Ayurveda physician)<sup>[33]</sup>

Except in sarad (Autumn) & nidagha (summer) even healthy persons should drink less quantity of water. [34]

Acharyas in Ayurveda say that when properly used water balance all the 3 doshas, maintain the health of all the tissues (dhatus), sustains life, delays the ageing process and thus Acts like nectar.

# Importance on water and health according to the modern knowledge<sup>[35]</sup>

**Daytime fatigue:** dehydration is the one of the first sign of fatigue. Even a very small drop of body's water level can hurt you. Many of the people could not realize that fatigue & lethargy they can be experiencing may be due to mild dehydration. Water reduces the daytime fatigue.

**Memory:** The human brain is most vital organ and it consists of 95% of the water. Mild type of dehydration can reduce your mental energy and capacity of brain functioning. It result in causing memory to become impaired.

**Reduce colon cancer & bladder cancer:** According to the research it shows that drinking adequate amount of the water can reduces the risk of colon cancer by 40% and bladder cancer by 50%.

**Nourishing skin:** The skin cells also required water for their nourishment. like any other cells in the body. Without water the organ should not function properly or at their best.

**Essential for the digestion:** the digestive system is depending upon the amount of Water. Sufficient amount of water help in breakdown of food materials.

**Nutrient absorption and chemical reaction:** water helps in carry nutrients and oxygen to the different body cell and overall it is help in keeping everything movie in our body.

**Aids circulation:** drinking water can helps the flow of water in our body and helps to keep blood circulation going on.

**Regulate body cooling system:** water in the body can helps in regulating body temperature and store extra heat in the body.<sup>[36]</sup>

#### Fire (AGNI)



Fig no 03: Fire (Agni).

Agni means fire in Sanskrit, consistent with Ayurveda Agni is liable for all digestive and metabolism within the person. [37] Agni is essential at both physiological mad pathological level. Majority of the diseases are produced due to the malfunctioning of the "Agni" Which rightly has been called as central to health. Agni is not only play important role in absorption of macro as well as micronutrients and it is destructive to pathogens also. The food is not get digested properly is called "Ama" in Ayurveda and it's nothing but a pathogens and the toxins responsible for diseases. Proper functioning of digestive fire is responsible for normal tone of the digestive system, circulatory system, strong immunity and resistance against diseases and the proper tissues growth. If the digestive Agni not work properly poor digestion, languid blood circulation, low energy level and poor complexion and poor immunity against diseases. [38] Agni is that the invariant agent within the process of paka (digestion, transformation). Agni is liable for Conversion of food within the sort of energy, Which is liable for all vital function of our body. Acharya charak has mentioned the important of Agni, after stoppage of function of agni the individual get dies, when the Agni of individual is sama, then that person would be absolutely healthy and would have long, happy and healthy life. If the Agni of person get destroy, the entire metabolism in his body get Disturbed, leading to unhealthiness and diseases. Hence, Agni is side to be the bottom of life<sup>[39]</sup> consistent with modern medicine, metabolic processes in our body, cellular division and cell multiplication are happening altogether cells (dhatu paramanu) of our body from birth till death. The cell is that the functional unit of our body, consistent with Charak, the constituent parts of the our body, if more divided into the atoms, are bound to become innumerable, intrinsically cells or atoms are exceedingly numerous, very minute and ultrasensory. within the disjunction and conjunction of cells, the activating factors are the Vata and therefore the nature of action. [40]

In Shushrut, we will see how the "Avayavaas" are formed from "various dhatus". [41] Thus, supported Charak and Shushrut, the above cells are often considered as "dhatu paramanus." For these constant processes altogether cells, a biological energy is consistently essential, without which the survival of our body are going to be quite impossible. The similar biological energy is provided by Agni in Ayurveda. The potential and kinetic are two types of biological energy provided by the Agni in the dhatu paramanu (cells) of our body.

#### Synonym of Agni

Vaishvanar, Vahani, Pavaka, Anala, Shikhavaan, Tanunpaat, Shuchi, Vrataha, Sarvapaka, Ameevachatan, Damunas.<sup>[42]</sup>

# **Types of agni**<sup>[43] [44]</sup>

Agni is numerous because it present in each and every cell (dhatu paramanu) of the body.

The counting of number of Agni varied in various classical Ayurvedic texts. As shown below,

- 1 Acharya Charaka has described about 13 Agnis.
- a) Jatharagni -1, b) Bhutagni -5, c) Dhatwagni -7
- 2 Acharya Sushruta, described five types of Pitta, which are the types five Bhutagnis that are,
- a) Pachakagni, b) Ranjakagni, c) Alochakagni, d) Sadhakagni and e) Bhrajakagni.
- **3.** Acharya Vagbhata has described different types of Agni, viz. a) Bhutagnis 5, b) Dhatvagnis 7, c) Dhoshagni 3 and d) Malagni 3.
- 4. Acharya Sharangadhara has described five types pittas are,
- a) Pachak, b) Bhrajak, c) Ranjak, d) Alochaka and e) Sadhak.
- **5. Achayra Bhavamishra** has followed Acharya Charaka and Vagbhata. Agni has been divided into 13 types according to the site of action and function. These are,
- **1. Jatharagni** one Agni existing in the stomach and duodenum.
- **2. Bhutagni** five Agni from the five basic elements.
- **3. Dhatwagni** seven Agni existing, one in each of the seven Dhatus.

