



## REVIEW ARTICLE ON ANATOMICAL CONCEPT OF MOOLASTHANA OF RAKTAVAHA SROTAS

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### ABSTRACT

*Ayurveda* is a life science. *Ayurvedic* researchers could rule out the occurrence of *Srotas* throughout the human body. *Srotas* is the sole route that transfers *Dhatu* during metabolic change. According to certain authors, *Srotas* might be understood as a microvascular carrier that specializes in material exchange. These *Srotas* are overseen by *Vayu*, who utilizes all of the *Srotas* of the body to carry out the functional and physiological activities of the human body, without which human civilization would not exist. The acharyas described several synonyms for *Srotas*.

*Srotas* have their own *Moolasthan*, or root. *Chakrapani* defined *Moolasthan* of *Srotas* as *Prabhavasthan*, which refers to the anatomical seat of the respective *Srotas*, the primary site of pathological alterations, having diagnostic value, or being the focus of treatment.

**Keywords:** *Srotas, Moolasthan, Raktavaha, Dhamani.*

### INTRODUCTION

In recent years, we have invented numerous things in the medical area, such as new techniques, effective drugs, and innovative therapies. To understand how to cure a certain ailment, one must first understand the anatomy of the human body.

*Ayurveda* has eloquently portrayed the anatomy of the human body. However, unlike contemporary sophisticated technologies, *Ayurveda* has given graphic descriptions regarding the anatomy (*Rachana*) in terms of *Kala, Koshtha, Srotas, Dhamani, Dosha, Dhatu, Mala*, etc. The physiology and pathology concepts of the human body cannot be understood without the unique understanding of *Moolasthan* of *Srotas*. It will aid in the diagnosis of ailments and provide advice on suitable treatment to cure them. *Ayurvedacharya*, such as *Charaka, Sushruta*, and *Vagbhat*, have established criteria for diagnosing specific diseases based on *Doshas, Dhatu, Malas, Srotas*, and so on. Channels or pores that transport nutrients and provide nourishment to the body's *Dhatu*s, as well as *Vata, Pitta*, and *Kapha*.

According to *Vagbhat, Ashtanghridaya Sharirsthana* mentions two sorts of *Srotas*: *Abhyantar Srotas* and *Bahya Srotas*. *Charaka* defines 13 forms of *Srotas*, while *Sushruta* defines 12 types of *Yogavahi Srotas*. *Charaka* and *Vagbhat* identify *Yakrit* and *Pleeha* as the *Moolasthan* of the *Raktavaha Srotas*. According to *Sushrut*, the *Moolasthan* of *Raktavaha Srotas* is *Yakrit, Pleeha*, and *Raktavaha Dhamani*.

In *Vimanasthana* Chapter 5 (*Srotovimaniya Adhyaya*), *Acharyya Charaka* provides a detailed description of *Srotas*. However, in *Sutrasthana* Chapter 30 (*Arthedasamahamulia*), he provides a clear definition of *Srotas*, stating that *Sravanatsrotangi* refers to the organ which distinguish it from *Sira*, *Dhamani*. The number of *Srotas* is equal to the number of specific structures found in the body of *Purusha*.

The word "*Murtimanta*," which means "structural existence" in this context, is further clarified by *Chakrapani*. It refers to the structural organization's constraints in terms of quantity and non-determinacy.

A hollow channel, *Srotas* was defined by *Sushruta* as all the other than *Sira* and *Dhamani*, which originate in root space and spread throughout the body carrying certain entities.

Although *Vagbhat* agrees with *Charaka*, he believes that *Dhamani* and *Sira* are only altered versions of *Srotas*. The *Srotas* are referred to by *Vagbhat* as *Jivita*, *Ayyantana*, A canal is referred to as *Srotas*. It comes from the root. As stated by *Charaka*, "*Sravanatrotamsi*" refers to the framework in which *Sravanam* occurs.

In ancient Indian literature, the term "*Moola*" has various meanings. The term "*Karan*" or "*Adhara*" refers to rationale or base, as used by *Acharya Charaka*. A tracker, director, or prob is how the word "*Moola*" is employed in *Sushrut Samhita* and *Ashtanng Hridaya*. *Moolasthan*, in general, refers to *Utpattisthana* (the place where *Dhatu* and *Mala* originated), *Sangrahassthan* (the seat of storage), *Naidaniksthan* (the significance of diagnosis), and *Chikitsatmaksthan* (the significance of treatment) are each related term.

## AIMS & OBJECTIVE

To explore the anatomical aspects of *Raktavaha Srotas Moolasthan* using *Ayurveda* and modern science, which can aid in the diagnosis and treatment of a variety of ailments.

## MATERIALS & METHODS

A detailed literary examination of the *Sharir Rachanatmak* aspect of *Raktavaha SrotasMoolasthan* was conducted using *Ayurvedic* and modern science books.

## OBSERVATIONS & DISCUSSION

As stated in *Charak Visvanathan* Chapter 5, the channel is our *Srotas*, which bring *Rakta* (blood) to the system and its dissemination throughout the entire body.

The *Rachana Sharir* (Anatomy) of the *Raktavaha Srotas* is determined by taking into account their *Moolasthan*. While *Yakrit* (liver) and *Pleeha* (spleen) were regarded as such by both *Charaka* and *Vagbhata*, *Sushrut* refers to *Yakrit*, *Pleeha*, and *Raktavahhi Dhamani* as *Moolasthan*. The *Raktavahi Dhamanis* are blood vessels, which include veins, arteries, and capillaries. The terms *Pleeha* (the Spleen) and *Yakrit* (the Liver) are not well defined in *Ayurveda*.

