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## Etiopathological Study of *Srotas Sharir* – A Conceptual Study

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### ABSTRACT

The living body is the result of the aggregation of innumerable structures called '*Srotas*'. Actually, *Srotas* is a channel. The term *Srotas* is derived from the root word '*Susravano*' means, which exude, ooze, filter, and permeate. *Srotas* performs such functions, which help to nourish the entire body. Any disturbance at the level of *Srotas* leads to the genesis of diseases. For the manifestation of the disease, there must be *Srotodusti* in *Sthansmsryavastha*. So knowledge of *Srotas* and factors, which influence the integrity of *Srotamsi* are important to gain knowledge of prognosis of disease as well as to treat the root cause of the disease.

### KEYWORDS

*Srotas*, *Srotodushti*, *Srotovaigunya*, *Khavaigunya*



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## INTRODUCTION

The human body is made up of numerous *Parmanu* (*Dhatu Paramanus*), which are living entities<sup>1</sup>. They are being constantly formed, destroyed and reformed with appropriate material derived from *Poshakadravyas* (nutrient substances) from the time of conception till death<sup>2</sup>. The substances to and from those *Parmanu* need a definite path known as *Srotas*. *Acharya Charak* says - “No structure in the body can grow and develop or waste and atrophy, independent of *Srotas* that transport *Dhatu*s, which latter are constantly subjected to (metabolic) transformations”<sup>3</sup>. These structures are not only important for normal physiology but pathological changes in the human body can also develop after vitiation of *Srotas*. So the knowledge about factors influencing the integrity of *Srotas* is important to understand the nature of the disease and its management.

## MATERIALS AND METHODS

The word *Srotas* etymologically derived from the Sanskrit root “स्रु स्रवणे” *Dhatu* which means, to exude; to ooze; to filter; to permeate; to flow, to move, etc<sup>4</sup>. According to *Acharya Charak* *Srotas* as the channels of circulation, which carry the transforming (*Parinamamapadyamananam*) tissues from one place to another place. They work as communicating channels especially for nutrients/temporary tissues (*Asthayi Dhatu*), which are to be utilized for the formation of

permanent *Dhatu*s (*Sthayi Dhatu*)<sup>5</sup>. They also provide path for *Prana*, *Udaka*, *Anna*, *Tridosh*, *Trimala*, and *Chetnayuktmana*<sup>6</sup>.

### Synonyms of *Srotas*: -

In *Ayurveda*, *Srotas* has an important place in *Samhitas*. The profounder of *Ayurveda* gave a unique concept of *Srotas*, in which the body of human is nothing but only the combination of *Srotas*<sup>7</sup>. The study of terms used to attribute thing gives information about its concept is a well-known fact. *Acharya Charak* has mentioned the various synonyms of *Srotas*. Therefore the few of the terms commonly used for *Srotas* in *Ayurveda* are given below.

***Srotamsi***: It’s meaning is to flow, to move, stands for channels, openings, meatus through which something flows.

***Sira***: *Sira* is like of *Pratan* [tendrils], which is originated from *Nabhi*. It’s meaning is to slide. *Acharya Charak* has described is as “*Saranat Sira*”.

***Dhamani***: *Dhamani* is pipe or tubular vessel or canal of the human body starting from the heart or from the naval on supported to carry the *Rasa*. The term *Dhamani* is used to described arteries and nerves.

***Rasavahini* and *Rasayani***: *Rasavahini* and *Rasayani* are that which bears *Rasa* or food juice. The term *Rasayani* is used for lymphatic channels while *Rasavahini* is used to describe capillaries.

***Nadi***: *Nadi* is any type of pipe or tubular structure in which something moves. *Nadi* word in *Ayurveda Samhita* is used to describe nerve,



vessel, duct, cord, *Dhamani*, *Sira*, *Tantuki*, and *Dhardi* in different contexts.

**Pantha - Panthan:** These words are used to go, move, passage or *Marga*.

**Margas:** This means pathways or tracts.

**Sarirachidras:** means body orifices or openings.

**Samvrtasamvtani:** means duct open at one end or open at both ends.

**Asaya:** *Acharya Sushruta* used this term in context with different organs located in the thorax and abdominal cavities such as - *Amashaya*, *Pakwashaya*, *Mutraashaya*, and *Garbhashaya*, etc.

**Niketa:** This word has a meaning of house, habitation, mansion, state of being *Ketana*,

temple, the seat of one element of the body, or resorts.

