



ANATOMICAL AND CLINICAL RELEVANCE OF SIRAVYADHA IN RELATION WITH MARMAS OF UPPER LIMB

Syamlal. S^{1*}, Anup Bhosgikar², N. G. Mulimani³

*¹P. G. Scholar, ²Lecturer, ³Professor and Head, P.G. Dept. of Rachana Sareera, N.K. Jabshetty Ayurvedic Medical College & P G Center, Bidar, India.

Received on: 10/08/2014

Revised on: 01/09/2014

Accepted on: 15/09/2014

ABSTRACT

The science of Ayurveda is well recognized system of medicine which have unique specialty in the field of *Shalyathantra*. The concepts of Ayurveda *Shareera* evolved 3000yrs ago. Because of generation gap concepts appear to be misinterpreted or not fully developed. At this junction it is our moral duty to take up such studies to understand the concepts clearly and to pass on knowledge to younger generation.

It is one of the Para surgical procedure denoting letting of blood outside the body. Different modalities of *Rakthamokshana* are adopted according to *Dosha avastha* and *Athura avastha*. *Siravyadha* is one of the types of *Rakthamokshana* by *Sasthravacharana*. So as to explain its significance a stanza of Su.Sha 8/23 is sufficient.

Acharya Sushruta has given same importance of *Dosha* to *Raktha* also, where in many places he has classified many diseases as *Rakthaja* also. *Siravyadha* is often recommended as *Shodhana chikitsa* for such diseases. In the *Sushruta Samhita Sharirastana* 8th Chapter particular anatomical sites especially the *Marma sthanas* are recommended as anatomical landmarks for *Siravyadhana* in Particular diseases. So this study helps to explore the Anatomical & Clinical relevance of *Siravyadha* on the basis of available literatures. So a creative and logical approach has been done to locate *Siras* for *Siravyadha* in Particular disease with Pathophysiological interpretation. So it can be concluded that *Siravyadha* is effective modality of treatment in many diseases. So the study taken up here is "Anatomical and Clinical Relevance of *Siravyadha* in Relation with *Marmas* of Upper Limb".

Key words: *Sira, Siravyadha, Rakthamokshana, Marma.*

INTRODUCTION

As *Basti* is an important therapy of Ayurvedic medicine, similarly *Rakthamokshana* at specific points are most effective treatment of Ayurvedic surgery. The knowledge of *Marma, Siras* and vessels are essential for understanding the concept of *Siravyadha*. *Marmas* are the vital points in the body which prove to be fatal when subjected to trauma. Detail knowledge of *Marma* is important from surgical point of view; surgical procedures like *Agnikarma, Ksharakarma, Raktamokshana*, etc., are used as a part of the surgery. While conducting these surgical procedures, the knowledge of *Marma sthana* is required. In trauma

condition the knowledge of trauma site, structures involving and deformity identification is necessary. So in treatment and surgical procedures *Marma* study is important.

Marmas are the *Sannipatha* (conglomeration) of *Mamsa, Sira, Snayu, Asthi & Sandhi*. So *Siras* are the important structure involved in the formation of *marma*¹. There are 22 *Urdhwaskhagatha marmas*. i. e., 11 in each Limb.

They are *Kshipra, Thalahrudaya, Kurcha, kurchasira, Manibandha, Indrabasthi,*

Kurpara, Ani, Bahvi, Lohithaksha, Kakshadhara.

The blood vessels which possess Sarana Karma (Flowing) are called as *Siras*. The life of the living being exists in the umbilicus; (vice versa) umbilicus subsists on life. The umbilicus is surrounded by veins (*Siras*) from all sides just as the centre of a wheel is surrounded all around by spokes¹. There are 700 *Siras* in the body as per the classics & they are classified on the basis of *Dosha, Adhishtana, Vedhya* and *Avedhyas*. The *Sira* which are located over the *Marmas* are *Avedhya*. Though all the *Brihatrayees* made considerable remarks on *Vedhya* and

Avedhya Siras, Susruta has clearly mentioned the *Vedhya siras* especially in connection with the diseases which are cured by *Siravedha*. However, the *Vedhya siras* are the vessels which are prohibited for *Siravyadha*. *Susruta* has mentioned 98 *Siras* throughout the body which are not fit for venesection. Any trauma to these structures may lead to deformity or death.^{1,2}

Acharya Susruta has mentioned 100 *Siras* in each extremity among which four are considered as *Avedhya siras* those are 1 *Jaladhara*, 2 *Bahvi* and 1 *Lohitaksha*. In this way there are 16 *Avedhya siras* are present in the extremities.

