

STUDY OF PAKVASHAYA AS CONSPICUOUS ABODE OF VATA DOSHA

Dinesh C. Chouhan^{1*} and Nitin Kumar²

¹Assistant Professor, Department of Sharir Kriya, MJF Ayurved Mahavidhyalaya, Harota,
Chomu, Jaipur, Rajasthan – 303702.

²Assistant Professor, Department of Rachana Shareer, Patanjali Bhartiya Ayurvigyan Evm
Anusandhan Sansthan, Haridwar, Uttarakhand – 249405.

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*Corresponding Author

Dr. Dinesh C. Chouhan

Assistant Professor,
Department of Sharir Kriya,
MJF Ayurved
Mahavidhyalaya, Harota,
Chomu, Jaipur, Rajasthan –
303702.

ABSTRACT

Ayurveda has emphasize on thought that whatever present in this universe is made by *Panchmahabhoot* and all that present out in cosmos is present within the human body. Functionally and clinically the *Pancmahabhoot* in an individual are represented by *Tridosha*. Complete physiology of our body is maintained by *Tridosha*, these presents all over the body, still they are attributed with specific sites because They exhibits their specific characters within these sites and giving due importance to the treatment. *Pakvashaya* is told as specific abode of *Vata Dosha*. This research paper especially clarifies the clinical importance of Pakvashaya in *Vataj Vyadhi*.

KEYWORDS: *Pakvashaya, Vata Dosha, Vataj Vyadhi* etc.

INTRODUCTION

The earliest medical science is evolved from great philosophical knowledge. The mater scholars of this ancient system of medicine utilize this enriched philosophical knowledge to developed basic principles of Ayurveda to fulfil the purpose of treatment. According to classics the whole universe is *Trigunatmaka* (i.e. *Satva, Rajas* and *Tama*), when these present in equilibrium they create *Panchbhautic Sristi*.^[1] Thus new theory enunciates the *Panchbhautic siddanta* (*Sarva dravyam Panchbhauticam*). According to this theory, entire creation along with human are made up of *Panchmahabhoot* (five basic elements). These five elements functionally represent *Tridosha* i.e. *Vata Pitta* and *Kapha*. Entire physiology of our body is maintained by these *Tridosha*. *Acharya Charak, Sushruta* and *Vagbhata* told their

specific and general abode within the body. These *Sthana* play significant role in maintaining health, as well in diseased condition and in treatment of diseases caused by *Tridosha*.

Importance of dosha sthana

Acharya Sushruta told *Tridosha* as pillars of the body.^[2] These are the functional entities present all over the body, and plays significant role in maintenance of health or physical well being when present in equilibrium and also get diseased or illness when this equilibrium is disturbed.

According to *Acharya Sushruta* these *Dosha* resides in equilibrium (i.e. *Avyapanna condition, Prakrit Avastha*), when they indwell in their specific and general places^[3] from there they operate activity of each and every cell of the body. *Acharya Dalhana* illustrate that these specific place are abode of '*Prakrit Dosha*' only. Whereas, place of vitiated '*Dosha*' is entire body.^[4] This equilibrium is disturbed when one of these *Dosha* undergo in *Vridhhi* or *Kshaya*. At the same time (*Sanchaya* or *Prakopavastha*), the symptoms of early manifestation of disease is seen in these places^[5] (*Vata prakop- koshtatod, Sancharana, Pitta Prakop- Amlika, Pipasa, Paridaha, Kapha Prakop- Annadvesha, Hridaya utkleda*. *Acharya Chakrapani* told the utility of these *Sthana* and gave the example of tree – “when one wants the root up tree, it is not of any use to cut the leaves. So, these places are the root place of *Dosha* and these *Dosha* evacuated from their places by nearest route in *Shodhan chikitsa*.

