



ANATOMICAL CONSIDERATION OF AANVAH STROTASMOOL W.R.T ANNAVAHINI DHAMNIYAN

¹[Gupta Kanika](#), ²[Singh Gurusewak](#)

¹Assistant Professor (Rachna-Sharir), Punjab Institute of Ayurveda, Abohar

²Associate Professor (Rachna-Sharir), CDL College of Ayurveda, Yamuna nagar

Corresponding Author: kanikagupta29@gmail.com

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ABSTRACT

In *Ayurveda*, where each *Strotas* have *Moolsthan* which influences the physiological functioning of the *Strotas*. Every *Strotas* has two components one is a source or reservoir while the other acts as disposing of one. *Moolsthan* of *Aanvah Strotas* is *Amashya* and *Vamparshwa* as per *Acharya Charak* while it's *Aanvah Dhamniyan* as per *Acharya Sushrut*. *Amashya* and *Vamparshwa* can be correlated to the stomach while *Aanvaha Dhamani* can be correlated to the small intestine. **Objective:** The term *Dhamni* in *Ayurveda* is usually correlated with various anatomical structures like arteries, nerves, tubular structure, etc. while the term *Amashya* refers to the place where *Ama* (undigested food) resides. Hence the term *Aanvah Dhamniyan*, as well as *Amashya*, mentioned in *Ayurveda* as *Strotasmool* needs to be evaluated and correlated to modern anatomical description. **Methods:** Various *Ayurved* textbooks, journals, modern anatomy textbooks, etc. were critically reviewed for literary references. **Results & Conclusions:** *Dhatu*s are transported and transformed in a dynamic inner system termed *Strotas*. One of the *Strotas* mentioned in *Ayurveda* is the *Aanvah Strotas*, which describes the anatomical as well as physiological units of the digestive system, associated with mechanical and chemical digestion of food. *Amashya*, *Vamparshwa*, and *Aanvah Dhamniyan* are the *Strotasmool* of *Aanvah Strotas*. Here, *Amashya* and *Vamparshwa* can be correlated to the stomach where undigested food chyme remains for a few hours, and *Aanvah Dhamniyan* can be correlated with the small intestine which allows the food to move forward with its different movements thus significantly justifying the definition of *Dhamani* in *Ayurveda* i.e where *Dhamani Kriya* takes place.

Keywords: *Aanvah Strotasmool, Amashya, Aanvah Dhamniyan, Vamparshwa*

INTRODUCTION

Ayurveda is a holistic science based on the concept of *Triguna Panchmahabhoota, Tridosha, Sapt-Dhatu, Ojus,* and *Agni*. These *Dosh, Dhatu,* and *Mala* are functional fundamentals of the human body. *Ayurveda* mentions *Purush* as *Srotamaya* where the living physical body is a channel system comprising innumerable channels meant for an inner transport system for both macroscopic as well microscopic components. Without *Strotas* *Sharirbhav* can't be formed or transformed^[1].

Strotas: As per *Acharya Dalhana*, in his commentary describes *Parinamaan* as the formation of the next *Dhatu*. Thus, *Strotas* is a channel system for the transportation and transformation of *Sharirbhav*. This explains the anatomical, physiological, and even pathological significance. The term *Strotas* is derived from *Sru + Tasi* which means moving, filtering, flowing, leaking, secreting, etc. As per *Acharya Charak* *Strotas* are structures through which *Starvan* i.e., secretion or exchange occur^[2]. *Starvan* here indicates *Pavan* i.e., filtration, and *Ati-vedhan* i.e., permeability. According to *Acharya Chakarpani*, *Stravan* is the circulation of all *Poshak Tatva* like *Rasa* throughout the body. Thus, this definition clearly indicates the circulatory moments within the body. *Acharya Charak* has given another definition of *Strotas* as *Strotas* are a way of transportation of *Dhatu* that is subjected to transformation^[3]. A similar definition is given by *Acharya Dalhan* where *Strotas* are channeled through which *Prana, Anna,* water, *Ras,* etc. circulate throughout the body^[4]. Hence, this indicates without *Strotas* there will be no formation or assimilation of any *Dhatu*, and thereby no tissue will be formed, metabolized, or secreted^[5]. The main characteristic feature of *Strotas* is that they are the channels that allow permeability, transformation, and transportation of *Dhatu* from one place to another. Alongwith the channels for transportation, *Acharya Sushrut* mentioned *Nishchavan Kriya* i.e., oozing within the *Strotas*.

