

## CRITICAL STUDY OF *DHAMANEE* IN *SROTAS MOOLSTHANA* W.S.R. TO *ANNAVAHI DHAMANEE*

Dr. S. D. Rokade<sup>1</sup> and Vd. Priyanka D. Nirwal<sup>\*2</sup>

<sup>1</sup>HOD and Professor Department of Rachanasharir Government Ayurved College Nanded–  
431601, Maharashtra state, India.

<sup>2\*</sup>PG Scholar Department of Rachanasharir Government Ayurved College Nanded –431601,  
Maharashtra state, India.

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### \*Corresponding Author

Vd. Priyanka D. Nirwal

PG Scholar Department of  
Rachanasharir Government  
Ayurved College Nanded –  
431601, Maharashtra state,  
India.

### ABSTRACT

In *Ayurveda* great emphasis has been laid upon concept of *Srotas* and got immense importance because the *Sharir* or *Purush* is assumed to be made of innumerable *Srotas*. Holistic biology of *Ayurveda* is based on *Triguna*, *Tanmatra*, *Tridosha*, *Saptadhatu*, *Oja*, *Agni*, *Ama* and *Srotas*. *Srotas* is used as dynamic inner transport system. Body consists of various components like *Dosha*, *Dhatu* and *Mala*. But other *Bhavpadartha* transported from one place to another in *Srotas*. Each *Srotas* is attached to specific anatomical structure called *Moola* means root or base. Structurally the *Srotas* are hollow channels originating from the root space spread within whole body. In *Ayurveda Dhamanee* is term different at various places in different contexts like artery,

nerve, tubular structure etc. Every *Srotas* has two components one is act as source or reservoir and other work as disposing organ. In *Sushrut Samhita* in *Dhamanee Vyakaran Sharir*, there are two types of *Koshtak*, *Dhamanee Koshtak* and *Srotas Koshtak* in this work we explained *Dhamanee* in *Srotas Koshtak*. *Annavaha Srotas* is the channel for transportation, digestion and absorption of food. Its *Moola* are *Amashaya* and *Annavahini Dhamanee* as per *Sushruta*. As *Annavaha Srotas* and its components deals with transportation of food material. *Annavahi Dhamanee* stated is a tubular structure other than artery, so *Annavahi Dhamanee* is considered as esophagus and small intestine.

**KEYWORDS:** *Annavahi Dhamanee*, *annavaha srotas*, *Sroto Dhamanee*, *srotas koshtak*.

## INTRODUCTION

*Sharir* is formed by innumerable number of *Parmanu*, which are in present time considered as cells. For the existence of life, the three elements i.e. *Prana*, *Udak* and *Anna* are very important, body which is constituted by the seven *Dhatus* and the end products formed in the body due to catabolism of *Dhatus* i.e. *Mutra*, *Purisha* and *Sweda* which all are eleven *Yogvahi Srotasa*<sup>[1]</sup> in *Sushrut Samhita*. *Moola* of *Srotas* is anatomical base of the respective *Srotas*, the main seat of pathology of that *Srotas* or principal seat of manifestation of disease. *Moola* of *Srotas* is, 1) root of *Srotas* (origin of collecting place), 2) conducting parts, 3) the main seat of pathology of that channel, 4) the principal seat of manifestation of disease after the vitiation of that particular *Srotas*. *Srotas* is defined as the hollow channel, except *Sira* and *Dhamanee*, which originating from root space spreads the body and carries specific entities.<sup>[2]</sup> Each *Srotas* is attached to a specific anatomical structure called *moola*. "*Moolamiti prabhav sthanam*" *moola* means root or base. The base is known as "*Prabhav sthanam*" or area of influence.<sup>[3]</sup>

The normal functioning of the particular group of channels is depending upon *Moolsthana*. In *Dhamanee vyakaran sharir*, there are two types of *Koshtak*, 1) *Dhamanee Koshtak*, 2) *Srotas Koshtak*, in *Srotas Koshtak Moolsthana* of *Srotas* is a *Dhamanee* i.e. *Pranvaha Srotas* (*Hriday*, *Rasavahi Dhamanee*), *Annavaha Srotas* (*Amashaya*, *Annavahi Dhamanee*), *Rasavah Srotas* (*Hriday*, *Rasavahi Dhamanee*), *Raktavaha Srotas* (*Yakrit*, *Pleeha*, *Raktavahi Dhamanee*), *Mansavaha Srotas* (*Snayu*, *Twacha*, *Raktavahi Dhamanee*), *Aartavavaha srotas* (*Garbhashaya*, *Aartavahi Dhamanee*).<sup>[4]</sup> According to Ayurveda, Acharya has given different estimation concerning *Moolsthana* of *Annavaha Srotas*. Acharya Sushruta has reveals *Amashaya* and *Annavahi Dhamanee* as a *Moolsthana* of *Annavaha Srotas*.<sup>[5]</sup> *Dhamanee* is a comprehensive term used in *Ayurveda* compendia at various places in different context like Artery, Nerve, tubular structure etc. Thorough review of literature from *Ayurved* compendia, modern texts and journals was done to clarify the term *Dhamanee*. So there is ambiguity concerning *Moolsthana* of *Annavaha Srotas* in ayurvedic compendia.

