



AYURVEDA CONCEPT OF SIRAVEDHA W.S.R. TO ANATOMICAL CONSIDERATION OF BLOODLETTING

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ABSTRACT

Ayurveda provides detailed description about *Sira* and *Dhamani* with respect to their physiological and anatomical importance under the heading of *Sharira Rachana*. *Sira* are blood vessels that can be considered as vein in modern science, these vessels possess much physiological importance and there are some therapeutic measures that can be performed through these vessels and *Sira vedhan* is one of them. *Siravedha* is bloodletting technique of Ayurveda practicing from ancient time for curing disorders related to the vitiation of *Rakta*. The technique mainly employed for *Vatavyadhi* which involves symptoms of pain and swelling. *Siravedha* offers therapeutic benefits in *Raktaja vikara*, it cleanses vitiated blood and purifies circulating *Rakta*. *Siravedha* can be used for many disorders like *Avabahuka*, *Visvachi*, *Bahusosha*, *Gridhrasi*, *Khanja* and *Pangu*, etc.

KEYWORDS: *Ayurveda*, *Siravedha*, *Rakta-mokshana*, *Bloodletting*, *Sira*.

INTRODUCTION

The ancient Ayurveda described *Shastra-vishravana* as one of the types of *Rakta-mokshana* (technique for bloodletting). *Shastra-vishravana* is done by the sharp instruments and it is of two types as depicted in **Figure 1**.

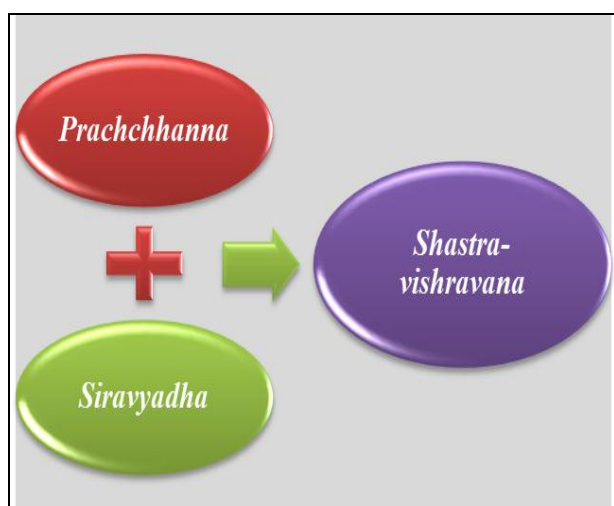


Figure 1: Types of Rakta-mokshana

Siravyadha is bloodletting technique and one of the types of *Shastra-vishravana* in which puncturing of *Sira* done for bloodletting purpose. It is described under the

heading of *Sodhana* purification purpose, which helps to remove vitiated *Dosha* & also considered as *Ardhachikitsa* for surgical treatment.^[1-4]

Sira are blood carrying channel, that transport blood towards the heart, Ayurveda described *Sira* as *Rakta Vahini Nadi*. Anatomically *Sira* is tubular structure which is capable to transport *Rakta* along with other bio-materials. *Sushruta* described that *Sira* start from *Nabhi*, *Vagbhat* opines their origin from *Hriday*, however both considered them as structures related to the blood circulation. *Dhamanis* can show pulsation while *Sira* carries moving blood without pulsation.^[4-6]

Siravedha is bloodletting technique in which puncturing of superficial blood vessels done using *Yantran Vidhi* to clear vitiated *Rakta*. *Sira vedhya* is contradicted in the *Sthavir*, *Ruksha*, *Balyavastha*, *Kshina*, *Bhiru* and *Madhya padhwa*.

***Sira Vedhan* (venue puncture) general consideration**

Sira Vedhan should be performed in various body parts by allowing patient to be seated facing towards the sun. Legs should be flexed and bandage should be tied in a way so that it remains neither too tightly nor too loosely. *Sira vedha* in leg should be done by lifting one leg up to little higher level. The leg should be tied below the *Janu sandhi*; that after pressure should be applied towards the

Gulf Sandhi. Ligature should be tied above the operating site before performing *Sira vedhya*.

