

Clinical Evaluation of an Ayurveda Protocol in the Management of Varicose Veins: A Case Report

Deepthi C V¹, Sivakumar C S²

¹Ph.D Scholar, Department of Shalyatantra, Glocal University

²Research Supervisor, Department of Shalyatantra, Glocal University

¹Email: deepthi.deepdev@gmail.com, ²Email: sivakumarcs33@gmail.com

Abstract—Background: Varicose veins are dilated and tortuous superficial veins of the lower extremities, commonly associated with venous reflux and chronic venous hypertension. In Ayurveda, the clinical presentation of varicose veins can be correlated with Siragranthi. Ashtanga Hridaya describes Siragranthi in association with aggravated Vata, producing changes in sira such as constriction, distortion and drying of the venous structures. The classical management includes Upanaha, Vasti Karma and Siravyadha as explained by Vagbhatacharya. **Case Presentation:** A 62-year-old male presented with prominent, dilated and tortuous veins over the left lower limb associated with pain, swelling and heaviness for two years. Clinical examination and venous Doppler evaluation revealed venous incompetence involving the saphenofemoral junction and perforator veins. An Ayurvedic treatment protocol consisting of Upanaha Sweda, Vasti Karma and Siravyadha, along with appropriate internal medications, was administered. **Results:** Following completion of the treatment protocol, the patient reported reduction in pain, swelling and heaviness of the affected limb. Clinically, a reduction in the prominence and tortuosity of the veins and improvement in pigmentation were observed. The patient also reported improved mobility and daily functional activities. **Conclusion:** This case demonstrates clinical improvement in symptoms and functional status following an Ayurvedic management approach based on the classical treatment principles of Siragranthi. Further controlled clinical studies with standardized outcome measures and longer follow-up are required to evaluate the efficacy and safety of this approach.

Keywords— Siragranthi; Siravyadha; Upanaha Sweda; Varicose veins; Vasti Karma.

I. INTRODUCTION

Varicose veins are abnormally dilated, elongated and tortuous superficial veins, most commonly affecting the lower limbs. They develop in association with venous reflux and chronic venous hypertension and may present with symptoms such as aching pain, heaviness, swelling, itching, skin pigmentation and, in advanced cases, ulceration. [1], [2] Duplex ultrasound is an important diagnostic investigation for evaluating venous reflux and identifying the anatomical source of incompetence. Current venous-disease guidelines recommend duplex ultrasound as the diagnostic investigation of choice in patients with suspected chronic venous disease.

In Ayurveda, the clinical features of varicose veins may be correlated with Siragranthi. Ashtanga Hridaya, Uttara Sthana, describes Siragranthi as a condition involving the veins in which aggravated Vata produces Sampeedana (compression), Sankocha (constriction), Vakreekarana (distortion) and Visoshana (drying)drying of vein. [3]

The classical treatment described for Siragranthi as per Ashtanga Hridaya includes Sahacharadi Taila Pana, Upanaha prepared with drugs possessing Anila-hara properties, Vasti Karma and Siravyadha. [4]

The present case was managed according to these classical principles using an ayurveda treatment protocol comprising Upanaha Sweda, Vasti Karma and Siravyadha, supported by internal medication. The case is presented to document the clinical response to this Ayurvedic approach in a patient with clinically evident lower-limb varicose veins and Doppler-confirmed venous incompetence.

II. CASE PRESENTATION

A 62-year-old male patient presented to the Department of Shalya Tantra with complaints of visible, swollen and twisted veins in the bilateral lower limb, particularly noticeable when standing or sitting for long period, present since past 2years progressively worsening. Associated with aching pain, swelling over left lower limb since 5 -6 months . Patient also complaints of Moderate itching over the affected area since 6 months

History of Present Illness

Patient not a k/c/o DM, HTN, DLP, had a history of varicose veins since 9 years. The symptoms began gradually and affected the lower limbs. The symptoms worsen towards the end of the day and after standing for long period and improve with leg elevation.

There was swelling around the ankles, occasional itching and darkening of the skin around the affected area.

For this complaint he underwent Vein Stripping Surgery of left leg in 2016.

