



THE TRIDOSHA CONCEPT: A COMPREHENSIVE STUDY FROM THE PERSPECTIVE OF MODERN SCIENCE

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ABSTRACT:

Tridosha Siddhanta is the fundamental principle of *Ayurveda* and is derived from *Panchamahabhuta*. *Tridosha* is the vital substance, which represents multitudinous events like *Dharana*, *Poshana*, *Chalana* etc. The equilibrium of *Tridosha* (*Vata*, *Pitta*, *Kapha*) is very essential to maintain the homeostasis of the body as the Universe is governed by the three vital forces i.e. air, sun and moon. In a single cell *Vata*, *Pitta*, and *Kapha* perform the function of *Gati* (movement), *Pakti* (transformation or metabolism) and *Shakti* (defence), which is also applicable to the whole organism. The article is dedicated to *Dosha* and its role in managing a living body suitably. There is a unique concept of mutual interdependence among *Dosha*, *Dhatu* and *Mala*. As these are the main building blocks of the body. *Triguna*, *Dhatu*, *Prakruti*, *AvasthaPaka*, *Agni*, *Kostha*, *Sharirika Avastha*, *Ahara Avastha* and *Vyadhi* are the factors that have strong inter-relationship with *Tridosha*. When there is a fluctuation in the state of balanced *Tridosha* i.e. *Dosha-Vaishamyia* results in disease formation. The principles of *Ayurveda* are not only to cure disease but also to prevent human beings from all types of miseries. For early diagnosis, one must know the causes, signs, symptoms, mechanisms (*Samprapti*) and stages (*Kriya-Kaala*) of the disease. Treatment of the disease is mainly two types viz. *Samshodhana* and *Samshamana*. The *Samshodhana* therapy treats the diseases at their fundamental causes when administered in appropriate *Kaala*.

Keywords – *Tridosha*, *Panchamahabhuta*, *Dhatu*, *Vyadhi*.

INTRODUCTION:

Ayurveda, which is an *Upaveda* of *Atharva Veda*, is considered to be the traditional and holistic science of life. *Ayurveda* is best known for its values of nurturing the health of a healthy individual and treating the disease of a patient,^[1] by retaining the *Samyavastha* of *Dosha*, *Dhatu*, *Mala* (*Dosha Dhatu Mala Moolam Hi Shariram*).^[2] *Dosha* is defined as an element, which tends to vitiate the body as well as the mind (*Dushyate Anen Iti Doshah*).^[3] Also, get vitiate itself (*Dushana Swabhavat Dosha Iti*).^[4] The *Srushti Utpatti krama* gives proof of the origin of *Dosha* in a contemporized manner. Again, *Doshas* are divided into two parts i.e. *Sharirika* and *Manasika*. *Manasika Doshas* originated from *Ahankara* and the genesis of *Sharirika Doshas* (*Tridosha*) took place from *Panchamahabhuta*. Production of *Tridosha* again takes place from *Avasthapaka* (*Madhura, Amla & Katu*) in our body. Although *Sattva*, *Rajas* and *Tamas* are the *Triguna* but *Rajas* and *Tamas* also considered under the *Dosha* due to having a nature of vitiation, while *Sattva* is the absolute *Guna*.

Manashika Dosha- *Manasika Dosha* is indicated as the factor that pollutes the state of mind (*Mana*). *Sattva* is divided into three types i.e. *Suddha Sattva*, *Rajas Sattva* and *Tamas Sattva*. The *Suddha Sattva* is

pure (*Kalyanansha*) and doesn't vitiate the *Mana*. So, it is not called *Dosha*. But the *Rajas* and *Tamas* have a destructive impact on *Mana*. So, they are called *Manasika Doshas*.^[5]

Sharirika Dosha- The *Sharirika Doshas* are considered as *Tridosha*. The word *Tridosha* is derived from two words i.e. *Tri* & *Dosha*. *Tri* is a numeric term that indicates -three and *Dosha* is the factor that has peculiar features to pollute (*Dushana*) the body as well as the mind. By supporting the body in its state of equilibrium, they are known as **Dhatu** (*sha. Sa. /cha.chi.3*). Similarly, in an abnormal state, they contaminate the body and tend to produce diseases. Hence known as *Mala*.^[6] *Vata*, *Pitta*, and *Kapha* are the foundation, from where the body originated. In normal conditions, *Vata*, *Pitta* and *Kapha* hold and support the lower, middle and upper parts of the body respectively in a well-articulated manner, as a house is supported by three pillars. So, *Tridosha* is known as **Tristhoona**.^[7] Any disarrangement among the three pillars makes doubt about the stability of the house, invariably any abnormality among *Vata*, *Pitta* and *Kapha* causes demolition of the body.