## MATERIALS AND METHOD

Through review of literature related to *Dhamanee* in *Srotas Moolsthana* and relevant topics was done through the *Ayurveda* compendia, various other *Ayurveda* texts and textbooks of contemporary science. The references from internet and journals were also critically reviewed the study was initiated for affirmation of *Annavahi Dhamanee* is *Moolsthana*

of *Annavaha Srotas* as per *Sushruta*.

## REVIEW OF LITERATURE

*Srotas* is internal transport system of the body. Total eleven *Srotas* are described by *Sushruta*.<sup>[6]</sup> The cause of morbidity of *Srotamsi* and their manifestation, pertaining disease has also been explained. The set of channels is apparently described as major seat of disease which can be clinically examined in a patient by physician for diagnostic purpose. *Dhamanee* is "*Dhamnadani poornad Dhamanya*"<sup>[7]</sup> I.e. *Dhamanad* means *Spandan* or peristaltic movement due to *Vayu* and *Akash Mahabhuta*. The action of peristalsis looks like on ocean wave moving through the muscle. *Dhamanee* is a comprehensive term used in *Ayurveda* at various places in different context like artery, nerve, tubular structure etc. Components deals with transportation of *Bhavpadartha*, stated is tubular structure other than artery. The literature review from *Sushruta samhita* related to *Dhamanee* in *Srotas Moolsthana*. Related to usually *Moolsthana* are two cardinal organs directly or indirectly related through scattered *Srotas* of body. Vessels which carry *Ras* and *Rakta* towards the body and has property of pulsation are known as *Dhamanee*.<sup>[8]</sup>

***Pranvaha Srotas***- *Prana* carrying channels are two their root being heart and *rasa* carrying *Dhamanees*. If injured it causes crying, bending, fainting, giddiness, trembling and death.<sup>[9]</sup> *Rasavahi Dhamanee* also called as *Pranavahi Dhamanee*. It is correlated with pulmonary vessels which carries blood from heart to bronchiole and vice versa. *Hridaya* originates from the essence of blood and *Kapha* supports the *prana* carrying vessels.<sup>[10]</sup>

***Annavaha Srotas***- Food carrying channels are two with their roots being *Amashaya* and *Annavahi Dhamanee*. If injured it causes flatulence, colic, aversion to food, vomiting, thirst, blindness and death.<sup>[11]</sup> A tubular structure extending from mouth to stomach is called *Anna nadi* or *Annavahinee*. This *Anna nadi* (esophagus) is situated behind the *Swasa nadi* (trachea), expand below like a funnel, passes through diaphragm and enters the abdominal cavity to continue itself as stomach, it continues the small intestine. *Acharya Sushruta* has included this as root source of *Annavaha Srotas*.

***Rasavaha Srotas***- *Rasa* carrying channels are two their root being heart and *rasa* carrying *Dhamanee*. If injured it produces consumption along with other symptoms as in injury to the *prana* carrying ones and finally death.<sup>[12]</sup> *Rasavahi Dhamanee* correlated with pulmonary and systemic vessels because *Srotoviddha lakshana* of *Pranvaha Srotas* similar to *Rasavah*

*Srotas*.

**Raktavaha Srotas**- Blood carrying channels are two their root being liver, spleen and blood carrying *Dhamanee*. If injured it causes cyanosis in body parts, fever, burning sensation, pallor, haemorrhage and blood shot eyes.<sup>[13]</sup> *Raktavahi Dhamanee* is correlated with portal capillaries.

**Mansavaha Srotas**- Muscle carrying channels are two their root being ligament, skin and blood carrying *Dhamanee*. If injured it produces swelling, wasting of muscles, nodular growths in blood vessels and death.<sup>[14]</sup> *Raktavahi Dhamanee* correlated with muscular capillaries which is embedded in the muscles.