Acharya further mentioned other features of *Strotas*:

- They have the same color as the color of the *Dhatu* they are transporting or transforming.
- They are transporting *Dhatu* from one place to another and are not meant for *Sthir Dhatu*. Also, the *Strotas* are channels where one *Dhatu* transforms into the next *Dhatu*^[6].
- The *Strotas* are the spaces having *Akash Mahabhoot* predominantly while the rest of the other *Mahabhoot* are present in *Gudh Roop*.
- As per shape, and size, the *Strotas* can be *Sukshma, Golakar, Pratan, Vrit,* etc^[7].

Moolasthan: According to *Acharya Chakarpani*, *Moolasthan* is also described as *Prabhavsthan* i.e., the anatomical seat of *Strotas* from where disease arises.

Anatomical exploration of Moolsthan of Aanvah Strotas:

1. Amashya:

- *Amashya* is defined as a place where food is being digested^[8], indicating the stomach where the first digestion of food takes place.
- As per surface anatomy, *Acharya Charak* mentioned *Amasya* lies in between the umbilicus and breast^[9].
- As per the surface anatomy of the stomach, the gastroesophageal junction lies left to the midline, posterior to the left seventh costal cartilage, at the T₁₂ level. The stomach lies curved within the left hypochondriac region and epigastric region. Although when distended it may reach the umbilical area^[10].
- Physiologically, the main function of the stomach involves mechanical and chemical digestion where gastric juice and various enzymes convert food into partially digested chime termed *Aam* (partially digested food) in *Ayurveda*.
- The *Amla Prapakv* stage during digestion occurs due to the predominance of *Pitta Dosha* representing gastric acid and gastric enzymes in the stomach which are responsible for the chemical diges-

tion of the food. Thereby, here consistency of the food converts from solid to liquid or paste.

- The word *Ashya* in *Amashya* refers to *Aakash's* predominant empty spaces meant for occupancy and created by *Vayu*.

Thereby *Ashya* can be more correlated to the stomach in contemporary science which is a sac-like organ. In the stomach, food is churned with the help of its strong muscular walls for 3-4 hours and emptied slowly into the small intestine. So, the stomach holds the food and also serves as the mixer and grinder of food.

2. *Aanvah Dhamniyan*^[11]:

- *Dhamani* is defined as anatomical structures in which pulsation or *Dhaman Kriya* occurs^[12]. The pulsations refer to *Spandhan Kriya* in these structures. At the pyloric end, there is a pyloric sphincter that allows the partially digested chyme to enter the small intestine in small amounts and that is too slow^[13]. Here small intestine allows food movements by following movements:
- Peristalsis: It is wavelike series of muscular contractions. Initially, longitudinal muscle contraction is followed by circular muscle contraction allowing chyme to move forward^[14].
- Segmentation: It is the localized contraction of circular smooth muscle allowing the chyme to move back and forth for closer contact of chyme to the intestinal wall.
- Pendular movement: It is alternating contraction and relaxation of longitudinal muscles causing a portion of the small intestine to shorten and lengthen to allow mixing of chyme with digestive juices.

All these movements are rhythmic or *Spandhan* movements thereby suggesting the small intestine be correlated to *Aanvah Dhamani*.

DISCUSSION

In *Ayurveda*, the *Strotas* are used for macro as well as micro transportation systems for various components like *Dosha*, *Dhatu*, and *Mala*. Along with transportation *Strotas* are also responsible for the transformation of these components.

The physiological functioning of *Strotas* depends on *Strotasmool*. Every *Strotasmool* is constituted of two components – a reservoir source for collection or generation and other acts as disposing of one. Amongst all the mentioned *Strotas*, *Aanvah Strotas* are defined as *Strotas* responsible for transforming the ingested food into nutrition required at the cellular level. It also transports nutrition to each cell of the body. The *Strotasmool* of *Aanvah Strotas* is *Amashya*, *Vamparshwa*, and *Aanvah Dhamniyan*.

On the basis of similar physiology, the term *Amashya* can be correlated to the stomach where the undigested food termed chyme is stored for a few hours. Here it undergoes chemical and mechanical digestion converting solid food into liquid or paste form for easy further absorption. That indicates the transformation of food.

Acharya Charak mentioned *Vamparshwa* as *Strotasmool* which can be considered as the left lateral aspect of the abdominal cavity or precisely can be correlated with the left hypochondriac region. As the stomach occupies the major part of the left hypochondriac region, *Vamparshwa* can be correlated to the stomach. Also, on the occurrence of any pathology in *Aanvah Strotas*, the symptoms associated are observed in this region itself. Hence it is considered as *Strotasmool* of *Aanvah Strotas*.

