

RECONCEPTUALIZING SIRA THROUGH ORIGINAL AYURVEDA PRINCIPLES

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ABSTRACT

Sushruta samhita, one of the most exceptional gem in Indian medical literature is considered as one of the oldest texts explaining ancient surgery tradition in Indian medicine and Acharya shusruta is known as father of surgery. In Sushrut samhita sharir sthaan detailed anatomy of every parts of the human body has been described but due to specific pattern of description with minimum shlokas they are in less understandable form and also in due course of time further controversies have been added. One such topic is Sira. In Charak samhita the term sira has been used for common channels and

synonymous with dhamani and srotash. In Sushrut samhita acc. To description vatavahasiras can be taken as nerves, pittavahasira as veins, kaphavaha sira as lymphatics and raktavahasira as arteries. In this review article with the help of original methodology i.e. tantrayukti and shastrapariksha the concepts regarding sira's are being tried to strengthen as per Ayurvedic principles.

KEYWORDS: Sira, Artery, Vein, nerves, lymphatics, tantra yukti.

INTRODUCTION

For treating any disease basic pathology should be clear and for which understanding regarding the anatomy and physiology is very important. So the basic knowledge regarding each and every structure of sharir is very essential for all Ayurvedacharya's irrespective of speciality. Sira, dhamani and srotas are the being called as channels of our body. Among these three, sira is most valuable because of its direct therapeutic value in form siravedha, which according to Acharya shusruta has been considered as half of the treatment, like that of importance of vasti in kayachikitsa.^[1] In sharir sthaan of Sushrut samhita detailed anatomy of

every parts of the body has been described because without detail anatomical knowledge surgery is not possible. Due to special pattern of description with minimum shlokas they seems to be in brief. Due to this brief description and also due to big generation gap between the Sushrut's period and present time, most of the anatomical entities are still controversial or in less understandable form. And Sira is one among **the least explored** structure and whatever description we get is very controversial. Due to this controversy, siravedha procedure yet has not been brought into full practice in its original form. Controversy in any subject raises questions about its truthfulness or scientificness that may reduce the confidence of the scholars on their own pathy and also no science can improve further in the state of controversy in its basics. So understanding of what sira actually mean is of utmost importance. From very early periods renowned ncient authors and tikakaar like acharya Ghanekar have tried to understand and explain literature available regarding sira, but due to brief literature and some deep rooted cause this misunderstanding is still existing today. In an article from department of Rachana sharir in BHU under the guidance of Prof H Avasthi have tried for identification of sira^[2], but again due to the same cause, that was not achieved fully. So in this article it has been tried to solve the controversies regarding siras by digging and exploring the literature.

AIMS AND OBJECTIVES

- To explore the literature available about sira.
- To overcome the Misconception regarding basic understanding about samhitas.
- To solve the controversy regarding sira and establish scientific terms for it in terms of modern science with reference to Sushrut samhita.

MATERIALS AND METHOD

The literary matter related to sira has been collected from different sthana of Sushrut samhita, charaksamhita and Vagbhatt samhita and the modern knowledge has been collected from modern anatomy books like B D Chaurasia General anatomy, Gray's anatomy, book of Tortora etc. Then all the literatures regarding siras were critically reviewed and analyzed. The matter has been discussed vividly with sharir rachna specialist of Ayurveda fraternity and modern anatomist. To understand the proper meaning of Sanskrit shlokas, Sanskrit acharya were consulted. Then only conclusion has been drawn.

DISCUSSION

One of the main cause Behind the various controversies of Ayurveda is the defective perception or understanding of various samhitas. Some terminologies of Charak and Sushrut samhita (two main initial treatise of Ayurveda) has been mentioned for different meaning, but we use to accept the meaning as equal, that's why lot of misunderstandings are existing regarding perception of a terminology. Actually the basic difference between the two main treatises is that Charak samhita deals with medicinal treatment including panchkarma where as in Sushrut samhita it has been advised to deal all the required surgeries including internal and external medications as well as panchkarma procedures. For the surgical procedure anatomical knowledge is of utmost importance. So a clear anatomy has been described in Sushrut samhita and it has declared that the anatomical knowledge written can be verified through dissection.^[3] Where as in Charak samhita, surgical parts has not been described so there was no need to describe anatomy in detail and hence is grossly described with basic meanings. That is why in order to understand a clear anatomy we must follow the version of Sushrut samhita. Due to lack of this understanding lots of controversies are existing in root level of Ayurveda. The two main utility of tantrayukti is vaakyayojana and arthayojana.^[4] So for arthayojana or to extract the real meaning of literature implementation of tantrayukti is most important. Here "Sasangya" tantrayukti should be applied to understand the different meaning of sira in different treatise.^[5] As per this rule the meaning of sira may be different as per two different treatises.