Table 1: ROGANUSARA SIRAVEDHA STHANA^{4,5,6,7}

S.No	Roga	Site of Siravyadha	Marma Sthana
1.	<i>Pleehodara</i> (Enlargement of spleen)	<i>Vama Kurpara Sandhithita Sira</i> (left sided medial cubital vein) ^{4,6} or <i>Sira</i> present in between left <i>Kanishtika</i> and <i>Anamika Angulas</i> (Left dorsal venous arch) ^{4,6}	<i>Kurpara marma</i>
2.	<i>Yakrudodara</i> (Enlargement of Liver), <i>Kasa</i> (cough), <i>Shwasa</i> (Breathlessness/ Dyspnoea)	<i>Dakshina Kurpara Sandhithita Sira</i> (Right sided medial cubital vein) ^{4,6} or <i>Sira</i> present in between right and <i>Kanishtika</i> and <i>Anamika Angulis</i> (Right dorsal venous arch) ^{4,6}	<i>Kurpara marma</i>
3.	<i>Vishwachi</i> (Brachial plexus neuritis)	Four <i>Angula</i> above the <i>Kurpara Sandhi</i> (Elbow joint)	<i>Kurpara Marma</i>
4.	<i>Apachi</i> (Lymphadenitis)	Two <i>Angula</i> below from <i>Indrabasti Marma</i>	<i>Indrabasti</i>

ANATOMICAL & CLINICAL RELEVANCE OF VYDHANA STHANA

- In '*Pleehodara*', there is enlargement of spleen; the spleen is heavy and firm. By bloodletting left sided medial cubital vein, the reticuloendothelial cell of spleen rapidly remove debris, bacteria, and parasites. Usually reserved blood is ejected into the general circulation. The fragile RBCs are washed off. Splenic vein is drained effectively. The classical anatomical Surface landmark for this *Siravyadha* is *Kurpara marma*.^{3,4,5}
- In '*Yakrutodara*', enlargement of Liver, by blood letting in right sided medial cubital vein reserved blood in the liver is

ejected into the general circulation, to cause decongestion. Epinephrine and nor-epinephrine hormones are released, mobilizing fatty acids deposited in the liver. Hepatocellular enzymatic activity is improved. Fresh RBCs are produced to utilize the ferritin. By all these affects the enlargement of liver can be reduced. So the said site is considered. For this *Siravydha* Surface landmark is *Kurpara marma*^{3,5,7}

- In '*Kasa*' cough as a defense mechanism of body. When blood letting is done in right sided medial cubital vein, the venous pressure in the right atrium may be decreased resolving pulmonary

congestion. So the site may be considered and the Surface landmark is *Kurpara Marma*.^{3,5}

- In 'Shwasa', the condition may be considered as breathlessness. By blood letting in right medial cubital vein, the congestion of lung and liver is decreased. So the verdict of *Acharya Sushruta* can be accepted and the Surface landmark is *Kurpara Marma*.^{3,5,7}
- In *Vishwachi*, i.e., Brachial plexus neuritis. By blood letting 4 *Angula* above from *Kurpara Sandhi* i.e. Cephalic vein, the pain precipitating factors like lactic acids are reduced. Blood supply to brachial plexus is improved, where there is aerobic metabolism in the part. There is provision to release of hormone serotonin, which reduces pain neuritis. For this *Siravyadha* Surface landmark is *Kshipra marma*.^{3,5,7}
- In '*Apachi*' which is an inflammatory condition of lymph nodes called lymphadenitis. By blood letting venous drainage is improved, automatically lymphatic drainage is improved, resolving in inflammation of lymph nodes by increased blood flow, scattered WBCs, removal of waste products. So the *Sira* two *Angula* below from *Indrabasti Marma* is selected.⁷

DISCUSSION

Siravyadha is being one type of *Raktamokshana* therapy as per *Acharya Sushruta* and *Vagbhata*. It is nothing but letting of blood outside the body, which is one measure described in the treatment of diseases caused by *Raktadusti*.