Vata- Term *Vata* is derived from "Va Gati Gandhanayo". *Gati* represents *Gamana*, *Gyana*, *Prapti*, *Moksha* and *Gandhana*

indicating *Utsaha, and Prakasha*.^[8] *Vayu* and *Akasha* combinedly form the *Panchabhoutikatwa* of *Vata Dosha*. Though *Vata* is present all over the body, its common sites are *Vasti, Purishadhana, Kati, Sakthi, Pada, Asthi and Pakvasaya* however *Pakvasaya* is the specific site (*Vishesh Sthana*).^[9] Being one in number it has been divided into five subtypes i.e., *Prana, Udana, Samana, Vyana* and *Apana* which have their specific sites. *Vata Dosha* exhibits physical properties like *Ruksha, Laghu, Sheeta, Khara, Sukshma* and *Chala*.^[10] Its action includes *Utsaha, Uchhwasa, Nihashwas, Chesta, Vegapravartana, Dhatu-Samgatya, Akhyanam-Patven*. Among *Triguna Rajo Guna* is predominant in *Vata*.^[11]

Pitta-Term *Pitta* is derived from “*Tapa Santape*,”^[12] which means “to burn ” or “to heat”. *Agni* and *Jala* are the *Panchabhoutika* components of *Pitta Dosha*. The common sites are *Sweda, Rasa, Lasika, Rudhira* and *Amashaya*.^[13] *Pakwamashayamadhya* i.e., *Grahani (Shasthipittadhara Kala)* is the specific site among all.^[14,15] Again, it has been divided into five subtypes i.e., *Pachaka, Ranjaka, Sadhaka, Bhrajaka* and *Alochaka*. *Acharya Bhela* subdivided the *Alochaka pitta* into two categories viz. *Chakshu Vaisheshika* and *Buddhi Vaisheshika*. The characteristic features of *Pitta Dosha* are *Sasneha,*

Tikshna, Ushna, Laghu, visra, Sara and *Drava*.^[16] *Pakti, Ushma, Darshan, Kshut, Trut, Ruchi, Prabha, Medha, Dhee, Shaurya, Tanu* and *Mardava* are the functions.^[17] *Sattva Guna* is preponderant here.

Kapha-The term *Kapha* is derived from “*Shlish Alingane*.”^[18] *Alingana* means to hold tightly. It has a *Panchabhoutika* composition of earth and water. *Urah, Shiro, Griva, Parva, Amashaya* and *Medo* are the common sites of *Kapha Dosha* but *urah* is the specific one.^[19] It has been divided into five types i.e., *Avalambaka, Kledaka, Bodhaka, Tarpaka* and *Shleshaka*. *Snigdha, Sheeta, Guru, Manda, Shlakshna, Mrutsna* and *Sthira* are the bodily qualities.^[20] *Sthiratwa, Snigdhata, Sandhibandha* and *Kshama* are the role of *Kapha*.^[21] Predominant *Guna* is *Tama*.

AIM & OBJECTIVE:

- To study the basic concept of *Tridosha*.
- To discover *Tridosha* at its cellular level.
- To clarify the relationship between *Dosha* and *Dhatu*.

MATERIALS & METHODS:

Bruhatrayee, Laghutrayee along with available commentaries and other classical literature had been taken into consideration. Articles, research papers, reference books and dissertations had been

overviewed as a secondary source for the betterment of the study.

RESULT:

It is very tough to know the movement of air, sun, and moon in this universe, correspondingly, to be conscious about the *Gati* of *doshas* in the human body is also challenging.^[22]

Vata can closely resemble the nerve impulse. The energy that helps in the

transmission of impulse is self-originating and self-propagating. The vital functions and structure of the body are governed by this energy as it is responsible for conduction, integration and regulation. It is also acknowledged as a biophysical force.^[23]

Pitta is a component that is intimately related to an enzyme as their functions are analogous to each other.