Sira, dhamani term in Charaksamhita has been described as synonyms for srotas.^[6] They have been mentioned for any passage or channels, where as in Sushrut samhita it has been clearly mentioned that sira, dhamani and srotas are not same but three different entities and clearly explains about the differentiating factors such as difference in their characters, original numbers, specific functions etc. Only due to their close relationship (anatomically), there are similarities in some of basic functions as described in the classics and also due to their minuteness, even though their functions are different they appear to be performing identical work.^[7] So it is not wise to mix up the two literatures during the identification of specific sira.

Acc to Acharya Sushruta there are seven hundred siras all over the body. As a garden or a field is irrigated by the water carrying channels and every parts receives nutrition, similarly the siras by their contraction and dilatation etc, provide nutrition to the body. Their branches

are just like the veins of a leaf. The site of origin of siras is nabhi (umbilicus) and from there they spread upward, down wards and obliquely.^[10]

Characteristic features of various siras

Vata-vaha siras are aruna (copper or golden) in colour and contain vata within it, pitta-vaha sira are bluish in colour and warm in touch whereas kapha-vaha sira are cool, sthira and white in colour and rakta-vaha siras are rohini (red in colour) and neither too hot nor cold.^[11]

FUNCTIONS OF INDIVIDUAL VARIETIES OF SIRAS^[12]

Functions of vatavahasira- The vata by circulating in its channels carries out bodily functions without any hindrance, proper functioning of the intellect and exhibits many other characteristics of its own. If the vata get vitiated various vattik diseases produced in the body.

From this description vatavaha siras can be considered as nerves because as per modern science also the features as well as functions of nerves are approximate with that of description of vatavaha siras.

Function of pittavahasira-The pitta circulating in its channels give luster to the body develops relish for food, increase appetite, maintain health and performs other functions of pitta. When pitta get vitiated it various paittik diseases are produced. Both external features and functions of pittavaha sira are exactly matching with that of veins as per modern science and this has also been accepted by all other Ayurveda acharyas.

Function of kaphavahasira-Normal kapha circulating give lubrications to the various parts of the body, stability to the joints, strength, energy and all other functions of kapha assigned to it. Whenever vitiated kapha circulates in its channels it produces various kapha diseases in the body. Both anatomical and physiological description of kaphavaha sira are similar with that of lymphatic channels of the body so kaphavaha sira can be considered as lymphatic channels.

Functions of raktavahasira- The rakta circulating in its channels provide nutrition and colour to the dhatus, cause a definite perception of touch and perform other functions of rakta assigned to it. When vitiated rakta circulates it produces several diseases related to blood. From both anatomical and physiological similarity between raktavaha sira and artery, arteries can be considered as raktavaha sira.

Table 1.

Types of sira	Color	Character	Function	Modern correlation
Vatavaha	Aruna (golden or cupper colour)	Filled with vata	Perform various functions of body without any hindrance, the proper functions of buddhi and other functions of vata.	Nerves
Pittavaha	Neela (blue)	Warm in touch	Creates lusture in the body and develops good appetite, maintain health and other function of pitta	Veins
Kaphavaha	Gaura (white)	Cold in touch	Gives lubrication to the various body parts and produces firmness in the joints. It also improves strength	Lymphatic
Raktavaha	rohini(red)	Neither too warm nor cold	Nourishes the dhatusimproves the complexion definite perception of sparsha.	Artery

Root of siras^[13]

Out of the 700 siras there are forty root sira. Out of them ten are vata carrying, ten are pitta carrying, ten are kapha carrying and ten are rakta carrying. Again ten of the individual varieties are divided into 175 branches each which collectively counts seven hundred siras. Neurovascular bundles are the place where one branch from each of artery, vein, nerve and lymphatics are found. So the 175 siras can be considered as specific numbers of neurovascular bundles present all over the body. Again it has been described that siras have been spread all over the body like that of veins in a leaf. That means sira may continue beyond their counting place, but for identification and understanding point of view those has been counted particularly in the position of neurovascular bundles. According to Acharya shusruta roots of sira is nabhi that is a structure or organ which is situated in the center of abdomen.

Division of total siras^[14]

Table 2: Shakhagat siras.

Types	Vatavaha	Pittavaha	Kaphavaha	Raktavaha	Total	Avedhyasira
Right arm	25	25	25	25	100	4-(1-jaaladhara,2-urvi, 1-lohitaksha)
Left arm	25	25	25	25	100	4-(1-jaaladhara,2-urvi, 1-lohitaksha)
Right leg	25	25	25	25	100	4-(1-jaaladhara,2-urvi, 1-lohitaksha)
Left leg	25	25	25	25	100	4-(1-jaaladhara,2-urvi, 1-lohitaksha)
Total	100	100	100	100	400	16

Table 3: (Kosthagatsira).

