

# Role of Siravyadha in Shodhana and Shamana: A Vyadhi-based Perspective

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## Abstract

Siravyadha, one among the most prominent procedures of Raktamokshana, Sushruta describes it as Ardha Chikitsa in Shalya tantra,<sup>1</sup> due to its rapid, decisive action across systemic and localized disorders. It acts as both Shodhana (elimination of dushta rakta and doshas) and Shamana (pacification of symptoms such as shoola, daha, kandu, sphurana, and sannirudha srotas), keeping in view of sthana of siravyadhana karma [site of venu puncture] with disease-specific site selection based on marma and sirā rachana. This paper consolidates vyadhi-wise indications, correlates classical sirā/marma sites with modern vascular anatomy, and here an attempt is made to clarify mechanism through Ayurvedic and contemporary science. It addresses Anukta Vyadhi (e.g., migraine, hypertension, varicose veins), refines clinical technique, contraindications, safety, and also proposes research directions for comparative validation with therapeutic venesection. This integrative framing positions Siravyadha as a precise, fast-acting, and cost-effective modality in contemporary practice.

**Keywords:** Siravyadha, Raktamokshana, Shodhana, Shamana, Marma, Vyadhi, Venesection

## Introduction

The concept of Sira, Dhamani, and Srotasa forms the foundation of Ayurvedic understanding of the circulatory system. Samhita describes the movement of colored fluids through Dhamani (bright red) and Sira (copper red), indicating an early awareness of vascular physiology.

Acharyas, Charaka, Sushruta, and Vagbhata clearly differentiated these structures. Dhamani is recognized by its pulsation, Sira serves for transportation (Sarana), and Srotasa for filtration and permeation (Sravana). Sushruta identified 700 Siras<sup>1,2</sup>, grouped as Vataavaha, Pittavaha, Kaphavaha, and Raktavaha, further distributed region-wise in the body.

Sushruta describes Vedhya and Avedhya Siras—veins that are safe for venesection and those are fatal if injured. Acharya sushruta have identified 98 Avedhya Siras, highlighting surgical precision and awareness of vascular injury. Later, Acharya Vagbhata expanded this by including tortuous and delicate veins under Avedhya<sup>3</sup>.

This systematic classification demonstrates the advanced knowledge of vascular anatomy and surgery in Ayurveda, particularly regarding Siravyadha (bloodletting therapy) and surgical safety.

Raktamokshana is one of the prime therapeutic measures of Shodhana, mentioned by all acharyas. Among its variants (Jalaukavacharana, Alabu, Shringa), Siravyadha is hailed as the foremost: 'Siravyadhaad Raktamokshanam sarva rogeshu prashasyate' (Su. Su. 14/3). Sushruta even compares it to Ardha Chikitsa

– highlighting its universal application. Siravyadha is particularly effective in diseases with vitiated Rakta (blood) and compounded by Pitta or obstructed Vata and Kapha. By directly eliminating Dushta Rakta (vitiated blood), it effectively breaks the Samprapti ghataka (pathogenesis) of numerous systemic and localized disorders, providing immediate and long-lasting relief. Its unique mechanism allows it to exert both Shodhana and Shamana. They even tried it as a cure to many non surgical diseases. Different blood vessels were linked with different organs as well as disease, according to their venous drainage. For example, in the yakruth vikara siravyadha is done in right hand and in the left hand for pleeha vikara. For different diseases and for different conditions, several varieties of Raktamokshana were designed. In western system Galen used to practise this therapy.

In modern practice, Siravyadha correlates with venesection/phlebotomy, still used in hematological and vascular disorders.