Table No. 1 **Correlations between *Pitta* and Enzyme**^[24]

Functions of <i>Pitta</i>	Functions of Enzyme
<i>Sanghatabheda</i>	Splitting
<i>Parinamana</i>	Transformation
<i>Paravrutti</i>	Mutation
<i>Dahana</i>	Oxidation

Kapha has a striking similarity with protoplasm. The qualities of *Kapha* in a physical body are similar to the qualities of protoplasm at a cellular level. *Kapha* is a combination of *Jala* and *Prithvi Mahabhuta*, among which the dominant one is *Jala* while

Prithvi is secondary. This is homogeneous to the composition of protoplasm. It has a water content of nearly about 65% and the remaining solids and gases possess 35% in the watery portion.

Table No. 2. **Correlations between *Kapha* and protoplasm**^[25]

<i>Kapha</i>	Protoplasm
<i>Snigdhatwa</i>	Viscosity
<i>Snehatwa</i>	Fat-Protein Complex and Lipids
<i>Mritsnatwa</i>	Resist Friction
<i>Shlakshnatwa</i>	Smoothness
<i>Sandratwa</i>	Gel- State
<i>Pichchilatwa</i>	Sliminess (A characteristic of Protoplasm)
<i>Sthiratwa</i>	Stability
<i>Mrudutwa</i>	Pliability
<i>Shuklatwa</i>	Whitishness

<i>Achcchatwa</i>	Transparency
<i>Gurutwa</i>	Heaviness and Bulk
<i>Madhura</i>	Due To Obtaining Carbohydrate in It
<i>Sheeta</i>	Cool- Feel

Tridosha plays a major role in various factors like *Triguna*, *Panchamahabhuta*, *Prakruti*, *Dhatu*, *Avasthapaka*, *Agni*, *Aharavastha*, *Vaya*, *Ahoratra* etc.

Tridosha and Triguna^[26]: -

Disease caused by *Tridosha* invariably affects the mental condition and vice versa as *Tridosha* are formed from *Triguna*. i.e., *Vata* arises from *Rajo Guna*, *Pitta* from *Sattva Guna* and *Tamo Guna* generates the *Kapha Dosha*.

Tridosha and Panchamahabhuta: -

All the *Dravyas* (i.e., *Dosha*, *Dhatu*, *Mala*, etc.) are made up of *Panchamahabhuta*. The food materials and body both are a combination of *Panchamahabhuta*.^[27] These pentads are combined to form the *Tridosha* during the *Srushti Uttapati Krama*. *Vata* is the combination of *Vayu & Akasha*, *Agni & Jala Mahabhuta* combinedly produce *Pitta Dosha* and *Kapha Dosha* is structured by the union of

Jala & Pruthvi Mahabhuta. Hence, we can manage the increase and decrease of *Tridosha* by giving food and drugs having dominancy of these *Mahabhuta* i.e. *Akasha Vayu* Worsen the *Vata* while *Pruthvi, Agni & Jala* subside it. *Pitta* is enraged by *Agni* and alleviated by *Pruthvi, Jala & Vayu*. Similarly, *Kapha* is agitated by *Pruthvi & Jala* but mollified by *Akash, Agni & Vayu*.^[28]

Tridosha and Dhatu: -

Vata, Pitta and *Kapha (Tristhoona)* are the three main constitutional factors.(discuss for anatomical justification). As per the requirement of the body, these factors are also called as *Tridhatu*. *Saptadhatus* (the other seven components of the body) are the further development of these basic *Tridhatu*. For easy understanding, these *Tristhoona* are not only responsible for building the smallest *Dhatu* but also sustain the structural and functional integrity of the body. *Mahabhuta* and *Dosha* composition of *Saptadhatus* are expressed below-

Table No. 3. **Correlations between *Dhatu, Panchamahabhuta* and *Dosha***

<i>Dhatu</i>	<i>Panchamahabhuta Composition</i> ^[29]	<i>Dosha Predominance</i>
<i>Rasa</i>	<i>Jala</i>	<i>Kapha</i>
<i>Rakta</i>	<i>Teja, Jala</i>	<i>Pitta</i>
<i>Mamsa</i>	<i>Parthiva</i>	<i>Kapha</i>
<i>Meda</i>	<i>Jala</i>	<i>Kapha</i>
<i>Asthi</i>	<i>Pruthvi, Vayu</i>	<i>Kapha</i>

Majja	Jala	Kapha
Shukra	Jala	Kapha

Tridosha and Ashraya -Ashrayi Bhava ^[30]:-
Doshas harboured in various *Dhatus* and *Malas* to demonstrate how interdependent they are with one another and helpful in disease diagnosis. i.e. *Vata* resides in *Asthi*, *Pitta* within the *Rakta* whereas *Rasa*, *Mamsa*, *Meda*, *Majja* & *Shukra* are the shelter for *Kapha*.