Importance of vata dosha

Acharya Charak gave supremacy to the *Vata Dosha*, he told about *Vayu* that it is life, it is Strength of body it seizes the *Aatma*, and entire creation is *Vayu*. Later he said the person lives complete life of 100 years, who have connate obstacle less conduction of *Vayu* in *Sharir* or *Vayu* resides in its abode.^[6]

Acharya Sushruta elaborates *Vata Dosha* in detail, he described etymology of *Vata Dosha* which clearly shows its importance in our body. “*Va Gati Gandhanayoh*” means the term *Vata* is derived by “*VA*” Dhatu which literally means *Gati* (movement) and *Gandha* (smell). The previous meaning applied the main function of *Vata Dosha* i.e. Movement, *Prakshepa, Chala* etc. later meaning indicates toward the distinctiveness of movement i.e. such as any smell spread in the air by a driving force(diffusion). Both *Acharya* described perspective of *Vata* as *Amurtatva* and *Avyaktovyaktkarma*. Means *Vata* is experienced by its functions, it is figureless entity. Another important function of *Vata Dosha* is *Prakshep Karma*, Viz it

maintains the cyclic change of climate in external (*Varshadi ritu*), alike in the body it regulates the cycle of *Dhatu niramana*, *poshana*, and *Malotsarrjana*. Indirectly it maintains the internal homeostasis as it does in externally.

Some more important functions or karma of *Vata dosha* are told in classics which reflect supremacy of *Dosha*, these functions need to be analysed intensively for establishment of *Dosha* as system.

Table 1: Correlation of function of vata.

Sr. no.	Functions (<i>Karma</i>) ^[7]	Meaning
1.	<i>Tantra-yantra dhara</i>	Maintain physiology of body and its components.
2.	<i>Swambhoo</i>	Autonomic
3.	<i>Pravartakchestanaam</i>	Initiate various karma (<i>Utkshepanam</i> , <i>Avakshepanam</i> , <i>Prasaranam</i> , <i>Aakunchna</i> , <i>Gamanam</i>) {motor function}
4.	<i>Niyanta praneta cha manas</i>	Controls and holds the psychological activities of the body.
5.	<i>Sarva indriyanaamudhyojaka</i>	Co-ordinates the activities of all the sense organs.
6.	<i>Sarvadhatuvyuhkaar</i>	Regulates the cyclic dynamics (<i>Nirman</i> , <i>Poshana</i> and <i>Utsarjana</i>) of the internal components (i.e. <i>Dosha</i> , <i>Dhatu</i> and <i>Mala</i>) of body to maintain homeostasis.
7.	<i>Aashukaari, muhuschaari</i>	Act rapidly.
8.	<i>Bahirmalanam</i>	Regulates excretion of the waste product.
9.	<i>Sthoolanu srotasaam bhetta</i>	Operating through macro and micro channels i.e. from major vessels to micro channel gates and receptors.

Pakvashaya

Acharya Charak, *Sushruta* and *Vagbhata* mentioned *Pakvashaya* as specific abode of *Vata Dosha*.^[8] There are different references and opinions are shown by different *samhita*, which make important to look at all the references.

According to *Acharya Sushruta* *Pakvashaya* is part which lies below the umbilicus up to the *Shroni* and *Guda*.^[9] *Purishdhara* kala lined the *Pakvashaya* and also lined the intestine which closer to the liver, *Unduka* is the part of *Pakvashaya*.^[10] *Dalhana* clarify the location of *Pakvashaya* that it is situated below *Pittashaya*, separation of *Mala* (waste product) and *Prasad* (nutritional matter) takes place here.^[11] *Dalhana* also divides *Pakvashaya* into two parts i.e. *Pittashaya* and *Vatashaya*.^[12]

Acharya charak told *Pakvashaya* as *Mulasthan* of *Purishvaha Srotas*^[13] and *Vishesh sthan* of *Vata Dosha*. He used various term regarding to intestine as *Kshudantra*, *Sthulantra*,

Uttarguda, Adhatguda, Aamashaya, Pakvashaya^[14] etc. but didn't clarify these terms. *Gangadhara* told the location of *Pakvashaya* that it is situated below the *Pittashaya*.^[15]