#### 1) Jatharagni

Jatharagni is the functions of digestive fire, Jatharagni is the Agni and bioenergy which is present in Jathara (stomach and duodenum). According to Jatharagni, Ashtanga Hridaya, the seat is grahani (duodenum), so called because it withholds the food for a particular time inside the Amasaya (stomach) to facilitate digestion. within the opinion of Dhanvantari, it's

the Kala referred to as "Pittadhara," situated at the doorway of the Pakvashaya (intestine) and acting as a bolt to the door of the pathway/channel of food. It is liable for the duration of life, health, valour, ojas (essence of the dhatus), strength of all the bhutagni and dhatvagni. The power of the grahani is from Agni itself, and therefore the strength of Agni is from Grahani. When the Agni undergoes default, grahani also gets defaulted and produces diseases.<sup>[45]</sup>

Jatharagni is noticed to be the most important because each and every nutrient that one ingests first comes in to the Jathara and is subjected to the action of Jatharagni. Jatharagni digests the all food materials that contains of the five basic elements and conver it for utilization by the respective Dhatus paramanus (tissues). Jatharagni is responsible for separation of the food material into the the waste products (kitta) and essence portion (Prasad) in our body. [46] Jatharagni is related directly to the Dhatwagni or bioenergy in the cells and their metabolic processes of cells, with ultimate tissue metabolism or (Dhatu-Paka) process. All the Dhatvagni depend on the healthy and normal state of Jatharagni. the Jatharagni it will cause an excessive or retarded action of the Dhatwagni if it is hyperactive (Tikshna) or hypoactive (Manda), This distracted action ultimately leads to various disorders. Jatharagni is controls the function of all other 12 Agnis, it is most important types of agni. All the Agnis are completely dependent on the status of Jatharagni. [47]

# Jatharagni is also classified into four type according to the performance of digestion in human body, [48]

- 1) Samagni
- 2) Visamagni
- 3) Tikshnagni
- 4) Mandagni

#### 2) Bhutagni

In a basic element (Bhutas) Bhutagni is present. There are five Agnis are present in each of the five basic elements, are—Parthiva (earth), Apya (water), Tejas (Agni), Vayavya (vayu) and Nabhasa (akash). Each and every Dhatu Paramanu (cell) in our body is composed of the five Mahabhutas or five basic elements. Naturally, each cell (Dhatu paramanu) contains of these five Bhutagni also. All the nutrients that we eat in this Universe also consist of the same five basic elements with their respective Agni or bioenergies. Thus, they are totally similar with respect to the five basic elements with their Bhutagni in our body cells as well in the entire outside nutrient that we ingest for the nutrition of our body. Acharya Charak has include that

the five Bhutagni digest their own part of the element present in the food materials. After the digestion of food by the Bhutagni, digested materials containing the elements and qualities similar to each Bhutas nourish their own particular Bhautika elements of the body. These Bhutagnis act after the Jatharagni present in the stomach and duodenum, acting on the food and bring out their disintegration. In the modern physiological point of view, the action of Jatharagni can be compared with the digestion in the stomach and duodenum, and the action of the Bhutagni can be equated with the conversion of digested substance in the liver.

# 3) Dhatwagni<sup>[50]</sup>

All the seven element tissues of the body means seven Dhatu contain their own Agni to metabolize the nutrient materials supplied to them through their own Srotas.

- 1. The **Rasagni** present in the Rasa Dhatu.
- 2. The **Raktagni** present in the Rakta Dhatu.
- 3. The **Mamsagni** present in the Mamsa Dhatu.
- 4. The **Medagni** present in the Meda Dhatu.
- 5. The **Asthyagni** present in the Asthi Dhatu.
- 6. The **Majjagni** present in the Majja Dhatu.
- 7. The **Shukragni** present in the Shukra Dhatu.

After the action of agni on the ingested food seven Dhatu are forms and some waste products are also formed. Each of the Dhatu earn its nourishment from the previous Dhatu receives its nourishment from the previous Dhatu. At the cellular level seven Dhatwagni works. Acharya Charaka has including the fact that the seven Dhatus that are a support of the body contain their own Agni, and by their own Agni they metabolize and transform the materials supplied to them to make the substances alike to them for assimilation and nourishment.

# Significance of Agni<sup>[51]</sup>

#### • Physiological significance of Agni

Majority of the diseases are result of malfunctioning of the Agni which rightly has been called as central root to health. Agni not only plays important role in absorption of macro as well as micronutrients, but is harmful to pathogens also. The food is not get properly digested or metabolized is referred as "Ama" in Ayurveda and it is nothing but a toxin or pathogen responsible for formation diseases. Proper functioning of digestive fire results in normal tone of the digestive-system, circulatory-system, strong immunity or resistance against diseases,

proper tissue growth and body complexion. It is also the source of intelligence, nutrition and awareness in the body. Agni helps to coordinates many physiological processes of the body from the digestion, reabsorption, sensations and formation of energy. This affects both body and mind of the human being It makes coordination between the both of them which leads to a healthy lifestyle.

#### • Pathological significance of Agni

If digestive fire is not working properly, one has poor digestion, improper blood circulation. poor complexion, low energy levels, flatulence and poor immunity against diseases. According to Ayurvedic principles, Thus help in proper functioning of the digestive fire is treating the root cause of the diseases. Thus a violent cycle of impaired Agni and the production of Ama is established. acknowledge basic relationship between Ama and Agni is of prime Importance in treating the diseases. Maintaining good appetite, use of digestive stimulants and ensuring regular bowel movements are of prime importance in enkindling the digestive fire and preventing the production of root cause of all diseases, Ama.

This shows Agni has the most important role in Dosha Dhatu balance in the human body and it will produce diseases as it get imbalance in the body. In Ayurveda it has been said that with decrease in functions of these thirteen types of Agni there will be production of disease.