Tridosha and Prakruti ^[31]:-

The features, which are acquired by birth and remain unchanged throughout their life are known as *Prakruti*. *Vata Dosh* established the *Heena Prakruti*, *Pitta Dosh* formulated the *Madhya Prakruti* and *Uttama Prakruti* emerged from *Kapha Dosh*. *Samadosha* is considered as *Shreshtha Prakruti*.

Tridosha and Avasthapaka ^[32]:-

The process of digestion that converts complex food substances into simpler ones and the formation of *Doshas* take place in three stages in the gastrointestinal tract which is known as *Avasthapaka*. *Katu-Avasthapaka* takes place in *Pakwashaya* and results in *Vata Dosh* formation, *Amlavasthapaka* occurs in *Pachyamanashaya* where *Pitta Dosh* is produced and *Kapha dosha* is evolved from

Madhura-Avasthapaka which is carried out in *Amashaya*.

Tridosha, Agni, and Koshta ^[33]:-

Agni plays a vital role in sustaining the body in a healthy state. It is responsible for the strength and longevity of life. *Agni* is also influenced by *Doshas* and results in the formation of different types of *Koshta*.

Tridosha, Kaala, Sharirika and Ahara Avastha ^[34]:-

Prevalence of *Doshas* in various durations (*Ahoratra*), life stages and different phases of the digestion process.

Vata: prevalences in *Divante*, *Nishante*, *Vrudhavastha* and *Jeernante*.

Pitta: dominant in *Divamadhye*, *Nishamadhye*, *Madhyamavastha* and *Jirnamane*.

Kapha: vogue in *Divarambhe*, *Nisharambhe*, *Balyavastha* and *Bhuktamatre*.

Tridosha and Vyadhi: -

Tridosha are always present in a living body. With the change of time, the bodily *Doshas* are also changed. Each *Dosh* has its different qualities so the excess use of drugs, diet, and regimens similar to those qualities due to **Samanya and Vishesha Siddhanta** leads to an aggravation of *Dosh*

and the reverse of that quality causes diminution of that *Dosha*.

The aggravating factors (*Hetu*) are as follows-

Shad-rasa: -*Katu*, *Tikta* and *Kashaya* aggravate the *Vata Dosha* whereas *Madhura*, *Amla* and *Lavana* pacify the *Vata Dosha*. *Amla*, *Lavana* & *Katu* elevate the *Pitta Dosha* however *Madhura*, *Tikta* & *Kashaya* demote the *Pitta Dosha*. *Madhura*, *Amla* & *Lavana* provoke the *Kapha Dosha* and contrarily *Katu*, *Tikta* & *Kashaya* calm down the *Kapha Dosha*.^[35]

Rutu: -*Vata* is accumulated in *Grishma*, gets aggravated in *Varsha* and pacifies in *Sharada*. Likewise, *Pitta* is gathered in *Varsha*, lifted in *Sharada* and diminishes in *Hemanta*. Similarly, *Kapha* gets collected in *Shishira*, proliferated in *Vasanta* and sits back in *Grishma*.^[36]

Diseases can be controlled when the signs and symptoms of *Dosha Vruddhi* and *Kshaya* are well known, as described below-

Table No. 4. **Dosha Vruddhi Lakshana**^[37, 38,39,40,41,42,43,44,45] and effects-

Effect	Vata	Pitta	Kapha
<i>Manasika Prabhava</i> (psychic impact)	<i>Moha, Bhaya, Shoka, Dainya, Bhrama, Pralapa</i>	<i>Krodha</i>	<i>Tandra, Avasada</i>
Nervous system	<i>Gatrasphurana, Bala-Indriya Bhramsa, Sangyanasha, Kampana</i>	<i>Murchha, Balahani, Indriya Dourbalya</i>	<i>Murchha</i>
Digestive system	<i>Anaha, Adhmana, Atopa, Gadha-Barcha</i>	<i>Tiktashyata, Kshudha Trishna</i>	<i>Prasheka, Hrullasa, Agnisadana</i>
Respiratory System	-	-	<i>Shwasa</i>
Skeletal System	-	-	<i>Sandhi-Asthi Vishlesha</i>
Sleep	<i>Nidranasha</i>	<i>Alpanidrata</i>	<i>Atinidra</i>
Overall, Health	<i>Karshya, Alpabala, Karshnya, Ushnakamatwa</i>	<i>Pitta-avabhasata, Pitta-Vinmutranetratwaka, Ojavisransa, Santapa, Sitakamitwa, Daha</i>	<i>Shuklatwa, Shaitya, Sthairya, Gourava, Shlathangatwa, Alashya,</i>