Acharya Vagbhata in *Astang sangrah* and *Hridaya*, described *Pakvashaya* in many context. He said, *Purishdhara kala* lined the *Pakvashaya* and separates the waste (*Mala*).^[16] It is one of the *Ashaya*.^[17] *Sushira Snayu* present around it.^[18] *Pakvashaya* is *Mula* of *Shakridvaha Srotas*. *Katu Awasthapak* occurs in the *Pakvashaya*.^[19] While describing *Nabhi marma* *Acharya* told *Nabhi* situated between *Pakvashaya* and *Aamashaya*.^[20] Commenter *Arundutta* and *Hemadri* try to clarify the location of they said that digested food (*Pakva Anna*) stays in *Pakvashaya* and its location is below *Nabhi*.^[21]

Importance of pakvashaya in the context of vata

Pakvashaya is terminal part of gastrointestinal tract, also a *Koshtaanga*, but in addition, as a specific abode of *Vata*, it is blessed with some specific anatomical specialization for the special action of *Vata Dosha*. Following references also exhibit the same-

- *Acharya Dalhana* told that *Chala guna* of *Vata* can easily be experienced in *Pakvashaya* as flatulence.^[22]
- *Acharya Chakrapani* told that according to *Parashara Guda* is *mula* of body and also the *pratishthan* of *Sira*. Inserted *basti dravya* circulates throughout the body by *sharirgata sira* alongside the *Murdhagata sira*, and produces *tarpana* of *murdha*.^[23]
- According to *Acharya Dalhana* *Purishdhara kala* and *Pittadhara kala* represents the *Asthidhara* and *Majjadhara kala*.^[24] *Bastidravya* in *Pakvashaya* absorbed by *Purishdhara kala* and nourishes *Asthi Dhatu* and *Uttarottar Majja Dhatu*. Later he considers brain (*mastishaka*) as *shirokapalasthi gata majja*.^[25]
- In classics at different places *Prana* and *Apana* have been mentioned together. This indicates that both *Parana* and *Apana vayu* has equal prime significance among all *Vayu*. *Chakrapani* used term *Prana* and *Apana* for inspiration and expiration.^[26] but *Dalhana* used these terms for *Prana vayu* and *Apana vayu*.^[27] *Apana vayu* is clinically more important because it shares its abode with *Vayu Dosha*. i.e. *basti, purishadha, kati, pakvashaya, shroni & guda*.

Interrelation between lower gastrointestinal tract and nervous system

There is Strong preclinical evidence suggests that the enteric microbiota has an important role in bidirectional interactions between the gut and the nervous system in health and in various disease models.^[28]

Evidence indicates that microbiota communication with the brain involves the vagus nerve, which transmits information from the luminal environment to CNS. In fact, neurochemical and behavioural effects were not present in vagotomized mice, identifying the vagus as the major modulatory constitutive communication pathway between microbiota and the brain. Microbiota can influence ENS activity by producing molecules that can act as local neurotransmitters, such as GABA, serotonin, melatonin, histamine and acetylcholine and by generating a biologically active form of catecholamines in the lumen of the gut. Lactobacilli also utilize nitrate and nitrite to generate nitric oxide and to produce hydrogen sulfide that modulates gut motility by interacting with the vanilloid receptor on capsaicin-sensitive nerve fibers. The ENS represents also the target of bacterial metabolites. One of the main product of bacterial metabolism are short-chain fatty acid, such as butyric acid, propionic acid and acetic acid, that are able to stimulate sympathetic nervous system, mucosal serotonin release and to influence memory and learning process.^[29]

DISCUSSION

Five basic building components or a structural unit of our body is *Panchmahabhoot*, while they maintain our physiology by *Tridosha*. When they work in harmony, they are capable to maintain intact physiology from every system to each and every cell of body. In this condition they perform their operation from their specific and general places. These places are told by *Acharyas* due to similarity of an organ with the *Dosha* in *Guna* and *Karma*. This harmony gets disturbed whenever *Doshavriddhikar Aahar* and *Nidan* are taken. In this condition *Dosha* revolves in entire body, and produces different types of diseases. In this case these *Sthana* exhibit following *Chikitsiya* and *Naidanik* importance-

- During *Dosha Vriddhi* and *Prakopa* some symptoms of *Dosha* exhibits in its *Vishesh Sthan* as described previously.
- In diseased condition, treatment on *Vishesh sthan* will radically take out the *Vriddha Dosha*, and establishes the Normalcy.