### Main Srotas and their Moola

*Chakrapani* has described *Moola am* as- "*Moolamiti Prabhava Sthanam*", meaning thereby that *Moola* of a *Srotas* is the anatomical seat of the respective *Srotas*, the main seat of the pathology of that channel and the principal seat of manifestation of disease<sup>8</sup>. The *Moola Sthana* or the source is so considered that without which the origin, maintenance and destruction of the specific carrier of the body nutrient cannot be possible and the place which controls the entire functional dealings and processes of that specific carrier.(Table no.1)

**Table 1** *Srotas* and their *Moola* according to brahatrayee<sup>9,10</sup>:-

S.No	Name of <i>Srotas</i>	<i>Moola</i> according to brahatrayee		
		CHARAKA	SUSHRUTA	VAGBHATTA
1	<i>Pranvaha Srotas</i>	<i>Hridaya</i> and <i>Maha Srotas</i>	<i>Hridaya</i> and <i>Rasavahi Dhamanis</i>	<i>Hridaya</i> and <i>Maha Srotas</i>
2	<i>Udakavaha Srotas</i>	<i>Talu</i> and <i>Kloma</i>	<i>Talu</i> and <i>Kloma</i>	<i>Talu</i> and <i>Kloma</i>
3	<i>Annavaha Srotas</i>	<i>Amashaya</i> and <i>Vamaparshva</i>	<i>Amashaya</i> and <i>Annavahi Dhamanis</i>	<i>Amashaya</i> and <i>Vamaparshva</i>
4	<i>Rasavaha Srotas</i>	<i>Hridaya</i> and <i>Ten Dhamanis</i>	<i>Hridaya</i> and <i>Rasavahi Dhamanis</i>	<i>Hridaya</i> and <i>Ten Dhamanis</i>
5	<i>Raktavaha Srotas</i>	<i>Yakrit</i> and <i>Pleeha</i>	<i>Yakrit</i> , <i>Pleeha</i> and <i>Raktavahi Dhamanis</i>	<i>Yakrit</i> and <i>Pleeha</i>
6	<i>Mamsavaha Srotas</i>	<i>Snayu</i> and <i>Twacha</i>	<i>Snayu</i> , <i>Twacha</i> and <i>Raktavahi Dhamanis</i>	<i>Snayu</i> and <i>Twacha</i>
7	<i>Medovaha Srotas</i>	<i>Vrikka</i> and <i>Vapavahan</i>	<i>Vrikka</i> and <i>Kati</i>	<i>Vrikka</i> and <i>Mamsa</i>
8	<i>Asthivaha Srotas</i>	<i>Meda</i> and <i>Jaghana Pradesh</i>	—	<i>Meda</i> and <i>Jaghana Pradesh</i>
9	<i>Majjavaha Srotas</i>	<i>Asthi</i> and <i>Sandhi</i>	—	<i>Asthi</i> and <i>Parva</i>
10	<i>Shukravaha Srotas</i>	<i>Vrishan</i> and <i>Shepha</i>	<i>Vrishana</i> and <i>Stana</i>	<i>Stana</i> , <i>Mushka</i> and <i>Majja</i>
11	<i>Mutravaha Srotas</i>	<i>Basti</i> and <i>Vankshana</i>	<i>Basti</i> and <i>Mendra</i>	<i>Basti</i> and <i>Vankshana</i>
12	<i>Purishvaha Srotas</i>	<i>Pakwashaya</i> and <i>Sthul Guda</i>	<i>Pakwashaya</i> and <i>Guda</i>	<i>Pakwashaya</i> and <i>Sthulantra</i>
	<i>Swedavaha Srotas</i>	<i>Meda</i> and <i>Lomakoopa</i>	—	<i>Meda</i> and <i>Lomakoopa</i>
14	<i>Artavavaha Srotas</i>	—	<i>Garbhashaya</i> and <i>Artavavahini Dhamanis</i>	—



**The Shape of Srotas:** - According to *Acharya Charak*, *Srotas* are *vritt* (cylindrical), either *Sthula* (gross or macroscopic) or *Anu* (microscopic), *Dirgha* (large) or *Pratana* (reticulated) in shape and have a color similar to that of the *Dhatu*, they transport.

*Acharya Sushruta* has claimed that *Dhamanis* has *Khani* in their wall, very much like the minute passage present in a lotus stem through which *rasa* is supplied to all parts of the body<sup>11</sup>. *Vagbhata* has compared the *Srotas* as fine passage and pores present in the lotus stem. He has observed that *rasa* spreads throughout the body through *Dwars* (pores) of *Srotamsi*, which are distributed in the body like the minute channels present in the lotus stem.

