CRITICAL STUDY OF **ANNAVAHINA SROTAS MOOLSTHANA W.S.R. TO ANNAVA-HINI DHAMANEE**

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| In *Ayurvedic* classics the term *Srotas* is used as dynamic inner transport system of body-mind-spirit organization system. Each *Srotas* is attached to a specific anatomical structure called *Moola* which influences the normal functioning of *Srotas*. *Annavaha Srotas* is the channel for transportation, digestion and absorption of food. Its *Mool* are *Amashaya, Vamparshwa* as per Charak and *Annavahini Dhamanee* as per Sushruta. *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 *Annavahini Dhamanee*. In previous studies some researcher quoted *Annavahini Dhamani* as Artery or Blood vessels related to stomach. Every *Srotas* has two components one is act as source or reservoir and other work as disposing organ. As *Annavaha Srotas* and its components deals with transportation of food material, the *Annavahini Dhamanee* stated is a tubular structure other than artery. *Annavahini Dhamanee* delineated in context of *Annavaha Srotas* can be considered as esophagus and small intestines.

**Keywords:** *Annavaha Srotas, Annavahini Dhamanee, Aamashaya, Moolsthan, Vamaparshwa*

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| *Ayurvedic* classics proclaim “*Srotomayam hi Shariram*” means living body is a channel system comprised of innumerable channels which are designed as inner transport system for divergent functions gross and subtle, tangible and intangible, biological and energetic.¹ ² *Srotas* is used as a generic term indicating all the macro and micro channels
and pathway operating in a living organism. Sushrutacharya described Srotas structures within the body in the form of channels performing Vahankarma (transport) of Dhatu and it is different from Sira (vein) and Dhamani (artery). Each Srotas is attached to a specific anatomical structure called Moola. “Mulamiti Prabhav Sthanam” Moola means root or base. The base is known as “Prabhav Sthanam” or area of influence. But in reference to Srotas, they are the two cardinal organs, directly or indirectly related through the scattered Srotas of body. The normal functioning of the particular group of channels is depending upon its Moolasthana. According to Ayurveda, Archaryas has given different estimation concerning Moolasthana of Annavaha Srotas. Archarya Sushruta has reveals Aamashaya and Annahvini Dhamanee as a Moolasthan of Annavaha Srotas whereas Acharya Charak and Vagbhata enlightened Aamashaya and Vama Parshva as a Moolasthan of Annavaha Srotas, so there is ambiguity concerning Moolasthan of Annavaha Srotas in Ayurvedic compendia.

**Materials and Methods:**
Thorough review of literature related to Srotas and relevant topics was done through the Ayurved Compendia, various other Ayurved texts and textbooks of contemporary science. The references from internet and journals were also critically reviewed. The study was initiated for Affirmation of Moolasthana of Annavaha Srotas as per Sushruta.

**Review of Literature:**
Srotas is derived from ‘Sru Gatou’ root which means mooring, filtering, flowing, leaking, secreting etc. Srotas is internal transport system of the body. Total 13 Srotas are described by Charak while Sushruta has described 11 Srotas. Annahvani Srotas is commonly described by both the Acharya. Annahvani Srotas have their origin in Aamashaya and the left lateral side. The symptoms such as loss of desire for food, anorexia, indigestion and vomiting indicate the affection of Annavahini Srotas. Food carrying channels are two with their roots being Aamashaya and food carrying Dhamanis; if injured, it causes flatulence, colic, aversion to food, vomiting, thirst, blindness and death.

The literature review from Bruhattrayee related to Annavaha Srotas denotes following three root sources.
1. Aamashaya
2. Annahvini Dhamanay
3. Vama-parshwa

**Aamashaya:**
It is chief organ of Annahvani Srotas and situated in Vamaparshwa (Lt. hypochondriac region). The organ situated between Sthanantara (breasts) and Nabhi (umbilicus) is known as Aamashaya. Sweda, Rasa, Lasika, Rudhira and Aamashaya are sites of Pitta. Aamashaya is principal location of Pitta. Sushruta told that Aamashaya is a Kaphasthana and is situated on superior plane of Pittasthana as its direction of action is opposite to that of Pitta which is Urdhwa Gati. Prana conveys the food to Aamashaya which acquires sweetness and foaminess in ingested food. The sweet and cool Kapha keeps the food non irritating, in fluidly status and in viscous condition hence it is derived that first stage is Madhura stage, generating Kapha. Aamashaya is considered as Matrujavayav as it is soft in nature.
while in Ashtanga Sangraha, 1 Peshi is present in Aamashaya. It is one among Saptashaya.