## **FUNDAMENTAL CHANGES BY BLOOD LETTING THERAPY**<sup>4</sup>

- To lessen the abundance of vitiated blood. If this blood is bled, the morbid materials of blood will be less. The purpose of blood letting is to give the bone marrow an opportunity to replace the old stagnant blood contaminated with toxins, with fresh blood cells.
- The diversion of the blood flow towards the open outlet of the superficial vessel from some of the internal organs; as for example, a vein of the right arm is opened to stay the bleeding of the left nostril; or a vein is opened in the ankle to draw down the menstrual flow in women.
- Polycythemia, which is an abnormal elevation in red cell hematocrit, has much higher blood viscosities. This increases the resistance to blood flow and therefore increases the work of the heart and can impair organ perfusion. In such condition, regular Raktamokshana is beneficial to the patient as it reduces blood viscosity by thinning the blood.

## **Vyadhi-wise Indications, Marma Sites & Anatomical Correlation**<sup>5</sup>

| Vyadhi                      | Classical sirā/marma                                      | Anatomical correlation                 | Therapeutic effect                                                                                         |
|-----------------------------|-----------------------------------------------------------|----------------------------------------|------------------------------------------------------------------------------------------------------------|
| Gridhrasi (sciatica)        | Jaladhara sirā at Janu marma; 4 angula above Gulpha marma | Popliteal vein; perforators near ankle | <b>Relief of radiating pain and stiffness:</b> decompresses congested channels, reduces local inflammation |
| Ardita (facial palsy)       | Shankha marma                                             | Superficial temporal vein              | <b>Improves circulation, pacifies Vata:</b> reduces congestion, may modulate neural perfusion              |
| Apabahuka (frozen shoulder) | Kakshadhara sirā                                          | Cephalic vein near axilla              | <b>Reduces stiffness, restores ROM:</b> clears local stasis                                                |

|                                                                                          |                                                       |                                                             |                                                                                                    |
|------------------------------------------------------------------------------------------|-------------------------------------------------------|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| Vatarakta (gout)                                                                         | Hasta–Pada sirā; 2 angula above Kshipra marma         | Dorsal hand/foot veins                                      | <b>Shodhana of dushta rakta:</b> pain and inflammation reduction                                   |
| Kushta (skin diseases)                                                                   | Hasta–Pada sirā                                       | Dorsal hand/foot veins                                      | <b>Reduces kandu, discoloration, thickening:</b> peripheral detox and microcirculatory improvement |
| Visarpa (herpes zoster)                                                                  | Local sirā                                            | Cutaneous veins in dermatome                                | <b>Relieves burning and pain:</b> reduces local congestion                                         |
| Shiroroga (migraine)                                                                     | Lalata sirā, Shankha marma                            | Frontal and temporal veins                                  | <b>Reduces vascular engorgement and daha:</b> alleviates cranial congestion                        |
| Netra roga (conjunctivitis)                                                              | Kaninaka sirā                                         | Angular vein at medial canthus                              | <b>Reduces congestion and redness:</b> drains local stasis                                         |
| Amavata (RA), knee predominant                                                           | Janu sirā                                             | Medial/lateral popliteal tributaries                        | <b>Relieves swelling and stiffness:</b> reduces inflammatory load                                  |
| Asthi–majja gata vata                                                                    | Local sirā                                            | Joint-associated superficial veins                          | <b>Reduces pressure and stiffness:</b> improves local flow                                         |
| Hypertension                                                                             | Shankha/Lalata sirā                                   | Temporal/frontal veins                                      | <b>Reduces cranial vascular overload:</b> symptomatic relief                                       |
| Siragranthi (Varicose veins)                                                             | Local congested sirā                                  | Great saphenous vein region                                 | <b>Reduces venous pooling and heaviness:</b> decompresses superficial circuit                      |
| Apachi (cervical lymphadenitis)                                                          | 4 angula below Indra basti marma                      | Anterior leg perforators (correlative)                      | <b>Reduces localized swelling:</b> facilitates drainage                                            |
| Shlipada (filariasis/lymphedema)                                                         | 4 angula above Gulpha marma                           | Distal leg superficial veins                                | <b>Decongests distal edema:</b> symptomatic relief                                                 |
| Pada daha – burning sensation of feet<br>Pada harsa – tingling or tenderness in the feet | Sira situated 2 angula – 4 cm above the Kshipra Marma | (vital spot present in in between big toe and the next toe) | <b>Relieves burning sensation,</b> tingling, tenderness in feet                                    |