#### Importance of Agni

As it is explained in many Samhitas that Agni plays an major role in maintain health. As Agni is the main cause of many diseases. Agni in Vedas is said to be fire for light, heat, ability to cook food. But in Ayurveda Agni is taken on another level that is it constitutes of Panchmahabutas which form the elements of the body, these elements are the basic of the cellular and tissue level formation of the body. If this is not working properly the imbalance will cause many diseases.

#### **Functional forms of Agni**

- Normally based function of Agni -
- 1. Longevity-(Ayu) cyto-sustenance mitochondria Complexion (Varna) developers Bioluminance
- 2. Strength (Balam) Immuno-blusters Health (Swasthyam) vital promoters
- 3. Enthusiasm (Utsaaha) physico-psycho stimulators Body accumulation (Upachaya) Body bulk promoters

- 4. Luster (Prabha) Bio-luminosity Tissue essence (Ojas) vital function triggers
- 5. Agnayah -Bio fires
- 6. Prana Life (Pranavata)
- Ushma the heat reflection in the hind part Gut and integumentary system is called Ushma.

#### Air (Vayu)



Fig no 04: Air (Vayu).

In Sanskrit Air is known as Vayu. The word 'vayu' means 'wind' or 'air'. It is one among the panchmahabhuta. In Ayurveda, it is applied to denote mahabhutas and dosha in the body.

The word vayu originates from va dhatu (saskrit root) which means 'movement. The word vayu is derived from word 'vagatigandanayoho', which means it exerts motility and pressure. Vayu possesses specific property of touch. It doesent have any shape. There two forms of vayu subtle (sukshma) and gross (sthula). The subtle form is present as vital force i.e. 'prana' in sheath of vital force (pranayama kosha). Gross (sthula) vayu is existing in the body as mahabhuta and dosha in sheath formed by food (annamaya kosha).

In the sequence of evolution, vayu evolves from the akash mahabhuta. The subtle forms of shabda and sparsha unify to form vayumahabhuta.

The substance with the predominance of vayumahabhuta possesses the following properties:

- Light (laghu)
- Dry (ruksha)
- Rough (khara)
- Clear (vishada)
- Subtle/minute (sukshma)Touch (sparsh)
- Sound (shabda)

The movement (chalatva) is the characteristic feature of vayumahabhuta. It can move in all directions i.e., 'tiryakgamana'. Among the three fundamental qualities (triguna), vayumahabhuta is raja guna dominant. The elements of the air represent the kinetic energy and capacity for motion. All the air represent the all forces and the movement.<sup>[57]</sup>

Synonym: Vata, pavana, sadagadi, anila, sameerana, maruta

#### Importance<sup>[52]</sup>

#### 1) Function in embryogenesis and Human body

- Vayu Mahabhuta's is responsible for the functioning of development of the touch sensation during the embryogenesis and its Perception, structure, impulsion, roughness and function of body tissue and all types of movements transportation in Channel.
- The dominance of vatadosha in prakriti of an individual is due to the Vayu Mahabhuta.
- The function of separation of foetus (garbha) into dosha, dhatu, mala, different body parts is carried out by Vayumahabhuta.
- All these function are carried out in postnatal life too.
- 2) Role in determining the complexion: Mahabhutas contribute in determining colour and complexion
- Black complexion is due to PRITHVI and Vayu.
- The results in sky like bluish complexion (shyamavarna) is due to an equilibrium of all the five mmahabhuta.

#### 3) Role of Vayubhutagni digestion of food

 During the process of digestion and the metabolism of food, the food passes through three levels of action of digestive fire (Agni). During the action by bhutagni, the Vayu dominant Agni act upon value dominant components of food. it further nourishes vayu dominant body components.

#### **Application in diagnosis**

Movement is the property function of Vayu. Therefore, Vayu is liable for all physiological function associated with movement and transportation inside and out of doors the body. Vayumahabhuta implement basic function of nourishment of its own component as in skin and touch sensation. Except from this, roughness, lightness (loss of weight and volume), dryness, fatigue, disintegration are observe. Abnormalities in these function and features can

be diagnosed and treated.<sup>[52]</sup>

#### **Application in treatment**

- The vatadosha is composed from vayu and akasha Mahabhuta. The dominance of properties of Vayumahabhuta is observed in Vata prakriti individual.
- Aggravation, Vayumahabhuta predominance is observed similarly, in condition of vatadosha. The treatment of all these condition is done by avoiding diet and lifestyle measures with Vayu predominance.
- On the other side, in condition of kaphadosha aggravation the Vayumahabhuta dominant regimen is indicated. The substance which are pungent, bitter and astringent in taste is due to power of Vayu and akashamahabhuta. If the prescribing drugs having the above said tastes, one can treat various condition of doshas.
- Those medicines which are used for the emetic (vamana) have Agni and vayu mahabhuta dominance. Both of These mahabhutas have lightness as a property, it carries the dosha in upward direction and it helps in throwing out the doshas though mouth.
- The drug having predominance of Vayumahabhuta causes retaining (sangrahi) effect in body, since Vayu does absorption of fluid (shoshana). [52]

#### Space/Ether (AKASHA)

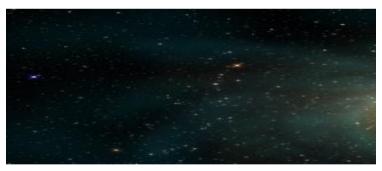


Fig no 05: Space/Ether (Akasha)

In Sanskrit the element ether is called "akahsa" is that the great elements in pancha mahabhutus. Akasha word is derived from the kashru-deptau dhatu, meaning that spreading all over<sup>[53]</sup> it comes first because it is the foremost subtle of the weather. Often mentioned as "space," it's the essence of emptiness. it's the space the opposite elements fill. The origin of ether is shabda. Shabda is that the tanmatra of sound, denoting that shabda is sound in its primordial, unmanifested form. Shabda is that the primordial space from which vibration emerges long before it takes the shape of sound within the ear. Sound and ether are

inseparable. The ear is considered to be associated with the sense organ of the element ether, and voice (mouth) it is organ of action. Imbalance of ether element in body produce loss of hearing and loss of voice. In the body ether is present within the empty spaces in the body. The hollow empty intestine, blood vessels, urinary bladder, and the lung are Filled with the ether. Destruction if ether in the body result in an increase in space and decrease in structure. Parkinson's is an example of this condition where space is created in body between the cellular structure. The loss of dopamine producing cell in the substantia nigra of the brain stem produce emptiness. The similar condition seen in the pancreas due to distribution of islet cell (insulin producing cell).

