

A Critical Review on Siravyadha by Kutharika Shastra and its Standardization in Siraja Granthi

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Abstract:- How a building is having the pillars in its construction similarly in human body the lower limbs are occupying the major role in their day to day activities. In the present era, life style and the working pattern of the person is showering varieties of diseases. Among which Varicose Veins are troubling the person a lot. Varicose veins, in particular of lower limbs are dilated, elongated and tortuous vein caused due to heredity, prolonged standing, increasing age, heavy weight lifting, multiple pregnancies, high blood pressure, less physical activities etc. *Sirajagranthi* one among the *Granthi Rogas* described in various Ayurvedic classics denotes a pathological condition characterized by an elevated, quickly developing and round swelling of veins, which are non pulsating and painless. Symptomatology of *Sirajagranthi* indicates the correlation towards the varicose vein. The aetiology of this condition is mainly the incompetence of the valves. Ayurvedic management has multiple time tested modalities of treatment such as internal administration of *SahacharadiTaila*, *Upanaha Sweda*, *Basti Karma* and *Raktamokshana*. *Raktamokshana* is mainly two types *Shastrakrita* and *Ashastrakritha*. *Siravyadha* with *Kutharika Shastra* comes under *Shastrakritha* and *Jaloukavacharana* comes under *Ashastrakritha Raktamokshana*. So this article is intended to analyse the *Siravyadha* by *Kutharika Shastra* in *Sirajagranthi* and its standardization.

Keywords:- *Sirajagranthi*, *Kutharika Shastra*, *Raktamokshana*.

I. INTRODUCTION

Vascular disorders are becoming a major concern for the society and medical community in recent times. Life style changes, obesity, occupational pattern of prolonged standing and pregnancy are considered to be significantly contributing to this situation. Varicose vein and Deep Vein Thrombosis are more common among the vascular diseases globally. Varicose vein affect up to 25% of women and 15% of men. By the age of 50, nearly 40% of women and 20% of men have significant vascular problems. Women are more affected than males¹. Varicose vein can be co-related to *Sirajagranthi* as described in Ayurvedic texts. Immense attention is to be given in the primary stage itself to prevent further complications.

Raktamokshana is the treatment of choice prescribed by the classics for *Siragata Vata*¹ along with *Sneha*, *Abhyanga Upanaha*, *Mardhana* and *Alepana*. In which *Siravyadhais* the one method given as the treatment for *Sirajagranthi*.² *Siravyadha* is considered as *Ardha Chikitsa* of *Shalya Tantra* and with *Siravyadha* ‘the diseases perish by root, just as when the water bunds are removed, the rice and other crops are destroyed.’³ Among the different techniques for *Siravyadha*, *Vrihimukha Shastra* is indicated in muscular or fleshy areas and *Kutharika Shastra* for puncturing veins over the bones.⁴

➤ *Kutharika Shastra*

Kutharika Shastrais similar to that of *Kutharika*(axe). The *Phala* of *Kutharika* is $\frac{1}{2}$ *Angula* and *Vrnta* is $\frac{7}{2}$ *Angula* and it is similar to *Godanta*. It is used for *Siravyadha* in *Asthi pradasha*.⁵

It is a small instrument shaped like an axe, so called from its resemblance to *Kuthara*, an axe which is still used in India for cutting wood. *Vagbhata* says that the base of the blade is thicker and broader than the end and is fitted to a handle, seven and a half *Angula* long. The blade which is shaped like the tooth of a cow has the width of one *Anguia*.

Bhoja describes the width of the blade to be a half *Angula*. It is recommended to be used for puncturing vessels in the following manner.

“Hold the handle with the left hand and put the blade on the vein resting on a bone. Raise the instrument a little upwards and then strike over the thick base of the blade with the downward stroke of the middle or index finger, then let go forcibly from the under surface of the thumb.”

To open the veins in fleshy parts, *Vagbhata* recommends the *Vrihimukha Shastra*, while *Kutharika* is advised to be used in *Siravyadha* on bony structures.

Palakapya mentioned the *Kuthara* and describes its shape to be like an axe. It is to be used for excision and scarification. He describes another *Shastra* called *Vatsadanta*. It is ten *Angula* long and the mouth of the instrument is one and a half *Angula* broad. It is also to be used for excision.

“Bleeding from the jugular vein, Albucasis describes much in the similar way that it is now practiced by veterinary surgeon, namely, by placing a sort of scalpel bent at the point, which he calls fissorium, upon the vein and striking the instrument with a hammer or some such body. He gives drawings of variously shaped lancets for opening the veins of the arm”.⁶

➤ *Vyadhana Pramana (Size of Puncture)*

In muscular areas, puncturing should be of the size of the *Yava* (barley grain) in other areas it should $\frac{1}{2}$ *Yava* or one *Vrihi* (rice) using a *Vrihimukha Shastra*.⁷ Veins on the bones should be punctured to the size of $\frac{1}{2}$ of *Yava* using a *Kutharika Shastra*.

II. SIRAVYADHA PROCEDURE USING KUTHARIKA SHASTRA IN SIRAJA GRANTHI

➤ *Materials Used*

Yavagu, *Moorchita Tila Taila*, *Nadi Swedana Yantra*, *Kutharika Shastra*, sterilized cotton pad, adhesive plaster, kidney tray, measuring jar, antiseptic lotion, distilled water.