|                                                                                                                                                                   |                                                                                                                                         |                                  |                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------|
| Timira – partial blindness<br>Aksi-paka – ulceration of the eye                                                                                                   | At upanasika – base of the nose or Forehead or Outer angle of the eye                                                                   | Angular/frontal veins            | <b>Reduces ocular congestion,</b> improves vision clarity             |
| Dakodara / Jalodara – ascites                                                                                                                                     | Below the umbilicus, 4 angula – 8 cm at the left side of the raphae of the abdomen                                                      | Abdominal wall veins             | <b>Relieves fluid accumulation,</b> reduces abdominal pressure        |
| Antar-vidradhi – internal abscess<br>Parsva-sula – pain in the flanks                                                                                             | In between the axilla and breasts, on the left flank                                                                                    | Intercostal/axillary tributaries | <b>Reduces abscess load,</b> flank pain                               |
| Pliha – diseases / enlargement of spleen                                                                                                                          | In the left arm, either at the inner side of the elbow joint or at the center of the arm or in the area between little and ring fingers | Basilic/median veins             | <b>Reduces splenic congestion</b>                                     |
| Yakriddalyodara – abdominal enlargement caused due to increase in size of liver – hepatomegaly and<br>Kaphodara – abdominal enlargement caused by increased kapha | In the right arm, at the same places mentioned for vein puncture in case of enlargement of spleen above                                 | Cephalic/median veins            | <b>Relieves hepatic congestion,</b> reduces kapha-related enlargement |

## Siravyadha in Shodhana and Shamana Role

### Shodhana (eliminative):

- **Primary indications:** Vatarakta, Kushta, Visarpa, Pittaja Shiroroga, Vidradhi. **Rationale:** Expels dushta rakta and pitta; breaks samprapti by clearing margavarana and normalizing Vata gati.
- **Modern parallel:** Reduction of hematocrit/viscosity and inflammatory mediators; relief of hyper viscosity and congestive states.
- **Shamana (palliative):**
- **Primary indications:** Gridhrasi, Ardita, Apabahuka, Amavata, Asthi–majja gata vata.
- **Rationale:** Reduces local pressure, clears obstruction, alleviates pain, burning, and stiffness; supports functional recovery.
- **Modern parallel:** Microcirculatory improvement, venous pressure reduction, symptomatic decompression.

## Mode of Action

### Ayurveda view

- Dosha shodhana: Expels vitiated Rakta-Pitta and unblocks srotas, thereby pacifying Vata.
- Samprapti vigatana: Relieves margavarana, restores gati of Vata, and reduces santata vedana, daha, and kandu.
- Vedana shamana: Removal of obstructive load decreases shoola; improved flow reduces daha and kandu.

### Modern view <sup>6</sup>

- Hemorheology optimization: Decreases hematocrit, viscosity, and shear stress, improving oxygen delivery and microcirculation in congestive states <sup>6</sup>.
- Inflammatory modulation: Evacuation of blood may reduce circulating inflammatory mediators and oxidative burden.
- Venous pressure reduction: Targeted venesection decompresses superficial circuits, relieving symptoms in venous congestion (e.g., varicose veins, cranial vascular engorgement).
- Clinical analogs: Therapeutic venesection remains standard in polycythemia vera and is used in porphyria cutanea tarda and select congestive states.

## Discussion

Siravyadha occupies a unique place within Panchakarma, offering swift resolution of congestive and inflammatory states while simultaneously addressing dosha and dushya. Its bidirectional action—Shodhana and Shamana—allows tailored interventions based on the vyadhi and atura bala. Classically marma-guides site selection and reflects precise anatomical awareness and surgical caution embedded in Ayurveda.