Vitiation of space generated symptomatic dysfunction that follow, The vata dosha contains both the ether and air. If any vitiation of ether produces results in vitiation of vata. There is the only one method for controlling the vata dosha is to prevent the ether form increasing. By felling the emptiness in our lives is prevent the ether from increasing. Our lives become fulfilled not by being busy, but by being nourished physically & emotionally. For the ether and vata dosha proper nourishment is act as an container. Moist, heavy and satisfying food full the empty spaces in digestive system and it pacify ether.

The winter is the season of ether. The season of ether started after the leaves have fallen and Earth is barren. The nature aims for everything and everyone to become lighter at this time. If the proper precaution are not taken there is danger of becoming to light at this season. Thus human being have historically prepared for this season by storing up food & other supplies to seen them through this period of emptiness. Death is the time of ether in the cycle of life. The body get disintegrate and the element flee their boundaries. All that are remain is the subtly of our spirit. [54]

#### **Synonym**

Nabha, ganaga, vyoma, nakshatra loka, divyaloka, viyat, antariksha and kha. [53]

#### General characteristics<sup>[55]</sup>

A material with the majority of Akash Mahabhuta process following characteristics,

- Soft (mrudu)
- Light (laghu)
- Subtle (sukshma)
- Smooth (shlakshan)

• The abundance of sound (shabdaguna). Only for Akash mahabhuta this property unique.

#### **Specific characteristics**

Characteristics feature of akasha Mahabhutas is free flow (apratighatatva). Free flow and transportation of nutrients in transportation system indicates the features of akasha. In biolo9 system empty spaces and hollow cavities are denoted.<sup>[55]</sup>

# Importance<sup>[55]</sup>

#### 1) Importance in embryogenesis

Attribution of Akasha Mahabhuta is sound (shabda), audition (shrotra), lightness (laghava), fineness (saukshmya) and disintegration (viveka) in the fetus. The factor is responsible for determining constitution (prakriti) of human being formed in embryonic life is akasha Mahabhuta. It is categorize under mahabhutavikara prakriti. Akasha is responsible for enlargement (vivardhana), after formation of fetus (garbha).akasha provides the space for enlargement of the size of the fetus.

#### 2) organs and constituents in the body

- Attribution of akasha Mahabhuta is sound, auditory organ, all orifices and Distinctness (bone, blood vessels, ligaments etc) in the body.
- In the person, akasha is represent in the form of embodiment, space.

#### 3) Inherent properties

- Akasha Mahabhuta in it's subtle (sukshama) form is one among eightfold nature of all beings (ashtaprakriti).
- It is most fine (subtle) in nature and as a result, it is the lightest among Mahabhuta.
- Akasha Mahabhuta possesses dominance of sattava guna. Hence it shows the purest form.

#### Importance in clinical practice<sup>[55]</sup>

- The vatadosha is composed from vayu and akasha Mahabhuta. The dominance of properties of akasha mahabhuta are observed in Vata prakriti individual.
- Similarly, in condition of vatadosha aggravation, akahsa Mahabhuta predominance is observed. By avoiding diet and lifestyle the treatment of such condition is done, it measures with akasha predominance.
- On the opposite side, the akasha mahabhuta dominant regimen is indicated in conditions of kaphadosha aggravation.

- The action of medicine having more akasha mahabhuta is pacification of dosha (shamana). Akasha Mahabhuta predominant drugs are selected for pacifiying (shamana) treatment.
- The drugs which are bitter in taste (tikta) have panchabhuta composition as vayu and aakash. This can be produce softness (mardava), porousness (saushirya) and lightness(laghava) in the body. Therefore these are a part of reducing treatment prescribed in diseases thanks to over-nutrition.

#### **TRIDOSHA**

- 1. Vata
- 2. Pitta
- 3. Kapha



Fig no 06: Composition of Tridosha.

Tridosha is there body humors. Ayurveda identify the three basics types of energy, or functional principal that are present in everyone and everything. These elements are vata, pitta & kapha. These principal can be related to the basic biology and physiology of the human body about energy and five basic elements of life. [56]

#### Importance of energy to living beings

Energy in living beings is very important as it creates movement, enabling fluids and nutrients to reach the body cells in order to function effectively. For the digestion of nutrient in the cell energy is also required, to lubricate and maintain the structural integrity of the cell.

- Vata is the energy of movement.
- Pitta is the energy of metabolism or digestion and all the chemical transformation that occurs in the body.

• Kapha is the energy of lubrication and structural integrity of the body.