**The Concept of Srotodusti / Kha vaigunya:** - According to Ayurveda there are two types of etiopathological factors responsible for morbidity in the human body; systemic and local<sup>12</sup>. The systemic factors (*triDoshaiik* etiology) are responsible for disease along with local factors (*Kha Vaigunya*). The systemic factor (*vitiated Doshas*) moves throughout the body in the different directions and is obstructed in the *Srotas*, where the loss of integrity of *Srotamsi* (local factor) occur, called "*Kha vaiguna*" which leads to the establishment of the actual disease process<sup>13</sup>. *Acharya Charak* has described

four kinds of abnormalities in the functioning of *Srotas*, called "*SROTODUSTI*". They are *Atipravritti*, *Sanga*, *Siragranthi*, and *VimargaGamana*<sup>14</sup>.

**Atipravritti:** Increased activity of the one or more organs of the system. Increase in the rate of the respiration and heart beat; increased peristalsis of the intestines, increased movements of the various parts of the body, increased production of urine, feces, and sweat, increased formation of *rasa* and other *Dhatu*s. It is mostly a functional abnormality but may rarely be structural also.

**Sanga:** It is also called *Srotorodha*, it is the opposite of *Atipravrtti*. In this, there will be decrease in the activity of one or more organs of the system, or obstruction to the *Srotas* (Channels, pores) leading to increase in shape, size and other qualities of the organ system. Obstruction to the pores of sweat in fever, accumulation of fluid in the abdomen in cases of *Udara roga* as a result of obstruction of channels of *Annavaha Srotas*; accumulation of fluid under the skin causing sotha (generalized Anasarca) due to obstruction of the *Rasavaha Srotas*; obstruction to the channels of the *Mutravaha Srotas* causing scanty urine, accumulation of urine due to obstruction of its passage causing enlargement of the urinary bladder and pain, in left ventricular



failure, decrease heart rate and Increase heart size due to obstruction of *Rasavaha Srotas*, are some examples for this kind of abnormality. It is a change both in structure and functions: both physiological and pathological conditions e.g. left Ventricular Failure etc.

**Sira-Granthi or Sroto-Granthi:** to be more appropriate and specific is the third kind of abnormality, which is characterized by the formation of thickening, new growth or tumors. The *Dhatu Pramanus* (tissue cells) undergo an increase in their size, shape and other qualities. Increase in the size of the organs of the *Srotas* system or development of new growth over them may take place. Diseases such as *Vidradhi* (abscess); *Granthi* (benign tumors), *Arbuda* (malignant tumors), *Valmika* (actinomycosis), *Slipada* (Filariasis), etc, are the best examples of this kind of abnormality.

**Vimarga-Gamana:** *Vimarga-Gamana* meaning movement in the wrong direction or passage is the fourth kind of *Srotodusti*. Movement applies to the functions of the organs or to the materials that are handled by them. During health, both these have a fixed path and have a definite direction of movement. Any deviation in these is to be called as *Vimarga Gamana*. Food taken into the mouth is moved to the downward direction to the stomach and from there to

the intestines. In the disease, *chardi* (vomiting) food is moved in upward direction from the stomach; intestines and this abnormal movement is *vimarga gaman* in the *Annavaha Srotas*; similarly *Purischardi* (fecal vomiting) fecal matter coming out through urethra or through fistula in the rectum; bleeding through the pores of the skin, nose, eye, ears, urethra regurgitation of some valvular defect in the heart, etc. are some others examples for this type of *Srotodusti*/abnormality.

These four kinds of *Srotodusti* (abnormalities of the *Srotas* systems) may occur either individually or in combination.

## DISCUSSION

The *Dhatus* (gross tissues) of the body are made up of innumerable *Dhatu Paramanus*. All the organs of the body are nothing but a collection of the *Dhatu Paramanus*. Each *Dhatu Parmanu* take nutrition and removes their waste through their minute conduits. These channels are specific for their respected parmanu. The ultimate source of life (*Prana, Anna, and Udak*), the structural unit of the body (*Sapta Dhatu*), their waste (three mala) are transported through there respected *Srotas* as described in *Samhitas* but *Doshas* (*Sharirik* and *Mansik* both) and mana are also transported through them. Classical texts on Ayurveda, especially in