In 11 *Marma* of each extremity, 2 are *Sira marma* which are not fit for venesection because these two *Marmas* are situated in the area where the majority of blood vessels passes. Injury to these vessels will lead to haemorrhage which causes hypovolumic shock and later death will occur. *Kshipra*, *Kurcha*, *Kurchashira*, *Ani*, *Kakshadhara marmas* are *Snayu* variety, injury to *Snayu marma* leads to *Ruja* and *Vaikalyata*. *Talahrudaya* and *Indrabasti* are

Mamsa marma, Injury to which will cause Pain and Deformity. *Manibandha* and *Kurpara* are *Sandhi marma*, injury to it causes *Ruja*.

By these we came to know that the *Marmas* are considered as the Classical anatomical surface landmarks and one should care about these vital points while doing *Siravyadha*.

- In *Pleehodhra- 'Vama-Kurpara Sandhi Sthita Sira'* or '*Sira* present in *Vama Kanisthika* and *Anamika Anguli*' -left median cubital vein or branch of metacarpal vein.
- In *Yakrudodara, Kasa, Swasa -'Dakshina Kurpara Sandhi Sthita Sira'*- right median cubital vein.
- In *Vishwachi- 'Four Angula* above the *Kurpara Sandhi'* - Cephalic vein.
- In *Apachi- 'Two Angula* below from *Indrabasti Marma'*- Basilic Vein.

CONCLUSION

- ❖ By Studying the Anatomical & Clinical Importance of *Siras*, we came to know that *Siravyadha* is a beneficial treatment for above mentioned diseases.
- ❖ The concept of *Marma* is also an important classical anatomical landmarks for the *Siravyadha*. The knowledge of *Marmasthana* is required to carrying the *Siravyadha*.

REFERENCES

1. Sushruta Samhita of Acharya Sushruta with English Text, Vol.I, 3rd Edition, Professor K. R. Srikanthamurthy: Choukhambha Orientalia, 2007, pp. 134.
2. Ashtanga Hrudaya of Srimadvagbhata, Hindi Text, Dr. Brahmanand Tripathi: Edited With Nirmala Hindi Commentry, Choukhambha Sanskrit Pratishthana, Reprint 2009, pp.191.
3. Guyton Arthur C, Hall John E : Textbook of medical Physiology, 9th edition, Pennsylvania, USA; W.B. Saunders company, A division of Harcourt Brace and company, Independence Square West, Philadelphia,1996, pp.161-163.

4. Standaring Susan, Gray's Anatomy, 39th edition, Barry Berkowitz (Chief editor), London, UK; Elsevier Churchill Livingstone, British Library, 2005, pp140.
5. Inderbir Singh: - Human Histology, 3rd edition, New Delhi: Jaypee Brothers Medical Publishers, B-3 EMCA House,23/23B, Ansari Road, Daryaganj,1997,pp.169.
6. A.Halim :- Surface and Radiological Anatomy, 2nd edition, CBS Publishers & Distributers 485, Jain Bhavan, Bhola Nath Nagar, Shahdra, Delhi-110032(India).pp.12-13.
7. Gerald. J.Tortora, Bryan Derrickson: - Principle of Anatomy & Physiology 11th edition John wiley and Sons, Inc. 2007. Pp. 781.

Cite this article as:

Syamlal. S, Anup Bhosgikar, N. G. Mulimani. Anatomical and Clinical Relevance of Siravyadha In Relation with Marmas of Upper Limb. Int. J. Ayur. Pharma Research. 2014;2(5):12-15.

Source of support: Nil, Conflict of interest: None Declared

***Address for correspondence**

Dr. Syamlal. S

M.D. Scholar

Dept. of PG Studies in Rachana Sareera

N.K. Jabshetty Ayurvedic Medical College
& PG Centre, Bidar, Karnataka, India.

Ph: +918496041762

Email: syams0121@gmail.com