

Research Article

Conceptual Study of Srotas (Body Channels) & Medicinal Plants Acting on Them

Prahalad Sahai Sharma¹, Kamini Kaushal²

¹Associate Professor, ²Principal, Govt. Ayurveda, Yoga & Prakrut Chikitsa Mahavidhyalaya, Jaipur, Rajasthan, India.
DOI: <https://doi.org/10.24321/2394.6547.202204>

I N F O

Corresponding Author:

Kamini Kaushal, Principal, Govt. Ayurveda, Yoga & Prakrut Chikitsa Mahavidhyalaya, Jaipur, Rajasthan, India.

E-mail Id:

drkaushal2002@yahoo.com

Orcid Id:

<https://orcid.org/0000-0001-7638-2170>

How to cite this article:

Sharma PS, Kaushal K. Conceptual Study of Srotas (Body Channels) & Medicinal Plants Acting on Them. J Adv Res Ayur Yoga Unani Sidd Homeo. 2022;9(3&4):6-9.

Date of Submission: 2022-11-01

Date of Acceptance: 2022-11-28

A B S T R A C T

Srotas (body channels) are said to be a significant component of the body and are responsible of Vahana (transferring) *Dosha*, *Dhatu*, etc. *Srotomaya* (made of *Srotas*) is regarded as the full body. These *Srotas* have strong ties to each individual *moolasthan*. Due to their involvement in the development, inspection, and regulation of the *Bhavapadartha* flowing through the *Srotas*, these *Moolsthana* are crucial from a therapeutic and prognosis perspective. *Srotas* nourishes the body, keeps the digestive and metabolic processes in balance, and restores the cleansing process. Disturbances in the transportation process are among the anomalies in *Srotas*. Clinically calming *Srotas* vitiation can be used to manage pathological disorders linked to anomalies in *Srotas*. The concept of *Srotas* is explained in this article in light of ayurvedic principles.

Keywords: Ayurveda, *Srotas*, Body Channels

Introduction

Ayurveda is the first medical system to announce and describe the existence of innumerable *Srotas*, within the human body. The word “*Srotas*” comes from the root “*Susravana*,” which also means to exude, ooze, flow, or filter. *Srotas* are those through which the materials in the body flow or from which *sravana*, or flow of the body substances, occurs.¹ They serve as the body’s “channels” or “pathways,” carrying nutrients and other elements from one part of the body to another in order to produce tissue. In other words, these *Srotas* serve as a channel for the movement of materials from the site of production to the location of need.² According to *Sushruta*, those which carry or transport materials like *Prana* (Life element), *Anna* (Food), *Vari* (Water), *Mamsa*, *Meda* *Dhatu* are called *Srotas*.³ *Charaka* opines that there

will be „*Parinamanapadyamananam*“ meaning undergoing transformation indicates that the channel carry such of the tissue elements as are undergoing transformation from their previous states.⁴ Only those mobile *dhatu*s are conveyed by the channels of circulation; they do not carry *sthira* (Stable) *dhatu*s. *Srotas* are the intricate nervous system routes or channels that *Vayu* controls in order to carry out the physiological and functional functions of the human body. This review article will highlight, evaluate, elaborate and discuss about *Srotas* (Body Channels).

Material & Methods

Material related to *Srotas* is collected from Ayurvedic text including *Bahatriye*, *Laghutrye* and text book of modern medicine respectively. The index, non-index medical journals has also referred to collect information of relevant topic.

Conceptual Study

Synonyms of Srotas

The word "srotas" is employed as a general phrase to indicate all macro and micro channels and pathways operating in the living organism, according to an analysis of several of its significant synonyms. Following are the synonyms- *Sira* (vein), *Dhamani* (arteries), *Rasayani* (lymphatics), *Rasavahini* (capillaries), *Nadi* (Tubular conduits), *Pantha* (passages), *Sthana* (sites, locus), *Ashayas* (repositories), *Niketa* (resorts), *Marga* (pathways, tracts), *Samvrita-asamvrita* (open or blind passages), *Sharir chidra* (body orifices, openings).⁵

Classification of Srotas

Sukshma (Subtle)- Innumerable - As many as the life factor operating in the life process. *Sthula* (gross) - Numerable - *Bahirmukha* (Aperture or natural opening)- 9 in male, 11 in females, *Antarmukha* – 13^{6,7}

Characterization of Srotas⁸

Colour- Colour of *srotas* is similar to that of dhatu they carry.