All the people have qualities of combination of all the three doshas, usually one dosha is primary, one is secondary and 3rd is usually less prominent. Due to an excess or imbalance of the vata, pitta, kapha dosha cause of diseases as a lack of proper cell function.<sup>[56]</sup>

#### Tridoshas and human body

There are the five basic elements of life i.e space, Air, fire, water, and the earth. All these elements are present in the human body as the three basic humours known as the tridoshas – vata, pitta and kapha. Vata dosha is composed from the element of space and air. Pitta dosha is composed from the element of fire and water. And the finally kapha dosha is composed from the element of earth and water. These tridoshas are responsible for the development of natural urges, mental growth and the physical growth of the human body, and it also responsible for the individual choice in the foods, their flavours, temperatures and the test etc. They control the creation, maintenance and destruction of body tissue and elimination of waste product from the body. These also responsible for the emotional impulses such as fear, anger and greed along with the highest order of human emotion such as love compassion and understanding. Thus, the tridosha are the foundation of the mind and the body balance existence of man. [56]

#### 1. Vata dosha: Energy associated with movement in the body

Vata provides energy for motion of all body processes and it is extremely important for health. On an yearly basis, Vata is most prominent in the fall and at the change of season, at this time most important to be careful of diet and lifestyle. A person with Vata dosha is blessed with a quick mind, flexibility and creativity.<sup>[57]</sup>

Vata dosha control breathing, blinking, tissue and muscle movement, heartbeat, transmission of nerve impulses and all movement inside the cell and cell walls. When Vata dosha is balanced, Vata helps to creativity and flexibility. When Vata dosha is imbalanced, Vata produces fear and anxiety. Sites of Vata are large intestine, pelvic cavity (area between your upper leg and lower abdomen), bones, kin, ears, well as brain, joint and things. If Vata develop in excess amount, it accumulates in this areas. Vata peoples are more sensitive to diseases involving the air principle, such as emphysema, pneumonia and arthritis. Another common Vata disorders include flatulence, tics, twitches, aching joints, dry skin and hair, nerve disorder, constipation and mental confusion. Vata in the body tends to increases with age as is shown by the drying and wrinkling of the skin.

The qualities of Vata are light, cold, rough, subtle, mobile and clear, any of these qualities in excess causes imbalance.

#### General advice for balancing Vata

- Keep warm
- Keep calm
- Avoid cold, frozen or raw foods
- Avoid extreme cold
- Eat warm foods and spices
- Keep a regular routine
- Get plenty of rest

#### 2. Pitta dosha: associated with chemical processes in body and body metabolism

Pitta dosa have many of qualities of the fire. Fire(Agni) is hot, penetrating, sharp and agitating. Exactly that pita peoples have warm bodies, penetrating ideas and sharp intelligence. When pitta get imbalanced, can become very agitated and short tempered. The pitta peoples body type is one of medium height and build with ruddy or coppery skin. Those People skin is warm and less wrinkled than Vata skin. Their hair tends to be silky and they experience premature hair loss. There Eyes are medium size. Nose is sharp and the tip tends to be reddish.[57]

Pitta dosha control digestion, absorption, nutrition, assimilation and metabolism of body temperature and all other chemical transformation in the body. The sites of pitta are small intestine, stomach, blood, fat, eyes, sweat gland and skin. [56]

Mentally, these pitta types are alert, intelligent and have good Powers of understanding. However, they are easily get upset and aggressive and tend towards hate, anger and jealousy when imbalanced. Pitta peoples have diseases involving the fire principal such as fevers, inflammatory diseases and jaundice. Common symptoms included are skin rashes, burning sensation, ulceration, fever inflammation or irritation such as conjunctivitis, colitis or sore throat.

Qualities of pitta are oily, hot, light, mobile, dispersing and liquid, an excess of any of these qualities imbalance pitta. Summer is the time of heat, the pitta season. Sunburn, poison ivy, prickly heat and short temper are common. This kind of pitta disorder get come down as the weather gets cooler.<sup>[57]</sup>

#### General advice for balancing pitta

- 1) Avoid excessive heat
- 2) Avoid excessive oil
- 3) Avoid excessive steam
- 4) Limit salt intake
- 5) Eat cooling, non-spicy foods
- 6) Exercise during the cooler part of the day

#### 3. Kapha dosha: associated with the formation of body structure

Kapha dosha helps to build the bone, muscle, tendons and also provide the "glue" force that holds the body cell together. Kapha supplies the water to all the systems and the part of the body. Kapha helps to lubricates joints, moisturize the skin and regulate immunity. When kapha is balanced it express itself as love, calmness and forgiveness. When kapha get imbalanced, it leads to attachment, greed and envy. Kapha is existing in the chest, throat, head, nose, mouth, stomach, joints, cell and liquid secretions of the body such as mucus. The Chest is firstly the site of kapha. The balance between tridoshas is necessary for good health. Any form of balance in the tridoshas can trigger emotions like fear, anger, anxiety and affect the body's natural immune system, giving rise to the diseases.

#### General advice for balancing kapha

- Get plenty of exercise
- Avoid heavy foods
- Keep active
- Avoid dairy
- Avoid iced food or drinks
- Vary your routine
- Avoid fatty, oily foods
- Eat light, dry food
- No daytime naps

# DIAGNOSIS IN AYURVEDA<sup>[58]</sup>

The concept of diagnosis in Ayurveda stems out of the belief that the body is constantly interacting between order and disorder in a balanced way and diagnosis is the idea of

regularly monitoring this interactivity from movement to movement basis. The concept of diagnosis in western medicine is different from the diagnosis in Ayurveda, where the disorder is identified after it present in the body. The disease process is a interaction between the body humors tridoshas and the dhatus or tissues. indication of every diseases are always related to the nature of imbalance among the tridoshas. once this imbalance is determined, the balance can be re- established through ayurvedic treatment and management.