	Vatavaha	Pittavaha	Kaphavaha	Raktavaha	Total	Avedhyasira
Shroni(guda and medhra)	8	8	8	8	32	8(vitap-4,katika taruna-4)
Parshwa	4	4	4	4	16	4(urdhwaga-2, parswasandhi-2)
Prustha	6	6	6	6	24	2(bruhati)
Udara	6	6	6	6	24	4(romraajiubhayata)
Vaksha	10	10	10	10	40	14(2-hriday,4-stanamool,4-stanarohita,2-apalaap,2-apastambha)
Total	34	34	34	34	136	32

Table 4: Urdhwayatrugatsiras (siras above clavicle).

	Vatavaha	Pittavaha	Kaphavaha	Raktavaha	Total
Griva	14	14	14	14	56
Karna	4	2	2	2	10
Jihwa	9	9	9	9	36
Nasa	6	6	6	6	24
Netra	8	10	10	10	38
Total	41	41	41	41	164

Urdhwa jatrugat avedhyasira^[15]

Total fifty numbers of avedhyasiras has been described in shiropadesha. During this description of avedhyasira other 16 siras in hanu Pradesh, 60 siras in nasa netragata gata lalata pradesh, 10 siras in shankha Pradesh, and 12 siras in shiropadesh also has been described, which are not described during the normal division of 164 urdhwayatrugat siras. So total 98 extra siras have been counted but nobody has explained the reason behind this. Here it has been tried to point out the cause behind this repetition of these siras with proper justification.

Table 5: Urdhwa jatrugat avedhyasira.

Parts of urdhwayatruPradesh	Total	Avedhya	Division of avedhyasiras
Shirodhara (griva+hanu)	56	16+4	2-Krukatika, 2-vidhura, 12-marmasangya 2-2-dhamani present in hanusandhi
Jihwa	36(below tongue 16+others)	4	1-1-Rasavaha, 1-1-Vaakvaha,
Nasa and Netragatlalata and apaangapradesh (12 murdhasira includes within nasa and netragat)	62(24+38)	5+9+8	2-2 upanasika, 1-mrudu taalugat, 1-1-Apanga, 2-2-Keshanta, 1-1-Avarta, 1-Sthapani, 1-1-Utkshepa, 5-Simanta, 1-Adhipati,
Shankha(karna)	10	2+2	1-1-Shabdavahini 1-1-Shankha sandhi
Total	164	50	

CONCLUSION

As per the above analysis and discussion we knew that very detail anatomy about artery, vein, nerves and lymphatics has been described in Sushrut samhita knowing about its clinical importance. In modern medical science anatomy has been developed as per the development of surgery likewise in Ayurveda required anatomy about sira has been described in Sushrutsamhita due to its clinical importance i.e. siravedha. To understand Ayurveda we have to apply its own rule i.e. tantrayukti. As per “sasangyaan” tantrayukti it is not necessary that same terminologies should be considered for a single meaning in all treatises. Keeping the etymological meaning intact the exact meaning may vary. The main purpose of Charak samhita is to treat a patient through panchkarma or internal medicines. Siravedha is not counted as a part of panchkarma in Charak samhita. So there was no need to describe sira in detail. Vagbhatt samhita is a compilation of available literature running in his period and also As per his commitment he has not written anything of his own. So keeping these points in consideration if we try to understand the ancient samhitas definitely we can prove the scientificness or truthiness of our available literature. The anatomical description available in Vagbhattsamhita is even less than that available in Sushrut so it may come under atisankshipt tantradosha.

700 siras counted by Sushrut are nothing but includes special branches of nerve, veins, lymphatic's and arteries present in the neurovascular bundles. Vatavahasiras are nerves, pittavahasiras are veins, kaphavahasiras are lymphatics and raktavahasiras are arteries.

The puzzle regarding extra 98 numbers of urdhwajatrugatsiras mentioned during the description of avedhyasira also has been solved here. Approximate comparison about mool 40 siras has been mentioned, which may show light to reach up to a definite identification of those siras. More detail research in collaboration with modern anatomist is needed to reach proper identification of these structures.

This article will definitely help the scholars of Ayurveda to start thinking about Ayurveda in a different way with full of confidence on root literature of Ayurveda. It is not only a solution for sira but it will give light to solve other many controversies regarding Ayurveda through this type of analysis. It is the need of time also to understand and establish Ayurveda in a scientific way before scientific committee.