Modern correlations with therapeutic venesection strengthen its relevance. In hyper viscosity syndromes such as polycythaemia vera, controlled phlebotomy reduces haematocrit and viscosity, improving perfusion and decreasing cardiovascular strain <sup>7,8</sup>. These effects align with Ayurvedic goals of clearing dushta rakta and relieving margavarana. Peripheral venesection in conditions with local congestion (e.g., varicose veins, cranial vascular engorgement) can reduce venous pressure and symptom burden, mirroring Siravyadha's palliative outcomes.

The marma-based mapping in this paper bridges traditional nomenclature with pragmatic vascular anatomy, aiding selection and safety. For example, Shankha/Lalata sirā targeting for Shiroroga and hypertensive headaches is consistent with relieving cranial venous load, while Hasta-Pada sirā selection in Vatarakta supports peripheral decompression where microvascular stasis exacerbates pain and inflammation. Nevertheless, robust clinical evidence remains sparse. Priorities include randomized comparisons with phlebotomy, dose-response studies correlating volumes evacuated with symptomatic change, and biomarker tracking (haematocrit, viscosity, inflammatory indices) to illuminate mechanisms and optimize protocols.

Integrative frameworks should also explore Anukta Vyadhi domains—autoimmune arthropathies, metabolic syndrome, migraine variants, and dermatologic disorders—where combined Shodhana-Shamana strategies may offer additive benefits <sup>8,9</sup>. Safety standardization, contraindication refinement, and training on Avedhya avoidance are essential to scale practice responsibly.

## Conclusion

Siravyadha remains a cornerstone therapy with dual Shodhana and Shamana effects. Disease-wise application aligned with marma–anatomical understanding enables precise, fast-acting relief in classical conditions (Vatarakta, Gridhrasi, Kushta) and modern disorders (hypertension, varicose veins, migraine)<sup>10</sup>. By bridging Ayurvedic principles with contemporary venesection<sup>11</sup>, Siravyadha exemplifies integrative, cost-effective care. Future work should focus on controlled trials, mechanistic studies, and standardized protocols to establish evidence, refine indications, and enhance global adoption.

## References

1. Sushruta. Sushruta Samhita, Sutrasthana 14/3. With Dalhana commentary. Varanasi: Chaukhambha Orientalia; 2008.
2. Charaka. Charaka Samhita, Siddhisthana 9. Varanasi: Chaukhambha Bharati Academy; 2006.
3. Vagbhata. Ashtanga Hridaya, Sutrasthana 23. Varanasi: Chaukhambha Sanskrit Series; 2011.
4. Tripathi RD. Clinical utility of Raktamokshana in Vatarakta. AYU. 2019;40(3):165–70.
5. Sushruta. Sushruta Samhita, shareerasthana 8/17. With Dalhana commentary. Varanasi: Chaukhambha Orientalia; 2008
6. Singh A, Sharma R, Gupta S. Therapeutic venesection: correlation with Siravyadha. J Ayurveda Integr Med. 2021;12(4):567–73.
7. McMullin MF. Therapeutic phlebotomy in hematological disorders. Hematology. 2016;21(9):543–50.
8. Agarwal A, Patwardhan B. Ayurveda and integrative medicine: relevance of Raktamokshana in modern disorders. J Ayurveda Integr Med. 2020;11(2):123–30.
9. Choudhary A, Singh R. Clinical evaluation of Siravyadha in autoimmune disorders: a pilot study. AYU. 2023;44(1):55–62.
10. Weiss G, Goodnough LT. Anemia of chronic disease. N Engl J Med. 2005;352(10):1011–23.
11. Kaur J, Sharma R. Integrative perspectives on Siravyadha in modern practice. J Res Ayurveda. 2022;46(2):89–95.