**Dhamani:**
While differentiating between Sira, Dhamanee and Srotas Acharya Charak quotes that ‘Dhmanat Dhamanya’. Dhamani is a structure through which transportation takes place like Sira and Srotas but the difference is of presence of pulsations in it.¹⁶ Srotas, Sira, Dhamanee etc. are the names of visible and invisible spaces within the Sharirdhatu.¹⁷ Vessels which carry Ras and Rakta towards the body and has property of pulsation are known as Dhamanee.¹⁸

**Annavahini Dhamanee:**
A tubular structure extending from mouth to stomach is called Anna Nadi or Anna Vahinee. This Annanadi (esophagus) is situated behind the Swasa Nadi (trachea), expands below like a funnel, passes through diaphragm and enters the abdominal cavity to continue itself as ‘Aamashaya’ the stomach. Acharya Sushruta has included this as root source of Annavaha Srotas.¹⁹

**Kshudrantra (Grahanee):**
Kshudrantra lies in between Aamashaya and Pakwashaya (the large intestine). Since it retains the food, allows the digested food to pass on to the next stage of digestion, it is known as ‘Grahanee’. It is supported by the Jatharagni and the Jatharagni is supported by the Grahanee. In case it becomes deranged by Agnimandya or Agnidushti it allows the undigested food only for excretion. Even if the food is digested, an injured Grahanee gives rise to pain, tenesmus offensive stools and constipation or diarrhea. Such a condition is called ‘Grahanee Roga’. This organ acts as a value or door to the alimentary canal.²⁰, ²¹

**DISCUSSION**
Srotas is a comprehensive term used in Ayurved compendia. The body consists of various components like Dosha, Dhatu and Mala. Since Dosha are biological forces they are situated in every part of body. The other body components (Bhavpadartha) need to be transported from one place to another. Srotas are the channels present in the body for the transportation of these materials. Each Srotas consist of root sources and transport system. Usually Moolsthana are the two cardinal organs, directly or indirectly related through the scattered Srotas of body. The normal functioning of the particular group of channels is depending upon its Moolasthana. Between two root sources one is collecting or generating organ while other is disposing organ.

Annavaha Srotas is one of prime Srotas present in our body providing nutrition to each cell of body. The Moolsthana stated in Bruhattrayee are Aamashaya, Vamaparshwa and Annavahi Dhamanee. The Annavahi Dhamanee stated by Sushruta in context of Annavaha Srotas is not clarified well in Ayurved literature. The Aamshaya stated in Ayurved has great similarities with Stomach in contemporary science. The stomach is a sac-like organ with strong muscular walls. In addition to holding food, it serves as the mixer and grinder of food. The 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. From there, food moves to the small intestine. B-
tween meals, the non-liquefiable remnants are released from the stomach and ushered through the rest of the intestines to be eliminated.\textsuperscript{22}

The \textit{Vamaparshwa} stated by Charaka can be considered as left lateral aspect of abdominal cavity which can be correlated with left hypochondriac region. The greater part of stomach resides in this area. Any pathology or vitiation in \textit{Annavaha Srotas} produces symptoms in this region. It is a probable cause that Charakacharya included \textit{Vamaparshwa} as one of root source of \textit{Annavaha Srotas}.

