



SIRA SHARIRA; ANATOMICAL AND PHYSIOLOGICAL VIEW AS PER AYURVEDA

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ABSTRACT

The ayurveda *Samhitas* contains huge information about the vessels of body which includes; *Sira* and *Dhamani*. *Sira* can be correlated with vessels that carry blood and perform many important functions inside the body. The knowledge about anatomical positioning of *Sira* helps to diagnose and treat diseases related to the vascular system. There are some *Sira* which should not be punctured and this procedure only allow in some specific *Sira* for therapeutic purpose. The vein and artery carry bloods from one place to another place as per modern science and *Siras* in some aspect can be correlated with vein and *Dhamanis* represents artery. *Sira* is thin blood vessels as compared to the *Dhamani*, other than this there are significant difference between *Sira* and *Dhamani*. Root of origin of *Siras* is umbilicus, after taking origin in the navel these *Siras* spread throughout the body and perform several physiological activities. Present article summarizes anatomical and physiological significance of *Sira* as per Ayurveda perspective.

KEYWORDS: Ayurveda, *Sira*, Vessels, Blood, *Dhamani*.

INTRODUCTION

Sushruta Samhita as Ayurveda *Samhitas* that explored traditional science of medical system describe *Sharira* and various anatomical aspects of human body. The anatomical and physiological consideration of body part is very important to diagnose and treat diseases of various body parts. Therefore, Ayurveda *Samhita* presented all information related to the human anatomy and physiology. In this regard the traditional medical science described anatomical and physiological view of vessels which not only covers internal body parts but also perform several functions.^[1-4]

Ayurveda philosophers described vessels as *Sira* and *Dhamani*, etc. along with their clinical and pathological perspectives. The *Sira* described as important vessels of human body that carries blood from one place to another and responsible for many functions of body. As per ancient description the *Sira* originates from *Nabhi* and spread upward as well as downward and covers whole body. Structurally *Siras* can be compared with the leaf fibres, which is branched and spread throughout to cover internal organs of body.^[4-7] *Atharva Veda* is described hundreds of *Siras*, these possess coppery red colour and carry *Ashuddha Rakta*. *Acharyas* mentioned different features of *Sira* as follows:

- ✓ They possess tubular shape like *Nadi*.
- ✓ Some possess apertures like *Strotasa*.
- ✓ It possesses blood like *Dhamni*.

- ✓ *Sira* and *Snayu* origin are same.
- ✓ *Sira* which are very fine branched into many vessels from their origin.

Anatomical View on Various types of *Sira*

As per the *Dosha* predominance of fluid carried by *Sira* these can be categorizes as depicted in **Figure 1**. *Vatavaha siras*, *Pittavaha siras*, *Kaphavaha siras* and *Rakthavaha siras* are various types as depicted in Figure 1. *Vatavaha siras* filled with *Vayu* and it is *Aruna varna*, *Pittavaha siras* is carry deoxygenated blood therefore it is *Neela varna*, *Kaphavaha siras* carrying clear lymph fluid and it is *Gowra varna* while *Rakthavaha siras* nourishes *Dhatus* and it is *Rohini* in color.^[7-9]

- *Vatavaha sira* observed thick at axilla, cord like structure of brachial plexus.
- *Kaphavaha sira* observed hollow at medial side of axilla.
- *Rakthavaha sira* observed as hollow and thick at brachial artery.



Various type of *Sira* based on *Dosha* predominance

Pratana of *Sira*

- ✚ The *Pratana* of *Vata-vaha sira* in neck, thorax, and head.
- ✚ *Pratana* of *Pitta-Vaha Sira* are veins in limbs, head and abdomen.
- ✚ *Pratana* of *Kapha-vaha sira* are abdomen, thorax and lymphatic system in limbs.
- ✚ *Pratana* of *Rakta-Vaha Sira* are abdomen, head and Arteries in limbs.

Ayurveda *Acharya* described about 700 *Siras*, *Sushruta* has mentioned somewhere *Dhamanis* as *Srotas Mula Sthanas* but this was not mentioned for the *Siras*. The root of origin of *Siras* is umbilicus, they spread throughout the body from the navel since life element of living system is resides in the navel. Therefore, *Sira* is considered as essential component of human body.

Different Number of *Sira*

- ❖ The *Vata Siras* conveying *Vata* are described 175 in number.
- ❖ The *Pitta Siras* conveying *Pitta* are described 175 in number.
- ❖ The *Kapha Siras* conveying *Kapha* are described 175 in number.
- ❖ The *Rakta Siras* conveying blood and located in the seats of blood are described as 175 in number.
- ❖ Different *Siras* transporting *Vata*, *Pitta*, *Kapha* and blood are divided into 175 branches each, these all together make total 700 *Siras* ($175 \times 4 = 700$ *Siras*).

Physiological Role of *Sira*

Physiologically *Sira* is responsible for intellectual functions, nourishment, color, complexion, enrichment of tissues, lubrication, immunity, strength and digestive functions, etc. *Siras* carrying *Vata* resembles the nerves and associated with function of nervous system. *Siras* carrying *Kapha* resemble structure and functions of lymphatics system.