Size- Anu (atomic in size or microscopic), *Sthula* (Gross or macroscopic), Shape - *Vritta* (cylindrical), *Dirgha* (long), *Pratana* (reticulated).

Moolam of Srotas:

According to Chakarpani, the Moola of the *Srotas* is the anatomical seat of each *Srota*, the primary site of that channel's pathology, or the main site of disease manifestation. The reason for *Srotas* morbidity and the sickness that results from it have also been identified. A clinician may perform a clinical examination of the patient's set of channels in order to make a diagnosis of the condition.⁹

Table I. Name of Srotas with their Moola

	No Name of Srotas	(Acc to Charak) ¹⁰	(Acc to Suśruta) ¹¹
1.	<i>Prāṇvaha</i>	<i>Hṛdya, Maha Srotas</i>	<i>Hṛdya, Rasvahini Dhamanī</i>
2.	<i>Udakavaha</i>	<i>Tālu, .Klom (oropharynx)</i>	<i>Tālu, Klom</i>
3.	<i>Annava</i>	<i>Āmāśaya, Vamparshwa</i>	<i>Āmāśaya, Annava Dhamanī</i>
4.	<i>Rasavaha</i>	<i>Hṛdya (Heart), Ten Dhamanī</i>	<i>Hṛdya, Rasvaha Dhamanī</i>
5.	<i>Raktavaha</i>	<i>Yakṛt, Plīhā</i>	<i>Yakṛt, Plīhā, Raktvaha Dhamanī</i>

6.	<i>Māmsavaha</i>	<i>Twacha (Skin), Snāyu</i>	<i>Tvacā, Snāyu, Raktavaha Dhamanī</i>
7.	<i>Medovaha</i>	<i>Vṛkka, Vapavahan</i>	<i>Vṛkka, Kaṭī</i>
8.	<i>Asthivaha</i>	<i>Meda, Jaghan</i>	Not consider
9.	<i>Majjāvaha</i>	<i>Asthi, sandhi</i>	Not consider
10.	<i>Śukravaha</i>	<i>Vṛṣaṇa, Śepha (Pudendum)</i>	<i>Vṛṣaṇa, Stana</i>
11.	<i>Mūtravaha</i>	<i>Vasti, Vankshaṇ</i>	<i>Vasti, Medhra</i>
12.	<i>Puriṣavaha</i>	<i>Pakvāśya, Gudā</i>	<i>Pakvāśya, Gudā</i>
13.	<i>Svedavaha</i>	-	Not consider
14.	<i>Ārtavavaha</i>	-	<i>Garbhāśaya, Ārtavavaha dhamanī</i>
15.	<i>Manovaha</i>	<i>Hṛdya (Heart and Brain)</i>	

Acharya Charak has described thirteen gross channels, seven for seven dhatu, three for mala and two for intake of nutrient substances like food, water, air and one for regulation of water.¹² *Manasika guna and Atma* which are beyond from the sense of perception, the entire sentient body is their vehicle and field of operation. Sushruta has described eleven pairs of *srotas* same as Charaka but he has left out *Asthivaha, Majjavaha and Svedavaha* and included *Artavavaha Srotas*. Sushruta has excluded *Dhamni and Sira* from purview of *Srotas*. Charak has described that they are spoken of *dhamani* because they pulsate, *sira* because they maintain the flow of *rasa - rakta*, as *srotamsi* because they permit oozing. C. Dwarikanath has explained that *Hridya (heart), dhamani (arteries), sira (veins) srotamsi* (capillaries) are the component of a single vascular system which regulate the proper flow of blood and nutrition supply to and clearance of waste products from *sthayi dhatu*.¹³ Charaka has described *srotas mula* or origin and symptomatology of pathological involvement of *srotamsi in nija* type of diseases (idiopathic or constitutional diseases as opposed to *aagantuja* or traumatic). While, Sushruta has described *srotamsi* in the context of injuries (*srotoviddha*) as may inflict on their *mula*. Thus, *Srotas* is a multi-meaning term referring to a range of structures, functions and concepts in different context. From extreme gross to most subtle the term *srotas* could refer to whole body as a single complex *srotas*, each gross physiological

system such as gastrointestinal system as one *srotas*, a single tubular structure like nephron, each single cell of the body or sub-cellular structures and membrane the receptor mechanisms and networks, pathways carrying emotions and *chetna*.¹⁴

Function of Srotas

Ayurvedic Acharyas have described that the entire range of life processes in health and disease depends on integrity of the *srotas* system.