REFERENCES

1. Kaviraj Ambikadatta Shastry., Sushruta Samhita, edited with Ayurveda tattwa Sandipika, hindi commentery, reprint in, New Delhi branch of Chaukhamba Sanskrit Sansthan, Varanasi publication, Sharirasthan, 2016; I: 91.
2. Kumar BMN, Awasthi HH, 2013; 4(4): 320-327. IJAM journal
3. Kaviraj Ambikadatta Shastry., Sushruta Samhita, edited with Ayurveda tattwa Sandipika, hindi commentery, reprint in, New Delhi branch of Chaukhamba Sanskrit Sansthan, Varanasi publication, Volume-I, Sharirasthan, 2016; 60.
4. Kaviraj Ambikadatta Shastry., Sushruta Samhita, edited with Ayurveda tattwa Sandipika, hindi commentery, reprint in, New Delhi branch of Chaukhamba Sanskrit Sansthan, Varanasi publication, Uttartantra, 2016; I.
5. Kaviraj Ambikadatta Shastry., Sushruta Samhita, edited with Ayurveda tattwa Sandipika, hindi commentery, reprint in, New Delhi branch of Chaukhamba Sanskrit Sansthan, Varanasi publication, Uttartantra, 2016; I.
6. Pt Kashinath Shastri., Charak Samhita, edited with Ayurveda tattwa Sandipika, Vidyotini hindi commentery from Ayurved Deepika commentery, reprint in, New Delhi branch of Chaukhamba Sanskrit Sansthan, Varanasi publication, Vimaansthan, 2012; I: 9.
7. Kaviraj Ambikadatta Shastry., Sushruta Samhita, edited with Ayurveda tattwa Sandipika, hindi commentery, 11th edition, Chaukhamba Sanskrit Sansthan, Varanasi publication, Sharirasthan I: 69.

8. Kaviraj Ambikadatta Shastry., Sushruta Samhita, edited with Ayurveda tattwa Sandipika, hindi commentery, 11th edition, Chaukhamba Sanskrit Sansthan, Varanasi publication, Sharirsthan, I; 70.
9. ptKashinath Shastri., Charak Samhita, Vidyotinihindi commentery from Ayurved Deepika commentery, reprint in, New Delhi branch of Chaukhamba Sanskrit Sansthan, Varanasi publication, Vimaansthan, 2012; I: 9.
10. Kaviraj Ambikadatta Shastry., Sushruta Samhita, edited with Ayurveda tattwa Sandipika, hindi commentery, 11th edition, Chaukhamba Sanskrit Sansthan, Varanasi publication, Sharirsthan, I: 59.
11. Kaviraj Ambikadatta Shastry., Sushruta Samhita, edited with Ayurveda tattwa Sandipika, hindi commentery, 11th edition, Chaukhamba Sanskrit Sansthan, Varanasi publication, Sharirsthan, I: 61.
12. Kaviraj Ambikadatta Shastry., Sushruta Samhita, edited with Ayurveda tattwa Sandipika, hindi commentery, 11th edition, Chaukhamba Sanskrit Sansthan, Varanasi publication, Sharirsthan, I: 60.
13. Kaviraj Ambikadatta Shastry., Sushruta Samhita, edited with Ayurveda tattwa Sandipika, hindi commentery, 11th edition, Chaukhamba Sanskrit Sansthan, Varanasi publication, Sharirsthan, I: 59.
14. Kaviraj Ambikadatta Shastry., Sushruta Samhita, edited with Ayurveda tattwa Sandipika, hindi commentery, 11th edition, Chaukhamba Sanskrit Sansthan, Varanasi publication, Sharirsthan, I: 59,60.
15. Kaviraj Ambikadatta Shastry., SushrutaSamhita, edited with Ayurveda tattwa Sandipika, hindi commentery, 11th edition, Chaukhamba Sanskrit Sansthan, Varanasi publication, Sharirsthan, I: 62.
16. Vaidya Ananta Damodar Aathvalle, Astaang Sangraha, Induvyakhya, Shreemad Aatreya Prakaashanam, 4.
17. Kaviraj Atridev Gupta, Astaang Hriday, vidyotinihindi commentery, reprint edition, Chaukhamba Sanskrit sansthaan, Varanasi, 2005; 187.
18. Kaviraj Atridev Gupta, Astaang Hriday, vidyotinihindi commentery, reprint edition, Chaukhamba Sanskrit sansthaan, Varanasi, 2005; 199.
19. Kaviraj Ambikadatta Shastry., Sushruta Samhita, edited with Ayurveda tattwa Sandipika, hindi commentery, 11th edition, Chaukhamba Sanskrit Sansthan, Varanasi publication, Volume-I, Sharirsthan, 50.