The liver is composed of a network of blood arteries and liver cells known as hepatocytes. Each of the many lobes that make up the liver is composed of segments called lobules. Every lobule resembles a honeycomb structure. The cells are organized into various plates. With a central vein, each plate has a thickness of one cell. Bile canaliculi are found in between the cells. Each lobule is enclosed by a portal vein and a tributary bile duct. The sinusoid situated between the plates receives blood from a branch of the portal vein and a branch of the hepatic

artery of the portal triad. Endothelial cells form the lining of sinusoids. A few macrophage cells called Kupffer cells can be seen between the endothelial cells. The perisinusoidal space, also known as the Disse space, surrounds sinusoids and includes cells that store vitamin A. Hepatic artery, hepatic bile duct, portal vein, and lymphatic channel.

The hepatic sinusoidal network, which drains to the hepatic veins, which drain to the inferior vena cava, supplies the liver with 20% and 80% of its blood supply, respectively.

The spleen is a lymphatic organ. The spleen has various functions in the body. It works as a blood filter as part of the immune system. The spleen recycles old red blood cells while also storing platelets and white blood cells. The spleen's microstructure comprises of red and white pulp. Red pulp contains splenic cords surrounded by sinusoids, while white pulp contains lymphoid aggregations with an eccentric central artery. The spleen has a thick capsule that sends septa into its material. The white pulp is an accumulation of lymphocytes around the arteries. The periarterial lymphatic sheath is composed of T lymphocytes. In some regions, it develops lymphatic nodules with germinal centres known as Malpighian bodies.

B lymphocytes are present in them. The majority of the spleen is made up of red pulp. It is composed of lymphocytes that are positioned along the sinusoids in the form of branching and anastomosing cords. The pulp's central artery penetrates the red pulp and splits into penicilli, which are straight vessels. Then, a sheath of macrophages envelops it, giving it the name "ellipsoid" and its narrow lumen. It continues to dilate, forming an ampulla, and blood enters the red pulp's sinusoids in two different routes. In closed circulation theory, blood enters the sinusoids directly from the ampulla. In the open circulation idea, blood exits capillaries between the cords and enters the sinusoids. The splenic artery serves as the spleen's blood supply. It is a branch of the celiac trunk, which is the primary branch of the abdominal aorta. The splenic vein drains the spleen.

## CONCLUSION

The *Srotas* are structurally hollow channels that emerge from the root area and extend throughout the body, serving as a delivery mechanism for the body's demand for nutrients. We can compare the hemopoietic system to the *Raktavaha Srotas* from its *Utpattisthana*. The liver and spleen are known to function as blood reserves from the *Sangrahassthana*. The body's circulatory system and the portal system can both be compared to the *Vahansthana* and *Moolasthana*, respectively. Based on the former, a physician can easily diagnose a patient and provide the appropriate therapy. We may conclude that the *Raktavaha Srotas* is the entire circulatory system, consisting primarily of the liver and spleen.

## REFERENCES

1. Sushrutasmhita (with English translation Dalhana's commentary along with Critical Notes.) Volume 2 (Nidan, Sharir, chikitsa) 9th chapter, Sharirasthan in Sharma PV. Chaukhambha Visvabharati oriental publishers and distributors. Edition: reprint 2013, p.g.222.
2. Astanga Samgraha of Vagbhat (text, English translation, Notes, indices etc) volume 2 (Nidan, Sharir, Chikitsa) in prof. Murthy Srikannta K.R, chaukhambha Orientalia, fifth edition 2005, 6th chapter, p.g.79-80.
3. Agnivesha, Arthedasmahamuliya 30th chapter, sutrasthan in Sharma RK and Dash.B Charakasamhita (with English translation and critical exposition based on Chakrapani Datta's Ayurveda Dipika) Volume 1 (Sutrasthan), Chowkhambha Sanskrit Series office, Varanasi, Edition: Reprint, 2016, p.g.595-596.

4. Agniveshha, Srotasam Vimana 5th chapter, Vimansthan in Sharma RK and Dash. B Charaka Samhita (with English translation and critical exposition based on Chakrapanni Datta's Ayurveda Dipika) volume 2 (Sharir, Nidan, Chikitsa), Chowkhambha Sanskrit series office, Varanasi, Edition: reprint, 2016, p.g.171-172.
5. Agniveshha, Srotasam Vimana 5th chapter, Vimansthan in Sharma RK and Dash. B Charaka Samhita (with English translation and critical exposition based on Chakrapanni Datta's Ayurveda Dipika) volume 2 (Sharir, Nidan, Chikitsa), Chowkhambha Sanskrit series office, Varanasi, Edition: reprint, 2016, p.g.173.
6. Agniveshha, Srotasam Vimana 5th chapter, Vimansthan in Sharma RK and Dash. B Charaka Samhita (with English translation and critical exposition based on Chakrapanni Datta's Ayurveda Dipika) volume 2 (Sharir, Nidan, Chikitsa), Chowkhambha Sanskrit series office, Varanasi, Edition: reprint, 2016, p.g.180.
7. Agniveshha, Srotasam Vimana 5th chapter, Vimansthan in Sharma RK and Dash. B Charaka Samhita (with English translation and critical exposition based on Chakrapanni Datta's Ayurveda Dipika) volume 2 (Sharir, Nidan, Chikitsa), Chowkhambha Sanskrit series office, Varanasi, Edition: reprint, 2016, p.g.178.
8. Histology Practical manual, 4th Edition, Author-Balakrishna Shetty, by Jaypee publication, p.g.no.56 & 102.