Table No. 5. **Dosha Kshaya Lakshana**^[46,47,48,49,50,51,52,53,54] and effects-

Effect	Vata	Pitta	Kapha
<i>Manasika Prabhava</i>	<i>Apraharsa,</i>	-	<i>Bhrama</i>

(psychic impact)	<i>Alpabhasitam</i>		
Nervous system	<i>Manda Chestata, Sangya Moha</i>	<i>Kampa</i>	<i>Toda</i>
Digestive system	<i>Prasheka, Aruchi, Hrullasa</i>	<i>Mandagni, Arochaka, Avipaka</i>	<i>Trishna</i>
Respiratory System	-	-	-
Skeletal System	-	-	<i>Sandhi Saithilya</i>
Sleep	-	-	<i>Prajagarana / Anidra</i>
Overall, Health	<i>Angasada, ShleshmaVrudhhi Lakshana</i>	<i>Mandoushmata,Prabhahani, Sthamba, Nakha Nayana Shouklyata, Shaitya</i>	<i>Rukshata, Antardaha, Shleshmasaya, Sunyata, Dourbalya, Angamarda</i>

Tridosha and Chikitsa^[55,56]: -

To restore the health of a person, treatment must be based on the *Doshas* in each of their *Kaalas*. *Samshodhana Chikitsa* like *Vasti*, *Virechana* and *Vamana* have opted for *Vata*, *Pitta* and *Kapha* during *Shraavana*, *Margashirsha* and *Chaitra Masa* respectively. Mainly *Taila*, *Ghrita* and *Madhu* are always used for *Vata*, *Pitta* and *Kapha* respectively as *Samsamana Chikitsa*. *Samshodhana Chikitsa* gives precedence to cure the disease at its best.

DISCUSSION:

All the laws i.e. physical or chemical which apply to the external world (*Loka*) are also applicable to the human body (*Purusha*). As per ***Loka Purusha Samya Siddhanta***, the air, sun and moon represent the *Vata*, *Pitta* and *Kapha* respectively in the body.^[57] The Subtle and movable properties of *Vata Dosha* manifested in the body, help the cell to regulate its environment through a membrane transport system. *Pitta Dosha* governs cellular metabolism with its thermal properties and

produces ATP, which is known as an energy-rich molecule. The metabolism of cells is controlled by several enzymes that are present in either cytoplasm, mitochondria or lysosome. The stable and unctuous properties of *Kapha Dosha* maintain the structural integrity, stability and protection by the plasma membrane. As the cellular components like the Endoplasmic reticulum contain ribosomes, it helps in the synthesis of protein and lipids which determines the shape and size. Hence, protects the cell.

In broader terms, *Vata* is exemplified as the kinetic energy of the body and it includes all the nervous activities and bodily movements. *Pitta* stands for thermal energy and is responsible for digestion at various levels in the body. *Kapha* primarily addresses the immunological system and defence mechanism of the body.

Vata is the most significant among the three, the other two are seen as dumb or lame. Without *Vata*, they do not move inside the body. It transports them to various body parts. So, they can carry out their innate tasks.^[58]

As each individual has their unique fingerprint, they also have their unique energy print. Hence, people are not “one size fits all”. It depends on the proportion of *Shukra* and *Shonita* during conception and hence the *Prakruti*.

Agni is a vital entity of the organism that controls how much food is to be consumed. It is also responsible for the ingestion, digestion and assimilation of food. A condition called *Vishamagni*, due to elevated *Vata* causes *Krura*

Kostha. Similarly, a higher-than-normal *Pitta* cause *Tikshnagni* which results in *Mridu Kostha*. An elevation of *Kapha* causes *Mandagni* and results in *Madhyam Kostha*. However, *Agni* plays an important role in determining whether the condition is healthy or sick. A person is completely content and healthy when *Tridosha* is in its normal condition.