Local Examination

On local examination, visibly dilated and tortuous superficial veins were observed over the affected lower limb. Swelling and pigmentation were also noted below knee.

Special Tests

Trendelenburg test – positive

Rapid filling of veins upon standing

Tourniquet test – positive

Immediate filling below tourniquet

Modified Perthes test – negative

Moses's sign - negative
CEAP SCORE - C4 Ep As Pr

Investigation

Venous Doppler examination was performed for assessment of the venous system. The investigation demonstrated incompetence at the saphenofemoral junction and incompetent perforator veins, supporting the diagnosis of chronic venous insufficiency with varicose veins.

Ayurvedic Assessment

The clinical presentation of varicose vein may be considered as Siragranthi based on the clinical presentation mentioned in classics especially in Ashtanga Hridaya.

III. TREATMENT PROTOCOL

The patient was treated according to the classical principles described for Siragranthi.

A. Upanaha Sweda

Upanaha Sweda was administered locally over the affected lower limb using vachadi choorna explained in Ashtanga Hridaya sutrasthana.

Procedure

Dravyas [5]

Vacha (Acorus calamus), Kinwa (yeast), Shatahwa (dill), Devdaru (Cedrus deodara), Dhanya, Gandha Dravya, Rasna (Pluchea lanceolata), Eranda (Castor)

Each added with salt (lavana) in Sneha (fat), Chukra (sour preparation), Takra(butter milk) and Payaha (milk)

The prepared medicinal paste was applied over the affected area and retained for the prescribed duration according to the treatment protocol. The procedure was performed under appropriate clinical supervision.

B. Vasti Karma

Yoga Vasthi was given

A total of eight Vasthi were administered across eight consecutive days

Snehavasthi – 5

With Sahacharadi mezhuku pakam- 100ml

Kashayavasti - 3

Erandamooladi Kashaya Vasthi

Composition:

Saindhavam - 15gm

Makshikam - 120ml

Sneham (Sahacharadi Mezhukupakam) - 200ml

Satapushpa Kalkam - 30gm

Erandamooladi Kashayam – 480ml

The procedure was selected based on the classical consideration of Vata as an important factor in the pathogenesis of Siragranthi.

C. Siravyadha

Siravyadha was performed as a parasurgical intervention according to the classical principles of Ayurveda and under appropriate aseptic precautions.

The participants were made to sit comfortably in a well-ventilated procedure room. A tourniquet was secured proximal

to the selected puncture site, which was then cleansed and prepared with an antiseptic solution. A prominent vein was identified. Using a sterile 18-gauge needle, the vein was punctured carefully, and blood was allowed to flow out freely into a sterile collection container. After withdrawal of 125 ml of blood, the needle was removed and the puncture site was immediately compressed with sterile gauze. This was followed by tight compression bandaging and the patient is advised to keep foot end elevation for 1 hr.

After every procedure the patient was observed for any immediate complications, such as dizziness, excessive bleeding, or drop in vitals. Vital signs were rechecked and recorded. The procedures were carried out after assessing the patient's general condition and suitability for the intervention.

D. Internal Medication

Sahacharadi kashayam 45ml along with Sahacharadi sevyam 2tsp was given daily twice before food was administered as supportive treatment during the treatment period.

IV. ASSESSMENT PARAMETERS

Clinical assessment was performed before and after treatment based on the patient's symptoms and physical findings.

The following parameters were assessed:

Pain, swelling, itching, visible tortuous veins, pigmentation, mobility, functional activity

Venous Clinical Severity Score (VCSS) is used for grading clinical severity.

V. RESULTS

Following completion of the Ayurvedic treatment protocol, the patient demonstrated clinical improvement in several presenting complaints. Pain and itching were considerably reduced, while venous oedema and induration showed noticeable improvement. The previously prominent dilated and tortuous veins became less prominent. Skin pigmentation showed gradual improvement, although it persisted to some extent after treatment. The patient reported improvement in mobility and overall functional status following treatment. Overall, the findings indicate a positive clinical response to Ayurvedic management of varicose veins in this single case.