#### Factors influencing diagnosis of diseases

In Ayurveda diagnosis related decision making is very complex and totally depends on evaluation of many internal factor that present themselves during a disease process, such as :

- Body humors (Tridoshas)
- Body tissue (dhatu)
- Excretory product (malas)
- Digestive power (Agni)
- Body channels (srotas)

In the expression of diseases internal factor are also involved like pathogens or infection, season or weather and the patient's lifestyle including diet, medication, smoking or alcohol and other such habits that are a part in vitiating persons constitution.

#### Method of diagnosis in Ayurveda

Examination of disease condition in Ayurveda includes three. Diagnostic methods (trividhapariksha):

- **Inspection (Darshana):** It involves examination of the body parts, for example skin, hair, eyes and tongue.
- Palpation (Sparsana): It involves pulse and palpation of body parts (wrist pulse, abdominal palpation etc.)
- Questioning (Prasna): during the questioning stage it covers understanding the medical history, symptoms, mental and physical state of the patient.

#### Pulse diagnosis - Nadi Pariksha

The pulse or nadi feels at the wrist is used as a method to diagnose disease in Ayurveda.

The place for Vata dosha is index finger position. When Vata become men in the prakriti of an individual, when the index finger feel the pulse strongly. If vata get aggravates in body pulse is irregular and thin and the pulse is felt like snake- like motion, therefore called the

snake pulse. The position of the middle finger represent the pulse of the pitta dosha. The pulse is stronger under the middle finger, when pitta becomes predominant in the constitution. If pitta gets aggravate pulse is felt like jumping of a frog, hence it called the frog pulse.

The position of the ring finger represent the pulse of kapha dosha, when kapha becoming predominant, the throbbing of the pulse under the Ring finger is most noticeable. It is called swan pulse when it feels strong and it's movement resemble movement of a swan across a pond.

# Treatment in Ayurveda<sup>[59]</sup>

The treatment in ayurveda consists of three factors:

- 1. Ahara food.
- 2. Vihara physical and mental behaviour.
- 3. Aushadha medicine.

The treatment in Ayurveda covers the widest possible prophylactic and therapeutic approaches viz, use of a drug, diet and practices prescribed jointly and opposite to the cause of the diseases.

#### The treatment in Ayurveda is if two types

- 1. Swasthasyaurjakara are the treatment which promotes and protect the existing health.
- 2. Aturasyaroganut are the treatment for the sick. Aphrodisiac and curative medicine are covered in this.

#### The treatment in Ayurveda is done by two methods

A) Shodhana: (elimination of junked toxic substance)

Shodhana is the cleaning and the elimination of pathological factors from the body by five purificatory procedure. This process done in three steps, preoperative, operative, post-operative. Oleation and sudation therapy is the pre-operative stage. In this phase the patient is given various medicated sneha (Lubricates- Ghee, oils, fats) externally and internally and various types of sudation are done. By this process pathological factors are removed from the stomach. This is followed by operative stage in which loosened pathological doshas are removed by following methods:

1) Banana: Emesis.

- 2) Virechana: Purgation.
- 3) Nashya: Nasal inhalation.
- 4) Vasti: Medicated retention enemata.
- 5) Raktamokshana: Bloodletting and Cupping.

The gradual administration of food from simple gruel to solid food is the post-operative stage.

B) Shamana: (Palliative treatment)

Shamana is done by diet control, fasting, exposing to sun rays and wind, various exercises, yoga and meditation.

#### **CONCLUSION**

Under the present circumstances Ayurvedic approach for etiopathogenesis would be of great use. The fruitful conclusion, which have automatically immersed though the above discussion, panchmahabhuta is basics element of our body. Imbalance in these elements can causes different symptoms in accordance with the characteristics which are called gunadwandva. The theories of Panchamahabhuta and Tridoshas are the fundamental basis for its pathophysiological condition. Panchmahabhuta principal is the basic tool that is helpful in the analysis of other principal like sapta dhatu concept (seven tissue system), Tridoshas, mala concept. The fundamental principles of Ayurveda are eternal truths. Understanding the fundamental principles of Ayurveda will not only help mankind to live a better life, but will also help all the present as well as future scientists and research workers in understanding and opening the mysteries and intricacies of human life in better way. Panchamahabhuta are present in every sphere of life and this concept of panchmahabhuta applied to everyday life to a huge Extent.

#### **REFERENCES**

- 1. http://www.tkdl.res.in/tkdl/langdefault/ayurveda/Ayu\_Principles.asp?GL
- 2. https://www.nccih.nih.gov/health/ayurvedic-medicine-in-depth
- Mishra AK, Gupta A, Gupta V, Sannd R, Bansal P, Asava and Aristha: An Ayurvedic Medicine – An Overview, International Journal of Pharmaceutical & Biological Archives, 2010; 1(1): 24 –30.). Ayurvedic medication as characterize in the medications and corrective act 1940, i
- 4. https://www.ayurherbs.com.au/principles-of-ayurveda/
- 5. SS. Agarwal, M paridhavi, second edition of herbal drug technology, page no- 34.