Vata Dosha considered noble among three *Dosha* by all *Acharya*. Its *Nirukti* (*Va gati gandhnayoh*) and *karma* (*prakshepan*) explicit its Dynamic function. There is nothing static in this living world as well as in human body, means dynamism is unequalled relics of animation. This dynamism of *Vata Dosha* regulates cyclic movements in external world as well as inside of body. *Vata Dosha* regulates Movements of all bio-molecules to maintain physiology of body. According to *Acharya Charak* *Vata Dosha* is autonomic, rapid, regulates

function of body and its organs, receives external inputs by sense organs (sensory informations), and regulates psychological activities, pioneer of motor functions (*Chesta*). Above description of *Vata Dosha* suggests that it is an ambient system of body which regulates the movement of each and every particle of body, but some of its functions also indicate that nervous system is a major component of this system.

Pakvashaya is told as specific abode of *Vata Dosha* by all *Acharya*. It is situated in *koshta*, between *Naabhi* (*Pitta sthan* i.e. place where digestion and absorption occurs) and *shorni* (pelvis), it is place of *Pakvanna* and *Katu avastha paak* (last stage of digestion of food), and lined by *Purishdhara kala*, *Mula sthan* of *Purishvaha Srotas* (channel that carries feces).

After absorption of water and action of gut flora on undigested food, feces and flatus is formed here. Therefore this terminal part also termed as *Purishvaha Srotas* (channel that regulates the excretion of feces). Classical description suggests that *Pakvashaya* can be correlates with entire large intestine till sigmoid colon.

Pakvashaya is significant in pathophysiology of *Vataj dosha*. This relation is very clear in classics, which can established by cogitation on following points-

- Brain and spinal cord is described in classics as *Majja Dhatu*, and *Dalhana* resembles *Purishdhara kala* as *Asthidhara kala*, which means the given drug in *Pakvashaya* by *Basti* karma will cherish the *Asthidhatu* (described also as *vata sthan*) as well the next one which is *Majja Dhatu* by *Dhatuposhana krama*. Another considerable view of *Acharya charka* in this context is, *Vataj vyadhies* also born from *Majja kshaya*, and this condition should treated by line of treatment of *Vataj vyadhi* viz *Majja Dhatu* and *Pakvashaya* has critical role in pathophysiology of *Vataj Dosha*.
- Another very important relationship between *Vata Dosha* and *Apan vayu* is that both shares common specious abode in the body (i.e. *Pakvashaya*) from where they are regulated. Whereby, both systems have significant clinical and pathological interrelation as *Apan vayu vikriti* is involved in various *vataj vaydhies* and vice versa. Grossly *Vata Dosha* is correlated with Nervous system and *Apan vata* is correlated with enteric nervous system. *Acharya* were very much confirmed about the complex interactions of above two systems (i.e. CNS & ENS), consequently they suggest *Basti karma* as *Pradhan Chikitsa* of *Vata Dosha*.

- Many studies have confirmed that CNS, ENS, and gut microbes has very complex interactions. Gut microbes can synthesize various compounds or neurotransmitters which have their local effects on ENS and also distal effects on CNS.
- Various neurotransmitters found commonly in brain and large intestine.

CONCLUSION

Our physiology is managed by *Tridosha*, and their specific and general abode play key role in their normal function, pathology as well in treatment. *Vata Dosha* is considered chief among them. Grossly nervous system can be correlates with *Vata Dosha*. Nervous system is chief controlling and regulating system of our body which maintain our normal physiology. Pakvashaya or large intestine is told specific abode of *Vata Dosha*, and plays key role in pathophysiology of nervous system.

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