1. *Srotas* are the inner transport system of the body which provides platform for activities of other important bio-factors like three dosha, the seven dhatus, the oja, the *agni*, thought and emotions etc.
2. Transformation (metabolism) of *poshya* dhatu occurs in *srotas*.
3. *Srotas* serves as conduit through which both *prasada* (nutrient) dhatu as well as mala dhatu (waste product or product of degradation) are transported, as structure through the pores of which nutrient and waste product pass to and from the *sthayi dhatu*.
4. All the dosha, dhatu and mala are dependent on *srotas* for their formation, transportation and destruction.^{15,16}

Srotodushti

Inappropriate eating habits and related activities are the causes of the doshas becoming vitiated. Diseases are one way in which this vitiation manifests itself. The same factors that generate *doshadushti* and *dhatudushti* also result in *srotodushti*, which is a vitiation of *Srotas*.

Srotodushti lakshanas - The main signs of the vitiation of the channels are 1) *Atipravrutti*: Increased flow or excess production of contents of the channel 2) *Sanga*: Obstruction or stagnation of the flow of content of the channel. 3) *Siragranthi*: Appearance of nodules in the channel 4) *Vimargagamana*: Diversion of the flow of the contents to an improper channel or flow in the path other than its own.¹⁷

Discussion

Srotas are important for each *Murthiman bhava* according to Ayurveda. *Srotas* are distinct from sira and dhamani, the channels that transport nutrients to the body's organs and are widely distributed throughout the body. Additionally, it transports waste products for the body to excrete. The physiological processes of the human body are impossible without *Srotas*. There are two *moolasthanas* in each *srotas*, and their job is to create the elements that flow through the *srotas*. *Sroto dushti* and *Srotosanga* are too responsible for the body's pathological changes. A healthy functioning of the *srotas* is essential for the correct growth of the human body since any imbalance in the *srotas* leads to sickness.

When doshas are aggravated in body, causes diseases. They lodged the channel (*Srotas*), ultimately various diseases arise. These aggravated doshas travel through the body, lodged in the site of abnormal channel where disease arises. Contaminated diet and regimen are blockage the *srotas* (channels). Removal of obstruction of channels is the only treatment. In the treatment of blockage of channels, purificatory and palliative treatments should be advocated along with psychic therapy in case of blockage of psychological channel. For example, some medicinal plants have anti-oxidant and anti-inflammatory effects on the life source channels (*Pranvahsrotas*) which cause alleviation of vata and kapha, which are hot in potency and which cause downward movement of vata are useful as medicines, drinks and food preparations for the patients suffering from the disease of which cause alleviation of vata and kapha, which are hot in potency and which cause downward movement of vata are useful as medicines, drinks and food preparations for the patients suffering from the disease. So the herbal drugs having properties of pacifying kapha and vata are used in the treatment, because these two are main dosha involved in its aetiopathogenesis. Some of these useful medicinal plants are. There are other sources/channels (*srotas*) here, but it is not possible to describe them in detail.

Table 2. Pranvahsrotas (Life Source Channels) & Useful Medicinal Plants

S. No.	Name of Medicinal Plant	S. No.	Name of Medicinal Plant	S.No.	Name of Medicinal Plant
1.	SHATI (Spiked ginger lily)	9.	AGURU (Indian Eagle wood)	16.	JEEVANTI (<i>Lepta denia reticulata</i>)
2.	<i>Shunthi</i> (<i>Zingiber officinale</i> Rosc.)	10.	PIPPALI (Indian long pepper Long pepper)	17.	SHIRISH (<i>Albizia lebeck</i>)
3.	PUSHKARMULA <i>Inularacemosa</i>	11.	CHANDA (<i>Angelica archangelica</i>)	18.	HARIDRA (<i>Curcuma longa</i>)
4.	ELA <i>Elettaria cardamomum</i>	12.	BHARANGI (<i>Clerodendrum serratum</i>)	19.	ANKOTA (<i>Alangium salvifolium</i>)