- ✓ *Sira* help in transportation of various fluids,
- ✓ *Sira* supply nutrients,
- ✓ Regulate circulatory process of body and maintain process of detoxification,
- ✓ The word *Sira* itself originated from *Hira* that means blood carrying channel.

- ✓ *Sira* described as *Srotas* since they carry *Rasa* & *Rakta*.
- ✓ The extension, flexion, sleeping and speech, etc. are under the control of the nerve and *Siras* associated with nerve thus control these all functions of body.
- ✓ *Sira* is also responsible for all functions which required proper blood supply to the related organs.
- ✓ *Siras* carries *Vata*, *Pitta*, *Kapha* and blood.

Functions of *Vata Sira*

The color, complexion, immunity, and strength, etc. are comes from the normal functioning of *Siras* which carries *Vayu*.

Functions of *Pitta Siras*

Digestion, metabolic activities, complexion, taste and physical health, etc. are associated with the normal functioning of *Sira* which carries *Pitta*. The digestive fire responsible for the nourishment of body also govern by *Pitta* and *Pitta* carrying *Sira* play important role in this regard.

Functions of *Kapha Siras*

The *Kapha* in balanced state when circulating in *Siras*, causes unctuousness and lubrication, maintain integrity of the bony and responsible for immunity.

Functions of *Rakta Sira*

These vessels are responsible for the nourishment of body, gives color, sensation, strength and detoxify body by facilitating excretion process.

Diseases of *Sira*

- Chronic venous insufficiency.
- Blood clots
- Deep vein thrombosis.
- Varicose and spider veins.
- *Sonithaavaseka sadhya roga*

The common symptoms of these diseases includes joints stiffness, emaciation, trauma, twitching sensation, numbness, pricking sensation, insomnia, breathlessness, blood pressure, angina and heart related symptoms, etc. The skin manifestations and mental issues also observed when *Sira* functions improperly.^[8-10]

CONCLUSION

Siras are described as tubular and hollowed structures which carry blood and *Doshas*, these carries fluids and possesses features as like the fluid that carried out with in *Sira*. The *Siras* carry *Rasa* and interchangeably can be corelated with the functions of *Srotas* or vein as per modern terminology. The umbilicus is described as the origin of *Siras* and from naval region *Sira* spread out through the body. *Vata Siras* conveying *Vata*, *Pitta Siras* conveying *Pitta*, *Kapha Siras* conveying *Kapha* and *Rakta Siras* conveying blood. These all different *Siras* transporting *Vata*, *Pitta*, *Kapha* and blood are divided into 175 branches each, thus together make total 700 *Siras*. Physiologically *Sira* help in transportation of

various fluids, supply nutrients, maintain process of detoxification, *Siras* control functions of nervous system and maintain immunity of body.

REFERENCES

1. Srikantha Murthy K.R., Sushruta Samhita with English translation, Third edition, Varanasi, Chaukhambha Orientalia Publishers, 2007; I: 9.
2. Kaviraj Dr Ambika Dutta Shastri. Sushrut Samhita with Ayurved tatva sandipika hindi Commentary, Part-1, Reprint, Chaukhamba Sanskrit sansthan, Varanasi, Sutra-sthan, 2012; 5: 61-66.
3. Jadavaji Trikanji Acharya, Charaka Samhita with the Ayurveda dipika commentary of Chakrapanidatta, Reprint edition, Varanasi, Chaukhambha Orientalia Publishers, 2009; 285.
4. Srikantha Murthy KR. Sushruta Samhita with English translation, Volume-I, 3rd edition. Varanasi: Chaukhambha Orientalia Publishers, 2007; 9.
5. Jadavaji Trikanji Acharya, Charaka Samhita with the Ayurveda dipika commentary of Chakrapanidatta. Reprint edition. Varanasi: Chaukhambha Orientalia Publishers, 2009; 285.
6. Sharma PV. Sushruta Samhita text with English translation and Dalhana's commentary, Volume-II. Reprinted edition. Varanasi: Chaukhambha Visvabharathi Publisher, 2005; 217.
7. Thatte DG. Sushruta Samhita text with English translation, Volume-III, 2nd edition. Varanasi: Chaukhambha Orientalia Publisher, 2007; 140.
8. Srikantha Murthy K.R., Sushruta Samhita with English translation, Third edition, Varanasi, Chaukhambha Orientalia Publishers, 2007; I: 9.
9. Yadavaji Trikamaji (editor), Charaka Samhita of Agnivesh, Elaborated by Charaka and Dradhabala with the Ayurveda - Dipika commentary of Chakrapanidutta, Viman Sthana, Strotasam Nidanam 5/9, chaukhambha Surbharti Prakashana, Varanaasi, Edition-2012; 251.
10. Ambika datta shastri, sushruta Samhita of sushruta, sharir sthan, chapter 7, 13th edition, chaukhamba Sanskrit Sansthan, 2004.