**Aartavavaha Srotas**- Channels carrying menstrual blood are two their root being uterus and *Dhamanee* carrying menstrual blood. If injured it causes sterility, intolerance to sexual intercourse and amenorrhea.<sup>[15]</sup> *Aartavvahi Dhamanee* correlated with uterine arteries because, the menstrual blood collected for a month and which is slightly black and discolored is brought by *Vayu* through two channels to the vaginal opening in appropriate time.<sup>[16]</sup>

*Dhamanee* is a comprehensive term used in *Ayurveda* compendia at various places in different context like Artery, Nerve, tubular structure etc. Thorough review of literature from *Ayurved* compendia, modern texts and journals was done to clarify the term *Dhamanee*. So *Dhamanee* is the similar structure of the *Srotas* and cardinal organ of *Moolsthana* which carry other body components needs to be transported from one place to another.

## DISCUSSION

*Srotas* are related to each other when one *Srotas* is vitiated then other *Srotas* are affected also. If *Annavaha Srotas* is vitiated then affected other *Srotas* also like *Pranvaha*, *Rasavaha* and *Purishvaha Srotas*. Such as GIT (Gastrointestinal tract) is too related to all other system. Actually anatomically, *Annavaha Srotas* is related with esophagus, stomach and small intestine. The digestion and absorption takes place till the last part of small intestine. Since the *Anna* is present in this area.

*Annavaha Srotas* describe in *Ayurvedic* epics is related to structural and functional units associated with mechanical and chemical digestion in the stomach, esophagus and small intestine. *Annavaha Srotas* is one of prime *Srotas* present in our body providing nutrition to each cell of body. The *Moolsthana* stated in *Sushruta Samhita* are *Amashaya* and *Annavahi*

*Dhamanee*. The *Annavahi Dhamanee* stated by *Sushruta* in context of *Annavaha Srotas* is not clarified well in *Ayurvedic* literature. The *Amashaya* stated in *Ayurveda* has great similarities with stomach in contemporary science. Stomach is reservoir of the food. Serves as the mixer and grinder of food. Stomach secretes acid and powerful enzymes that continue the process of breaking the food down and changing it to a consistency of liquid or paste. According to *Sushruta Samhita* one of *Moolsthana* of *Annavaha Srotas* is *Annavahi Dhamanee*. *Dhamanee* is a broad term used in different *Ayurvedic* context at various places. In some previous work done *Annavahi Dhamanee* is taken as artery or blood vessels related to stomach. But transportation of food through blood vessels is not possible hence, *Dhamanee* is the tubular structure which transport food.

Food processing being with ingestion, form a bolus due to mastication. In deglutition, tongue pushes the bolus towards the pharynx and into esophagus. Upon entering the esophagus peristalsis of smooth muscle carries the bolus towards stomach, throughout the digestive tract. From the esophagus, the bolus passes through gastroesophageal sphincter into stomach. In the stomach peristaltic contraction churn the bolus, powerful HCL in stomach breakdown bolus in chyme. The chyme is transported through pyloric sphincter in to small intestine. The small intestine has three parts; duodenum, jejunum and ileum. Ingested food starts to arrive in small intestine after 1 hour and after 2 hours the stomach has emptied. As the food is digested in small intestine and dissolve into the juices from the pancreas, liver and intestine. Food moves to the small intestine, between meals the non liquefiable remnants are released from stomach and ushered through the rest of the intestine to be eliminated.<sup>[17]</sup> Finally all the digested nutrients are absorbed through the small intestine and waste product moves in to large intestine.

In above discussion, it is clear that the esophagus and small intestine are two tubular structures connected stomach helping for the transportation of the food and digestion. So *Dhamanee* is a similar structure of stomach which perform function of transportation. In *Sushruta*, *Srotas* is excluded *Sira* and *Dhamanee* it means that here, *Dhamanee* is expected as a tubular structure which transport the concerned material not the artery. According to modern science study of digestive system clears that the esophagus and small intestine are help in the transportation of food. So it is clear that *Annavahi Dhamanee* stated by *Sushruta*. An be considered as esophagus and small intestine.

## CONCLUSION

*Annavaḥa Srotas* is passage which serves the function of transportation and digestion of *Anna*. Anatomically *Annavaḥa Srotas* can be considered as upper part of GIT (gastrointestinal tract) i.e. esophagus, stomach and small intestine. *Annavaḥa Srotas* describe in *Ayurvedic* epics, it is related to structural and functional units associated with mechanical and chemical digestion in esophagus, stomach and small intestine. Esophagus and small intestine can correlated with *Annavaḥi Dhamanee*, described by *Sushruta* as *Moolsthana* of *Annavaḥa Srotas*.

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