Sira vedhya in arm region can be performed by allowing patient to seat on comfortable positions. Before performing *Sira vedhya* ligature should be tied in the arm region.

Sira vedhya in *Udar* and *Uras* can be performed by allowing patient lying with extended chest posture and head should be raised position.

Sira vedhya in *Parshav* can be performed with hanging arm position around the sides of body.

Sira vedhya in *Gridhrasi* & *Viswachi* region can be performed by keeping *Janu sandhi* and *Koorpar sandhi* in flexed position.

Sira vedhya in *Pristh* and *Skandh* region requires patient position raised back, with flexed head, while erectile bending position requires for performing *Sira vedhya* in *Medhra*.^[6-8]

- Veins over the bones can be punctured to the size of half *Yava* using *Kutharika*.
- Depth of puncturing should not be exceeded 2.4mm.
- Venesection must be performed on superficial veins.
- Veins liable for venesection should become prominent when pressure applied.
- *Sushruta* suggested that *Sira vedhya* should be done in *Muhurta* and blood flow should be limited up to one *Prastha*.

Specific Vein to be punctured for Particular Diseases.

1. Dorsal scapular vein can be punctured in case of *Avabahuka* (frozen shoulder) using *Brihimukha Yantra*.
2. Venesection at 4 *Angul* above and below elbow joint can be done in case of *Visvachi* (brachial neuralgia); median cubital vein can be used for puncturing vein.
3. Venesection between two scapulas of dorsal scapular vein can be done in case of *Bahusosha* (muscular wasting of shoulder).
4. *Gridhrasi* (sciatica) can be treated by puncturing great saphenous vein at four *Angul* above & below the *Janu Sandhi*.
5. Venesection at 4 *Angul* above *Gulpha* in the *Jangha* can be performed in case of *Pangu* (Paraplegia).

Physiological and therapeutic aspects of bloodletting^[7-10]

- ✓ Bloodletting causes evacuation of morbid matters from the affected area.
- ✓ Improves circulation around the affected area.
- ✓ Provides nutrition and rejuvenate circulatory process.
- ✓ Promotes metabolism & increases heart rate and boost blood supply to the brain.
- ✓ Improves microcirculation & vascular functioning.
- ✓ Removes harmful free radicals from the blood.

- ✓ Decreases chances of pathological conditions like ischemia.
- ✓ *Sira vedhya* maintain homeostasis of body and reduces edema.
- ✓ Acupuncture process associated with *Sira vedhya* stimulates release of adrenocorticotroic hormone.
- ✓ Adrenocorticotroic hormone stimulates adrenals to release Glucocorticoids which enhances immune functions & prevent production of pro-inflammatory cytokines thus suppress symptoms of inflammation.
- ✓ *Siravedha* mainly used for *Pitta* and *Rakta Vyadhies*.
- ✓ Indicated when *Pitta* or *Kapha* in *Anubandha* to *Vata Dosh* which further leads pathological manifestation.
- ✓ *Siravedha* removes *Avarana* of *Pitta* and *Kapha*.
- ✓ *Siravedha* provides way for *Anuloma Gati* of vitiated *Vata* thus relives effects caused by *Anuloma Gati* of vitiated *Vata* and cures *Vatika* symptoms.
- ✓ *Siravedha* is useful especially for *Avarana Janya Samprapti* of *Gridhrasi* in *Vata Kaphaja Gridhrasi*.

CONCLUSION

Ayurveda described many unique procedures for curing several health ailments and *Siravyadha* is one of them. Ayurveda described *Siravyadha* or bloodletting as *Ardha chikitsa* in therapeutic procedures as part of *Shalya tantra*. *Siravyadha* used as therapeutic as well as prophylaxis therapy. However practice of *Siravyadha* must requires anatomical knowledge regarding *Vedhya-Avedhya Siras* to avoid any accidental injury. The technique mainly used for *Vatavyadhi* and also offers therapeutic benefits in *Raktaja vikara*. *Siravedha* can be used for pathological conditions like *Visvachi*, *Bahusosha*, *Avabahuka*, *Khanja*, *Pangu* and *Gridhrasi*, etc.

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