- 6. Biological Thermodynamics, DONALD T. HAYNIE, Cambridge University Press Publication, first south Asian edition 2007.
- 7. https://www.easyayurveda.com/2016/05/24/understanding-concept-panchamahabhuta-application-areas-utility-ayurveda-treatment/amp/
- 8. http://www.ayurvedaamritvani.com/pancha-mahabhutas---five-great-elements.html
- 9. https://www.slideshare.net/SrinivasuluNayakanti/five-elements-8833899
- 10. Synonyms of Prithvi [Internet]. 2018 [cited 2020 Apr 18]. Available from: https://www.wordtodictionary.com/%E0%A4%AA%E0%A5%83%E0%A4%A5%E0%A 5%8D%E0%A4%B5%E0%A5%80-%E0%A4%95%E0%A4%BE-%E0%A4%B60%A4%B0%E0%A5%8D%E0%A4%AF%E0%A4%BE%E0%A4%A F%E0%A4%B5%E0%A4%BE%E0%A4%BE%E0%A4%BE%E0%A4%BE%E0%A4%BE%E0%A4%BE%E0%A4%BE%E0%A4%BE%E0%A4%BE%E0%A5%80-prithvi-paryayvachi-shabd/
- 11. Dingari Lakshmanachary. Acharya's Ayurvedeeya padartha vigyana. Delhi: Chaukhamba Sanskrit pratisthan; 2012. Chapter 07, Pruthvi nirupana; p.54.
- 12. Dalhana, Sushruta Samhita, Nibandha Sangraha, sanskrit Commentary, Editor Jadavaji Trikamaji Acharya, Reprint 1999. Chaukambha Surabharati, Prakashana, Varanasi.
- 13. Dr. Shambhu Sharan, and Dr. Vidyavati Pathak, CONCEPTS OF PANCHAMAHABHUT AT ELEMENTAL LEVEL, Lecturer, Dept. of Kriyasharir, Govt. Ayurveda College, Patna. Associate Professor, Dept. of Kriya Sharir, Govt. Ayurveda College, Patna.
- 14. https://www.carakasamhitaonline.com/index.php/Prithvi\_mahabhuta
- 15. https://www.researchgate.net/publication/331023396\_SIGNIFICANCE\_OF\_JALA\_MAH ABH UTA\_WATER\_IN\_DAY\_TO\_DAY\_LIFE
- 16. Sushruta Sushruta samhita. Edited with English translation and explanatory notes by Singhal GD Chaukhamba Sanskrit pratisthan, Delhi. 2<sup>nd</sup> Edn. 2007.pg 369-371.
- 17. Shri Haricharan Vasu, Redactor. Shabdakalpadruma of Raja Radhakanthadev Bahadur, Dvitiya Kanda, Delhi: Nag Publishers, 1998; 926: 519.
- 18. Vaidya Jadavji Trikamji Acharya. Editer. Sushruta Samhita of Sushruta, with the Nibandhasangraha commentary of Sri Dalhanacharya, and the Nyayachandrika Panjika of Sri Gayadasacharya on Nidanasthana, Varanasi: Chaukambha Sanskrit Sansthan, 2010; 824: 196.
- 19. Mrudul Y. Chitrakar and Ashwini Patil, AYURVEDA PERSPECTIVE OF WATER (JALA): A REVIEW BASED ON ANCIENT LITERATURE, Department of Swasthavritta and Yoga, D. Y. Patil School of Ayurveda, Nerul, Navi Mumbai, India. Department of Shalakyatantra, D. Y. Patil School of Ayurveda, Nerul, Navi Mumbai,

India.

- 20. Vaidya Jadavji Trikamji Acharya, Editer. Sushruta, Samhita of Sushruta, with the Nibandhasangraha, commentary of Sri Dalhanacharya, and the Nyayachandrika Panjika of Sri Gayadasacharya on Nidanasthana, Varanasi: Chaukambha Sanskrit Sansthan, 2010; 824: 196.
- 21. Vaidya Jadavji, Trikamji Acharya, Editer.Sushruta Samhita of Sushruta, with the Nibandhasangraha commentary of Sri Dalhanacharya, and the Nyayachandrika Panjika of Sri Gayadasacharya on Nidanasthana, Varanasi: Chaukambha sanskrit Sansthan, 2010; 824: 197.
- 22. Pt. Hari Sadashiva Sastri Paradkara Bhishagacharya, Editer. Astanga Hridaya of Vagbhata, with the commentaries Sarvangasundaraa of Arunadatta& Ayurveda rasayana of Hemadri, annonated by Dr. anna MoreshwarKunte& Krishna Ramachandra Sastri Narve, Varanasi: Chaukambha Sanskrit Sansthan, 2014; 955: 61.
- 23. Vaidya Jadavji Trikamji Acharya, Editer. Charaka Samhita by Agnivesha, revised by Charaka and Dridhabala, with Ayurveda Deepika commentary of Chakrapanidatta, Varanasi: Chaukambha Orientalia, 2009; 738: 164.
- 24. Vaidya Jadavji Trikamji Acharya, Editer. Sushruta Samhita of Sushruta, with the Nibandhasangraha Commentary of Sri Dalhanacharya, and the Nyayachandrika Panjika of Sri Gayadasacharya on Nidanasthana, Varanasi: Chaukambha Sanskrit Sansthan, 2010; 824: 197.
- 25. Sri Bhavamishra. Bhavaprakasha nighantu,commented by Dr. k.c.Chunekar, edited by Dr. G.S. Pandey: Chaukhambha Bharathi Academy: reprint. varivarga cha 13, shloka., 2006; 66:755.
- 26. Vriddha Vagbhata. Ashtanga Sangraha, Translated by K.R. Srikantha murthy 1<sup>st</sup> edition,: Krishnadas Academy. Sutrasthana, cha13, shloka., 1991; 57: 8-9.
- 27. Vagbhata. Ashtanga Hridaya, Translated by Prof. K.R. Srikantha Murthy Principal, krishnadas academy, varanasi. Chowkamba Press, Varanasi, First Edition. Sutrasthana, cha5, shloka., 1991; 55: 9-10.
- 28. https://www.researchgate.net/publication/331023396\_SIGNIFICANCE\_OF\_JALA\_MAH ABH UTA\_WATER\_IN\_DAY\_TO\_DAY\_LIFE
- 29. Vagbhata. Ashtanga Hridaya, Translated by Prof. K.R. Srikantha Murthy Principal, krishnadas academy, varanasi). Chowkamba Press, Varanasi, First Edition. 1991. Sutrasthana, cha5, shloka 51-52.p.no
- 30. Mrudul Y. Chitrakar and Ashwini Patil AYURVEDA PERSPECTIVE OF WATER