According to Sushruta, one of \textit{Moolasthan} of \textit{Annavaha Srotas} is \textit{Annavahini Dhamanee}. \textit{Dhamanee} is a broad term used in Ayurveda compendia at various places and is related to transportation of materials. In general the word \textit{Dhamanee} is taken as artery as per Ayurved literature is concern. But many times such terms are used in many contexts e.g. \textit{Dhamanee} is used as a synonym of \textit{Srotas} by Charak; Whereas Sushruta has excluded \textit{Sira} and \textit{Dhamanee} from definition of \textit{Srotas}. It seems that a term like \textit{Dhamanee} has meaning depending upon the place or context where it is used.

In previous works \textit{Annavahini Dhamanee} is taken as Artery or Blood vessels related to stomach. But the transportations of food through blood vessels is mere impossible. The ingested food passes through mouth to esophagus and received by stomach for storage. The matter is then released from stomach to small intestine through pyloric sphincter. In small intestine essential nutrients are absorbed through wall and picked up by red blood cells which are rich in oxygen and move throughout the body.

The stomach acts as a reservoir of food but its transportation is facilitated by esophagus and small intestine. The esophagus consists of a muscular tube through which food passes from the pharynx to the stomach. At rest the esophagus is closed at both ends, by the upper and lower esophageal sphincters. The opening of the upper sphincter is triggered by the swallowing reflex so that food is allowed through. The sphincter also serves to prevent back flow from the esophagus into the pharynx. The junction between the esophagus and the stomach (the gastroesophageal junction) is controlled by the lower esophageal sphincter (LES) which remains constricted at all times other than during swallowing and vomiting to prevent the contents of the stomach from entering the esophagus.

Small intestine made up of three segments viz. the duodenum, jejunum and ileum. Ingested food starts to arrive in the small intestine after one hour and after two hours the stomach has emptied. The bolus is received in the duodenum is processed by the addition of bile along with the secretions from the pancreatic duct. It then becomes the partially digested semi-liquid food termed as chyme. The duodenum is first section of the small intestine which is a hollow, jointed C-shaped tube connecting the stomach to the jejunum which continues as the ileum. The duodenum is largely responsible for the continuing breakdown process, with the jejunum and ileum being mainly responsible for absorption of nutrients into the bloodstream. Most food digestion takes place in the small intestine. What’s leftover (the waste) moves into the large intestine.
In above discussion, it is clear that the esophagus and small intestine are two tubular structures connected stomach helping for transportation of ingested food as well as its digestion. The *Dhamanee* is also a tube like structure which performs the function of transportation. *Annavahi Dhamanee* is stated by Sushruta as a *Moolsthana* of *Annavaha Srotas* while in definition of *Srotas* he has excluded *Sira* and *Dhamanee*. It means that the *Dhamanee* expected here is the tubular structure for transportation of concerned material and not the artery. The detailed study of digestive system as per contemporary science clears that esophagus and small intestine helps for transportation of food in relation to stomach. So esophagus and small intestine can be considered as *Annavahi Dhamanee* stated by Sushruta.

**CONCLUSION**

*Srotas* is the macro, micro channels and pathways operating in a living organism for transportation of body tissues. *Annavaha Srotas* describe in *Ayurvedic* epics is related to structural and functional units associated with mechanical and chemical digestion in esophagus, stomach and small intestine. The esophagus and small intestines can be correlated with *Annavahini Dhamanya* described by Sushruta as *Moolasthana* of *Annavaha Srotas*.

**REFERENCES**

7. Ghanekar B. G. Sushruta Samhita, Ayurvedahasyadeepika hindi commentary, Sharirsthana, Chapter 9 verse: 11, Reprint edition, New Delhi; Meharchand laxman das publication; 2009; p. 238
9. Ibid (4), Sharirsthana; Chapter 9, Verse 12, p. 221
10. Dhargalkar ND, Sharir-Kriya Vidnana, Section-II, Mahasrotas Pakakriya, Reprint
Ed. Varanasi; Chowkhamba Sanskrit Series, 2015, p-172
11. Chakrapani, Charak Samhita with Ayurvedipika commentary of Chakrapani, Sutrassthana, Chapter 20, Verse 8, Reprint ed. Varanasi; Chaukhambha Orientalia, 2011, p.113
19. Ibid (7), Sharir Sthana, Chapter 9, verse: 13, p. 240

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