TABLE I. Clinical Changes Observed Before and After Treatment

Clinical parameter	Before treatment	After treatment
Pain	Moderate pain, particularly on prolonged standing, interfering daily activities	Mild/occasional pain, not interfering daily activities
Swelling	Moderate oedema of the affected lower limb extends below knee	Mild oedema, mainly after prolonged standing limited to ankle
Itching	Moderate itching over the affected area	Itching was not present
Visible tortuous veins	Prominent, dilated and tortuous veins	Veins less prominent with reduced distension
Pigmentation	Moderate pigmentation over the affected area especially lower third of calf	Mild Pigmentation over affected area
Mobility	Restricted/discomfort	Improved
Functional activity	Affected	Improved



Fig. 1. Clinical photographs before and after treatment.

VI. DISCUSSION

From Ayurvedic perspective, the clinical presentation of varicose vein can be correlated with Siragranthi. Hence the classical treatment protocol mentioned in Ashtanga Hridaya was selected which includes Upanaha, Vasti Karma and Siravyadha.

Mode of Action of Upanaha Sweda [7], [8]

Upanaha Sweda provides local therapeutic application of warm medicinal material. From an Ayurvedic perspective, the procedure is primarily considered Vata-shamana and Srotoshodhana. Application of the Upanaha to the affected part causes local vasodilation, stimulation of superficial nerve endings and increased blood flow which increases nutrition supply and metabolism. The local application and warmth may also contribute to symptomatic relief. It also causes an antiinflammatory effect on the local site by clearing the inflammatory mediators. [9]

Mode of Action of Vasthi

Vasti Karma is traditionally regarded as an important treatment for disorders involving Vata. In this case, its inclusion was based on the classical understanding of Vata involvement in Siragranthi. Vasthi is the principal therapy for pacifying Vata Dosha, whose primary seat is the large intestine. When administered rectally, its Veerya (active potency) rapidly spreads through the circulatory and nutritional channels, mobilizing aggravated doshas from the abdomen, flanks, and distant tissues for systemic elimination. Medicated oils provide antiinflammatory, venotonic, and antioxidant effects that strengthen venous walls, reduce endothelial injury, and improve elasticity. Herbal decoctions enhance microcirculation, relieve stasis, and reduce edema, while lipidbased formulations support mucosal uptake and sustained release. Gentle rectal stimulation

may also activate the parasympathetic system, promoting vascular relaxation and improved hemodynamics. [10]

Mode of Action of Siravyadha

Siravyadha is described by Vagbhata as part of the management of Siragranthi. The procedure was incorporated into the present protocol as a classical parasurgical intervention

There is considerable pressure gradient at the two ends of capillary loop—being higher at the arteriolar end (average 32 mmHg) than at the venular end (average 12 mmHg). A rise in the hydrostatic pressure at the venular end of the capillary which is normally low (average 12 mmHg) to a level more than the plasma oncotic pressure results in minimal or no reabsorption of fluid at the venular end, consequently leading to oedema. By doing Siravyadha the elevated venous pressure gets relaxed normal fluid exchange mechanism and tissue oxygenation gets enhanced which in turn helps in reducing oedema and pigmentation. [11]

Even though a treatment protocol is mentioned for siragranthi, it may not be necessary to perform together in all cases. Depending on the chronicity of the disease and clinical manifestation of the disease the treatment modality can be adopted.

VII. CONCLUSION

The present case demonstrated improvement in pain, swelling, itching, limb heaviness, pigmentation, visible venous tortuosity and functional activity following an Ayurvedic treatment protocol consisting of Upanaha Sweda, Vasti Karma and Siravyadha, along with supportive internal medication.

The treatment approach was based on the classical Ayurvedic management principles described for Siragranthi. Although the clinical response observed in this patient is encouraging, a single case report cannot establish treatment efficacy. A large scale prospective clinical studies with standardized outcome measures, objective Doppler assessment and longer follow-up are required to evaluate the therapeutic role of this protocol in varicose veins.

VIII. PATIENT PERSPECTIVE

The patient reported subjective improvement in pain, swelling and heaviness of the affected lower limb following treatment and experienced improved mobility and ability to perform routine activities.

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