- (JALA): A REVIEW BASED ON ANCIENT LITERATURE, Department of Swasthavritta and Yoga, D. Y. Patil School of Ayurveda, Nerul, Navi Mumbai, India. Department of Shalakyatantra, D. Y. Patil School of Ayurveda, Nerul, Navi Mumbai, India.
- 31. Vagbhata. Ashtanga Hridaya, Translated by Prof. K.R. Srikantha Murthy Principal, krishnadas academy, varanasi. Chowkamba Press, Varanasi, First Edition. 1991. nSutrasthana, cha5, shloka., 1991; 18: 57.
- 32. https://www.avnarogya.in/blog/panchakarma/the-correct-way-of-drinking-water-as-perayurveda.
- 33. https://ayurvedamysore.org/properties-usage-of-water-according-to-ayurveda/
- 34. https://www.researchgate.net/publication/331023396\_SIGNIFICANCE\_OF\_JALA\_MAH ABH UTA\_WATER\_IN\_DAY\_TO\_DAY\_LIFE
- 35. Water encyclopaedia.
- 36. https://slideplayer.com/amp/1629528/
- 37. https://en.m.wikipedia.org/wiki/Agni\_(Ayurveda)
- 38. https://www.planetayurveda.com/types-of-agni/
- 39. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3221079/
- 40. Charaka Samhita, Sashtri Kashinath, Pt, Chaturvedi Gorakhnath., Dr. Varanasi: Chaukhamba Bharti Academy, 2004. p. 917. [Google Scholar]
- 41. Sushrut Samhita, Shastri Ambicadutt., Dr. Varanasi: Chaukhamba Sanskrit Sansthan; 2005. p.88. [Google Scholar]
- 42. https://www.hamc.org.in/UserFiles/files/pdf-files/bams-1st-year-kriya-sharir-concept-ofagni-29-04-2020.pptx
- 43. Rahul Panditrao Surnar, Avinash Deshmukh and Deepali Amle, CONCEPT OF AGNI CLINICAL IMPORTANCE, P.G. ITS Scholar C.S.M.S.S. Mahavidyalaya, Aurangabad, Maharashtra, India.
- 44. Santosh Kumar Verma, Bandana Singh, Sri Jyothsna P M, AN OVERVIEW OF CONCEPT OF AGNI IN AYURVEDA, Assistant professor, Dept. of Shalyatantra, Jeevan Jyoti Ayurvedic College Aligarh, Uttar Pradesh, India, p.G. Scholar, Dept. of Rog Nidan N.I.A Jaipur, Rajasthan, India, P.G. Scholar, Dept. of Shalya Tantra, S.V. Ayurvedic College Tirupati, Andhrapradesh, India.
- 45. Kunte AM, Navre KR. Ashtanga hrdaya (A Compendium of the Ayurvedic System)of Vagbhata, 'Sarvangasundra' of Aruna-datta and 'Ayurvedarasayana' of Hemadri. Varanasiaranasi: Chaukhamba Surbharti Praka-san; 2002. p.394.

- 46. Kunte A M, Navre KR. Ashtanga hrdaya (A Compendium of the Ayurvedic System)of Vagbhata, 'Sarvanga sundra' of Aruna-datta and 'Ayurvedarasayana' of Hemadri. Varanasi: Chaukhamba Surbharti Praka-san; 2002. p.193.
- 47. Sharma RK, Das VB: Editor, Caraka Samhita of Agnivesa, Vol. IV Chikitisa Sthan; Grahani Dosa Adhyaya: Chapter 15, Verse 39-40, Varanasi: Chaukhamba Krishnadas Academy, Ed., 2009; 1: 22-23.
- 48. Charaka Samhita, Shastri K, Chaturvedi G., editors. Varanasi: Chaukhamba Bharti Academy; 2012. p. 387.
- 49. Charaka Samhita, Shastri K, Chaturvedi G.Varanasi: Chaukhamba Bharti Academy; 2012. p. 380.
- 50. Sharma RK, Das VB: Editor, Caraka Samhita Of Agnivesa, Chikitisa Sthan; Grahani Dosa Adhyaya:Chapter 15, Verse 15-16, Varanasi:Chaukhamba Krishnadas Academy, Ed., 2009; 1(IV): 10-11.
- 51. https://ijapr.in/index.php/ijapr/article/view/1052/845
- 52. https://www.carakasamhitaonline.com/index.php/Vayu\_mahabhuta
- 53. Dingarilakshmanachary. Acharya's Ayurvedeeyapadarthavigyana. Delhi: Chaukhamba Sanskrit pratisthan; 2012. Chapter 11, Akasha nirupana; page 64-65.
- 54. https://www.ayurvedacollege.com/blog/five-elements-ether-ayurveda/#:~:text=The%20element%20ether%2C%20called%20%E2%80%9Cakasha,is%20th e%20essence%20of%20emptiness
- 55. https://www.carakasamhitaonline.com/index.php/Akasha\_mahabhuta
- 56. https://www.dabur.com/daburarogya/ayurveda/ayurveda-aur-hum/tridoshas-the-three-body-humors.aspx
- 57. www.ayurveda.com > pdf > i...PDF Web results A Brief Introduction to Ayurveda The Ayurvedic Institute.
- 58. https://www.dabur.com/daburarogya/ayurveda/ayurveda-aur-hum/diagnosis-in-ayurveda.aspx
- 59. https://www.nhp.gov.in/four-components-of-treatment\_mtl.