*Charaka Samhita*, the origin (*Moola*) and the symptomatology of pathological involvements of *Srotamsi* in *Nija* type of disease. While *Sushruta* has a clear approach towards Anatomy either in the definition of *Srotas* or definition of any *Srotas* with their *Moola* and characters of the *viddha* (acute injury) of the *Srotas*. The *Moola Sthana* of a *Srotas* can be considered as governing sites of that particular *Srotas* for proper maintenance of the corresponding *Dhatu* or it can also be considered that the main effect over the *Srotas* is first observed in the *Moola Sthana*. The *Srotas* in an abnormal condition not only deteriorates the state of *Dhatu*s but also causes abnormality in the functioning of nearby *Srotas* leading to a local disorder like *Pratisyaya* effects, nasal cavity, and pharynx, leading to *Kasa* and vice versa. The infection from there may enter the ear causing pain and deafness. If the infection enters the air sinuses it may cause severe headache.

## CONCLUSION

*Srotas* of the body comprise of channels of different kinds. They may be, *Sthula* or *Anu*, *Dirgha* or *Pratana* in shape and have a color similar to that of the *Dhatu*, they transport. In general usage, the term *Srotamsi* comprehends all channels – big

and small, perceptible and imperceptible. They are the transporting structures, through which the factors for *Prakopa* and shaman of *Doshas* are transported. Healthy *Srotas* perform their normal functions as a result body remains free from the diseases, on the other hand, vitiated *Srotas* are the cause of the development of diseases. Due to faulty lifestyle, the integrity of the *srotansi* gets impaired.

If the integrity of the *Srotansi* is impaired (i.e. *Khavaigunya*) both the *Sthayi* and *Asthayi Dhatu*s are involved; the morbidity spread by one *Dhatu* vitiating the other and one *Srotas* to other *Srotas*. *Khavaigunya* is an essential event for the formation of disease.



## REFERENCES

1. Agnivesh, Caraka Samhita, Sharir Sthan, 7/17, Prof. Priyavrat Sharma, Chaukhamba orientala, Varanasi, Reprint Ed. 2014.
2. Agnivesh, Caraka Samhita, Vimaan Sthan, 5/3, Prof. Priyavrat Sharma, Chaukhamba orientala, Varanasi, Reprint Ed. 2014.
3. Agnivesh, Caraka Samhita, Vimaan Sthan, 5/3, Prof. Priyavrat Sharma, Chaukhamba orientala, Varanasi, Reprint Ed. 2014.
4. C. Dwarakanath, Introduction to Kayachikitsa, Chapter 21 page 372, Para 1, Chaukhamba orientala, Varanasi, Ed. 1996.
5. Agnivesh, Caraka Samhita, Vimaan Sthan, 5/3, Vd. Satyanarayan Shastri, Chaukhamba vishwabharti, Varanasi, Reprint Ed. 2005.
6. Agnivesh, Caraka Samhita, Vimaan Sthan, 5/7, Prof. Priyavrat Sharma, Chaukhamba orientala, Varanasi, Reprint Ed. 2014.
7. Agnivesh, Caraka Samhita, Vimaan Sthan, 5/4, Vd. Jadavaji Trikamji Acharya, Chaukhamba orientala, Varanasi, Reprint Ed. 2015.
8. Agnivesh, Caraka Samhita, Chakrpani teeka, Vimaan Sthan, 5/8, Vd. Jadavaji Trikamji Acharya, Chaukhamba orientala, Varanasi, Reprint Ed. 2015.
9. Agnivesh, Caraka Samhita, Vimaan Sthan, 5/8, Prof. Priyavrat Sharma, Chaukhamba Joriantala, Varanasi, Reprint Ed. 2014.
10. Sushrut, Sushrut Samhita, Sharir Sthan, 9/12, Dr. Ambikadutta Shastri, Chaukhamba Sanskrit Samsthan, Varanasi, Reprint Ed. 2009.
11. Sushrut, Sushrut Samhita, Sharir Sthan, 9/10, Dr. Ambikadutta Shastri, Chaukhamba Sanskrit Samsthan, Varanasi, Reprint Ed. 2009.
12. Agnivesh, Caraka Samhita, Nidan Sthan, 1/3, Vd. Kashinath Pandey & Vd. Gorakhnath Chaturvedi, Chaukhamba vishwabharti, Varanasi, Reprint Ed. 2005.
13. Sushrut, Sushrut Samhita, Sharir Sthan, 24/19, Dr. Ambikadutta Shastri, Chaukhamba Sanskrit Samsthan, Varanasi, Reprint Ed. 2009.
14. Agnivesh, Caraka Samhita, Vimaan Sthan, 5/24, Prof. Priyavrat Sharma, Chaukhamba orientala, Varanasi, Reprint Ed. 2014.