Doshas are involved in the process of *Dhatu Nirmana* in the following manner-

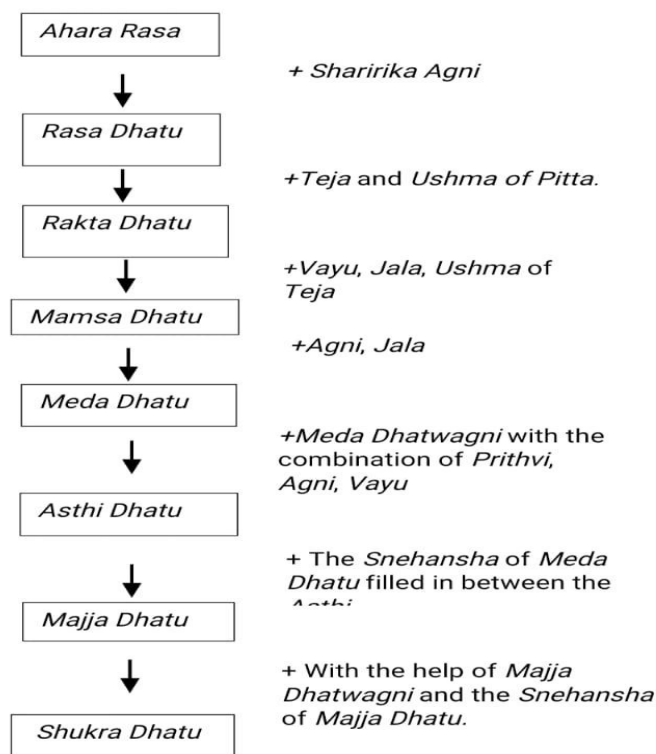


Fig.1. Contribution of *Doshas* in *Dhatu Nirmana* process

*Vayu Mahabhutac*an be correlated with *Vata*, *Agni* & *Ushma* of *Teja* with *Pitta* and the *Snehansha* & *Jala* with *Kapha*. In this way, *Tridosha* helps in the formation of *Dhatu*.

The existence of a unique concept of mutual interdependency between the *Dosha*, *Dhatu* and *Mala* indicates that *Asthi Dhatu* is a roof (shade)

of *Vata Dosha*, *Sweda* and *Rakta* gives shelter to *Pitta Dosha*. Lastly, *Kapha Dosha* inhabits the rest of the *Dhatu*s viz. *Rasa*, *Mamsa*, *Meda*, *Majja* & *Shukra*. *Pitta* and *Kapha Dosha* have a directly proportional relation with their respective *Dhatu*s. It means when there is an increase in *Pitta* and *Kapha Dosha*, it increases

their respective *Dhatus* and vice versa. while it is inversely proportional in the case of *Vata Dosha* and *Asthi Dhātu*, i.e. increase in *Vata Dosha* being the cause of a decrease in *Asthi Dhātu* and vice-versa.

The disease manifests with the vitiation of *Doshas*, which is termed as *Dosha-vaishamyata* (*Vikrutavastha*). As a bird can't even cross its own shadow by flying throughout the day, analogously the vitiated *Vata*, *Pitta* and *Kapha* are the invariable cause of all the endogenous diseases.^[59]

The specific stages for the development of the diseases described chronologically known as "*Kriya Kaala*" are *Sanchaya* (stage of accumulation), *Prakopa* (stage of aggravation), *Prasara* (stage of spread), *Sthanasamsraya* (stage of localization), *Vyaktavastha* (stage of manifestation), *Bhedavastha* (stages of complication). In *Sanchayavastha* *Doshas* are accumulated on their place. The accumulated *Doshas* get increased and excited which tend to overflow from their place in *Prakopavastha*. In *Prasaravastha*, *Doshas* expand from their site of limitation to other places. The fourth stage i.e. *Sthanasamsrayavastha* is considered the most critical stage as *Dosha* stagnates at a specific location of the body i.e. *Kha-Vaigunyata*. If a patient continues the *Nidana Sevana* in this stage, *Dosha* will enter into *Vyaktavastha* (fifth stage), which is known as *Rupavastha* or the stage of *Vyadhidarshana*. Negligence or lack of treatment during *Vyaktavastha* leads to the manifestation of *Upadrava* or complications (i.e., *Bhedavastha*).^[60] The mechanism of *Dosha*

in *Kriya Kaala* must be understood to make an early diagnosis of a disease.