5.	HINGU (Asfoetida)	13.	SURASA (<i>Ocimum sanctum</i>)	20.	SHALLAKI (<i>Boswelliaserrata</i>)
6.	AMLA-VETASA (<i>Hippophaesalicifolia</i>)	14.	TAMLAKI (<i>Phyllanthuurinaria</i>)	21.	MARICH (<i>Piper nigrum</i>)
7.	VASA (<i>Adathoda vasica</i>)	15.	KANTAKARI (<i>Solanumxanthocarpum</i>)	22.	YASHTIMADHU (<i>Glycyrrhizaglabra</i>)
8.	TALISA (<i>Abis webbiana</i>)				

Conclusion

Srotas is merely a hollow channels or space. According to Charaka Acharya "*Srotomayamayampurusha*," i.e they have seen the body in the form of *Srotas*. The human body is made up by numerous and numerous *Srotas*. *Srotas* represent all macro and micro-level descriptions of exchange, movement, and excretion occurring within the human body. In order to study pathology and practise medicine, *srotas* and their *moolasthan* have been described. Knowing about *Srotas* and *Srotovaignunya* makes it easier to treat illnesses. As long as *Srotas* continue to function normally, the body will be disease-free.

Source of Funding: None

Conflicts of Interest: None

References

- <https://ayurpub.com/wp-content/uploads/2018/02/727-734.pdf>
- <https://www.easyayurveda.com/2016/06/02/srotas-body-channels-and-duct-systems-of-body/>
- <https://niimh.nic.in/ebooks/esushruta/?mod=read>
- <https://niimh.nic.in/ebooks/ecaraka/?mod=read>
- Agnivesha, *Srotasam Vimanam* 5th chapter, *vimana sthan* in Sharma RK and Dash B. *Charak samhita* (with English translation and critical exposition based on Chakrapani dutt's *Ayurveda dipika*) vol II, Chowkhambha Sanskrita Series, Varanasi, sixth Edition; 2000; p. 177.
- Susruta, *Sharir Sankhyavyakarana* 5th chapter, *sharirasthan* in Murthy Shrikant KR, *Susruta Samhita* Vol. I, English translation Chowkhambha orientalia, Varanasi, Reprint edition. 2008;81
- Samgraha A, *Siravibhag* 6th chapter, *sharirasthan* by Prof KR Srikantha Murthy. English translation Vol. II Chowkhambha orientalia, Varanasi, reprint edition; 2009;79-80.
- <https://www.easyayurveda.com/2016/06/02/srotas-body-channels-and-duct-systems-of-body/>
- Byadgi PS. Critical appraisal of Doshavaha *Srotas*. *Ayu*. doi:10.4103/0974-8520.108819. PMID: 23723638; PMCID: PMC3665105.
- Charak Samhitā -Vidyotini Hindi Commentry-Pt. Kashinath Shastri and G.N. Chaturvedi, Part 1st, Page No. 710-712. 2012;33(3):337-42.
- Suśruta Samhitā- Kaviraj Ambikadatta Shastri, part 1st *Chaukambha Sanskrit series*, Varanasi 14th edition-2001;96-97.
- Srotovijnaneeya adhyaya* 14th chapter in A textbook of *Ayurvedic Physiology* by Kotur SB and Kotur Shashikala, first edition; 2007;344.
- A reassessment of the concept of *kriyakala srotas*, chapter 21st, in *Introduction to kayachikitsa* by C. Dwarikanath, Chowkhambha orientalia, Varanasi, 3rd edition; 1996;381.
- Singh RH. Exploring Quantum logic in Ayurveda with special reference to *srotovijana* of Ayurveda, *Ayu Journal* 2009;30(4):360- 368.
- Agnivesha, *Rajayaksmachikitsa* 8th chapter, *chikitsa sthan* in Sharma RK and Dash B. *Charak samhita* (with English translation and critical exposition based on Chakrapani dutt's *Ayurveda dipika*) vol III, Chowkhambha Sanskrita Series, Varanasi, fourth Edition; 2000;371.
- Agnivesha, *Vividha Ashitapeetiya adhyaya* 28th chapter, *Sutrasthan* in Sharma RK and Dash B. *Charak samhita* (with English translation and critical exposition based on Chakrapani dutt's *Ayurveda dipika*) vol I, Chowkhambha Sanskrita Series, Varanasi, 7th Edition; 2001;572.
- <https://www.easyayurveda.com/2016/06/02/srotas-body-channels-and-duct-systems-of-body/>