Acharya Sushrut mentioned *Aanvah Dhamniyan* as one of the *Strotasmool* of *Aanvah Strotas*. *Dhamniyan* is a comprehensive term related to tubular structures responsible for the transportation of materials. Generally, the word *Dhamnee* is used as a synonym for artery in contemporary sciences. Hence at times, *Aanvah Dhamniyan* can also be used to indicate blood vessels in the abdomen. But blood vessels only absorb the nutrients and don't cause any transportation or transformation of food. On the other hand, the transportation of food is facilitated by various muscular contractions (i.e., peristalsis, segmentation, and pendular movements) in the small intestine. The stomach empties itself, allowing the chyme to enter slowly into the small intestine along with mixing the bolus with the bile enzymes and pancreatic juices. The small intestine consists of three parts- duode-

num, ileum, and jejunum. In the duodenum further breakdown of food takes place, in the ileum and jejunum the nutrients are absorbed into the bloodstream. The left-over waste with the help of peristaltic movements enters the large intestine.

From the above discussion, it becomes clear that *Aanvah Dhamniyan* which are tubular structures responsible for the transportation of food thus are mentioned as *Strotasmool* of *Aanvah Strotas* should be correlated with the small intestine mentioned in contemporary sciences.

REFERENCES

1. Acharya Priy Vrat Sharma, Charaka Samhita, Vimans-thana, Chapter 5, Verse no.3. 2nd Edition, Delhi; Chowkhambha Sanskrit Pratisthan;2007:586
2. Acharya Priy Vrat Sharma, Charaka Samhita, Su-trasthana, Chapter 30, Verse no.12. 2nd Edition, Delhi; Chowkhambha Sanskrit Pratisthan;2007:445
3. Acharya Priy Vrat Sharma, Charaka Samhita, Vimans-thana, Chapter 5, Verse no.3. 2nd Edition, Delhi; Chowkhambha Sanskrit Pratisthan;2007:586
4. Vaidya Jadavji Trikamji Acharya, Susruta: Susruta Samhita: Nibandhasangraha Commentary by Sri Dalhanacharya: Sharirasthana; Chapter 9, Verse 13, Varanasi, Chaukhamba Surbharati Prakashan;2008:387
5. Acharya Priy Vrat Sharma, Charaka Samhita, Vimans-thana, Chapter 5, Verse no.3. 2nd Edition, Delhi; Chowkhambha Sanskrit Pratisthan;2007:586
6. Acharya Priy Vrat Sharma, Charaka Samhita, Vimans-thana, Chapter 5, Verse no.3. 2nd Edition, Delhi; Chowkhambha Sanskrit Pratisthan;2007:586
7. Acharya Priy Vrat Sharma, Charaka Samhita, Vimans-thana, Chapter 5, Verse no.24. 2nd Edition, Delhi; Chowkhambha Sanskrit Pratisthan;2007:592
8. Jadavji Trikamji Acharya, Samhita of Agnivesh elaborated Charak. By Charak & Dridhabala, with Ayurveda Dipika commentary, by Chakrapanidatta, Vimansthan, 5th Chapter, 7th verse, 2nd Edition, Varanasi, Chaukhamba Surbharati Prakashan;2005:250.
9. Acharya Priy Vrat Sharma, Charaka Samhita, Vimans-thana, Chapter 2, Verse no.17. 2nd Edition, Delhi; Chowkhambha Sanskrit Pratisthan;2007:565
10. Lawrence H. Bannister et al, Grey's Anatomy, 38th Edition, Melbourne, Churchill livingstone;1995:1753.
11. Acharya Priy Vrat sharma, Sushrut Samhita, Sharir Sthana, Chapter 9, Verse 12, 2nd Edition, Varanasi: Chaukhamba Publishers;2009:123
12. Acharya Priy Vrat Sharma, Charaka Samhita, Su-trasthana, Chapter 30, Verse no.12. 2nd Edition, Delhi; Chowkhambha Sanskrit Pratisthan;2007:444
13. Lawrence H. Bannister et al, Grey's Anatomy,38th Edition, Melbourne, Churchill livingstone;1995:1753
14. Lawrence H. Bannister et al, Grey's Anatomy,38th Edition, Melbourne, Churchill livingstone;1995:1760

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