➤ *Operative Procedure of the Siravyadha*

- Explanation, Assurance & written consent of the patient.
- Position & Procedure

➤ *Poorva Karma*

- *Yavagu* is to be given to the patient.
- After 1 hour local *Abhyanga* with *Moorchita Tila Taila* and *Nadee Swedana*.
- Patient should be in standing position.

➤ *Pradhana Karma*

- Site:- Maximum tortuous area.
- Application of Tourniquet is applied above the level of *Siravyadha* after local sterilization. To make the vein more prominent and easily accessible, gentle strokes by the index finger is given on the vein.
- Then under all aseptic precautions *Kutharika Shastra* has to be hold in left hand and tapping is given with the help of right thumb and middle finger with a single stroke.
- Care was taken to make a single stroke with enough force to eject a jet of blood.
- Blood is collecting in a measuring jar.

➤ *Paschat Karma*

- The tourniquet was removed.
- After removing the tourniquet, wait for complete stoppage of bleeding, *Bandha* has to be done with sterilized cotton pad soaked in distilled water.

The food or diet, which is neither hot nor cold and is light, which can be easily digested and that which stimulates the digestion is recommended to be taken for 7 days. The patient is advised to have *Ksheera* along with *Guda*.

➤ *Standardization of Kutharika Shastra*

In *Ashtanga Sangraha*, *Vagbhatacharya* explained the size of *Kutharika Shastra* which is used for *Siravyadha*. “*Kutharika Pruthudanda Godanthakara Ardhangulaphalasthyashritha Siravyadhartha*”⁸

Angula means almost 1.9 cm. *Ardhangula* is 0.95 cm which is used for *siravyadha*. Diameter of normal short Saphenous vein is 3.1 ± 1.3 mm and when engorged it becomes 5.2 ± 2.7 mm. Diameter of normal great Saphenous vein is 5 ± 2.4 mm and engorged vein diameter is 6.4 ± 2 mm⁹. The wall thickness of vein is almost 1.4 ± 0.5 mm¹⁰.

On the basis of above calculations minimum depth needed during *Siravyadha* is nearly 4-5 mm. So, as to avoid the avulsion of vessel, the length of *Kutharika Shastra* is fixed to 5mm (0.5 cm). The shape of *Kutharika Shastra* is explained as *Godanthakara* ie shape of the tooth of cow (incisor tooth) by both *Sushrutha* and *Vagbhata*. The blade is 5 mm in length, sharp edge thickness is 0.3 mm in size and the length of the sharp edge is 3 mm in size. The sharpness for *vyadhana* is *Keshapramana* or thickness of the hair which is maintained for *Kutharika Shastra*

III. DISCUSSION

In the disease *Sirajagranthi*, the main vitiated factors are *Vata* and *Rakta*. By doing *Siravyadha*, the stagnant vitiated *Rakta* gets drained out which will helps to retain the *Chala Guna* of *Vata*. By removing the stagnant vitiated blood that had caused *Sanga*, *Siravyadha* reduces intravascular pressure and volume hence relieving *Shoola* and *Shotha*. Since the stagnant blood is drained out, the breakage of RBC gets reduced which in turn reduce the pigmentation and itching over the part. Vitiated *Vata* in *Sira* causes *Siraakunchana* (dilatation of the veins) and stimulate release of substance P which gets collected in smooth muscle of blood vessels causing pain. After doing *Siravyadha*, this is removed from the blood thus causing relief in pain. *Vata Shamana* is also done by *Snigdha Ahara* which is given at the time of *Paschat Karma*.

Shonitha Kleda is one among the *Pitta Nanatmaja Vikara* here *Kleda* refers to multiple intermediate metabolites particle which embedded in *Rakta* which triggers skin changes and oedema, hence *Raktamokshana* by *Siravyadha* is an attempt to reduce the *Kleda* in *Rakta*.

Even more “*Raktam hi Amlatam hi thatha cha ruk*” - *amlata* in *Rakta* (inflammatory markers, intermediate metabolites, Substance P) is responsible for *Ruk* that is all type of Pain. Hence forth *Raktamokshana* by *Siravyadha* is instrumental by relieving symptom like *Ruja*.

IV. CONCLUSION

Kutharika Shastra is similar to that of *Kutharika* (axe). The *Phala* of *Kutharika* is $\frac{1}{2}$ *Angula* and *Vrnta* is $7\frac{1}{2}$ *Angula* and it is similar to *Godanta*. It is used for *Siravyadha* in *Asthi pradasha*. It is a small instrument shaped like an axe, so called from its resemblance to *Kuthara*, an axe which is still used in India for cutting wood. The blade is 5 mm in length, sharp edge thickness is 0.3 mm and the length of sharp edge is 3 mm in size. The sharpness for *vyadhana* is *Kesha pramana* or thickness of the hair which is maintained for *Kutharika Shastra*. By using *Kutharika Shastra* large amount of vitiated blood can be removed from the maximum tortuous area which reduces the size of *Granthi*.

In general, the various probable mechanisms are going to change in the body by bloodletting, such as local blood supply is improved, local metabolism is improved, local drainage system is improved, fresh RBCs are produced which are active.

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