The most well-known aspect of *Ayurveda* is its tenet, which is to maintain the health of a healthy individual and treat a sick one. To do this we have mainly three primary procedures i.e., *Vasti*, *Virechana* and *Vamana* as a *Samshodhana Chikitsa* – that eliminate the disease at its root level in each of their respective *Kaalas*- *Shravana*, *Margasheersha* and *Chaitra* respectively.

In the Modern aspect, the function of *Vata*, *Pitta* and *Kapha* are seen throughout the biological structure.^[61] These are possibly signifying the three separate receptors within the body.^[62]

Vata is in charge of active transport, which is responsible for different kinds of motion like Respiration, Intestinal peristalsis, eructation, horripilation (goosebumps), shivering and transmission of nerve impulses in the central nervous system (CNS) through sodium-potassium neurotransmitters.

Pitta is intimately connected with material turnover, influencing energy production. Enzymes are responsible for Digestion, metabolism, erythropoiesis, visual processes, different hormones related to the cerebrum, limbic system, hypothalamus, and cardiac stimulants. It includes intelligence, memory, intellect, motivation and initiation.

Kapha, responsible for storage, is closely associated with the cell membrane in the simplest single cells. On a molecular level, *Kapha* is linked to lipids and polysaccharides.^[63] Within the human body, *Kapha* plays a crucial

role in coordinating structural elements, including cohesion and lubrication. The cell wall, where *Kapha* primarily operates, is

responsible for cohesion through reactions and interactions. Possible correlations arranged below in tabular form-

Table No. 6. **Modern correlations of Doshas**^[64,65,66].

Dosha	Possible Correlations
<i>Prana Vayu</i>	Glutamate (Neurotransmitter)
<i>Udana Vayu</i>	Acetylcholine
<i>Vyana Vayu</i>	Dopamine, Epinephrine, Norepinephrine
<i>Samana Vayu</i>	Serotonin
<i>Apana Vayu</i>	Serotonin & Dopamine
<i>Pachaka Pitta</i>	Digestive enzymes and GI hormone
<i>Ranjaka Pitta</i>	Gastric intrinsic factor, erythropoietin, dietary protein and energy, vitamin B12, folic acid, pyridoxine, riboflavin, niacin, ascorbic acid, vitamin A, vitamin E, iron, copper
<i>Bhrajak Pitta</i>	hormones controlling pigmentation like ACTH & MSH from anterior pituitary, enzymes in the skin
<i>Sadhaka Pitta</i>	Norepinephrine, Cytochrome C
<i>Alochaka Pitta</i>	Photo-pigments, neurotransmitters involved in the visual pathway
<i>Kledaka Kapha</i>	Mucin secreted by cardiac and pyloric glands in stomach, Gut Associated Lymphoid Tissue
<i>Avalambaka Kapha</i>	Serous fluid
<i>Bodhaka Kapha</i>	Salivary juice
<i>Tarpaka Kapha</i>	Cerebrospinal fluid, Microglia and other similar Glial cells of brain tissue
<i>Shleshaka Kapha</i>	Synovial fluid, substance that forms the fundamental histological basis of cytoplasm, gel-like cement substance which binds parenchymal cells.

CONCLUSION:

It is a pivotal concept on which the entire principles and practice of *Ayurveda* are built. *Doshas* don't destroy one another, despite having contrary properties, it is similar to how the poison of a snake doesn't harm itself. The roles of *Vata*, *Pitta* and *Kapha* are minute both at the cellular level and for the entire structure of an organism. *Tridosha* exhibits their mutual

interdependence with *Dhatu* and *Mala* as well as acts as a framework in the formation of *Dhatu*.

Normalcy of the body depends on *Samyavastha* while *Doshavaisamyata* is responsible for disease. Diagnosis of a disease depends on *Doshavaisamyata* based on *Kriya Kala*. A normal human being, somehow manages the disease having superficial knowledge of *Tridosha*. But a physician who wants to treat the deep-rooted disease

effectively must have a clear understanding of the permutation and combination of *Doshas*, which is sixty-two in number.^[67] Early diagnosis of disease allows us to give tailored treatment according to *Doshas* i.e. *Samshodhana* and *Samshaman*. Finally, we can conclude *Vata* is conductive, *Pitta* is a catalyser and *Kapha* is perseverance in action.

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