

The Role of Siravedha in the Management of Siraja Granthi (varicose veins)- A case Report.**Dr. Pooja Telangre,**¹BAMS MS Shalya Tantra (Banaras Hindu University, Varanasi),

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E-mail- telangrepooja55@gmail.com**Abstract:**

When a vein becomes dilated, elongated and tortuous due to retrograde blood flow, the affected vein is called a "Varicose vein". The superficial venous system of lower limbs affects either the long saphenous or short saphenous veins, or both are common sites for Varicose veins.¹

The most common cause is incompetent valves in the vein, while increasing age, obesity, pregnancy, standing posture etc are risk factors. Shira Sankocha (tortuous veins), Shira Vakrata (irregular surface of veins), Shira utsedha (inflammation of veins) and Vishoshana (roughness and hardness of veins) are the clinical features of Shiragranthi. These features are helpful in correlating shiraja granthi with Varicose veins²

In this Case report A 40-year-old patient Suffering from Dilated veins in the right lower limb since 7 years associated with pain in the right lower limb and discoloration of skin over the right ankle was diagnosed as a case of the varicose vein (sirajagranthi). After 1st sitting of Siravedha there was a remarkable reduction in pain. After 3rd sitting pain was completely relieved. The patient has shown tremendous improvement in the VAS score. Skin pigmentation was gradually reduced after 2nd sitting of siravedha. Even after 1 year of follow-up, the patient had relief in all symptoms. This case study demonstrates that the case of Varicose vein can be successfully managed with Siravedha - A minimally invasive nonsurgical therapeutic intervention.

Keywords: varicose veins, Siravedha, sirajagranthi

Introduction:

Varicose veins are dilated, tortuous, elongated veins in the leg. There is reversal of blood flow through its faulty valves. It is permanently elongated, dilated vein/veins with a tortuous path causing pathological circulation. Risk factors being heredity; female sex; occupation that demands prolonged standing; immobility; raised intra-abdominal pressure like in sports, tight clothing, pregnancy, raised progesterone level and altered estrogen-progesterone ratio, chronic constipation, high heels. Prevalence of varicose veins is 35%; severe varicose veins is 10%; chronic venous insufficiency (CVI) is 8%; ulcer is 2%.³

The various stages of the condition are classified by the CEAP classification. In stage C1, the disease manifests itself as spider veins and reticular veins.⁴ Stage C2 includes uncomplicated varicose veins. The more advanced stages of the

disease are referred to as chronic venous insufficiency. In stage C3 oedema, without skin changes, is present. Advanced skin lesions such as lipodermatosclerosis or trophic changes (C4) as well as healed (C5) and active ulcerations (C6) are complications seen in more advanced stages. Consequently, it can lead to the loss of the affected limb, and can even be life threatening.⁵

In Ayurveda classics varicose veins can be very much correlated with the signs and symptoms explained for Siraja granthi (obstructive circulation). Due to Vataprakopaka nidanas (causative factors which increase vata) such as physical exertion, and straining, for debilitated persons the vitiated vata enters the Siras(veins) causing Sampeedana (Squeezing), Sankocha(constriction), and Vishoshana(the act of drying up) which produces round and protruded Granthi in the Siras(Veins), manifesting Siraja granthi(varicose vein)⁶. Hence Ayurveda reveals Siravyadham(venesection).⁷

Siraja granthi is one among the five granthi's which are mentioned by Acharya Susruta⁶ It is also

mentioned by Acharya Charaka, Acharya Vagbhatta⁸, etc.

Symptoms, if present, are usually localized over the area with varicose veins; however, they may be generalized to include diffuse lower extremity conditions. Localized symptoms include pain, burning, or itching. Generalized symptoms consist of leg aching, fatigue, or swelling. Symptoms are often worse at the end of the day, especially after periods of prolonged standing, and usually disappear when patients sit and elevate their legs. Women are significantly more likely than men to report lower limb symptoms, such as heaviness or tension, swelling, aching, restless legs, cramps, or itching.⁹ No correlation between the severity of the varicose veins and the severity of symptoms has been noted. Established risk factors for varicose veins include chronic cough, constipation, family history of venous disease, female sex, obesity, occupations associated with orthostasis, older age, pregnancy, and prolonged standing.¹⁰

Although varicose veins may cause varying degrees of discomfort or cosmetic concern, they are rarely associated with significant medical complications. Skin pigmentation changes, eczema, infection, superficial thrombophlebitis, venous ulceration, loss of subcutaneous tissue, and a decrease in lower leg circumference (lipodermatosclerosis) are possible complications. Although rare, external hemorrhage resulting from the perforation of a varicose vein has been reported.¹¹

Evaluation of patient risk factors, symptoms, and typical physical examination findings help determine a diagnosis. Although a detailed physical examination is sufficient to diagnose most patients with primary varicose veins, it does not provide information about the presence of deep venous insufficiency. Clinical tests used to detect the site of reflux are of limited value. A positive tap test and a negative Perthes test are most helpful.¹²

Aim And Objective:

- To Study the role of Siravedha in the management of Siraja granthi (varicose veins).

Material And Method:

- Study design: Single-arm clinical study.

- For ethical consideration, consent has been taken from the patient before the commencement of treatment.
- For the present study, a 40-year-old male patient having symptoms of Varicose veins since 7 years has been discussed in a detailed manner.
- The patient was treated with Siravedha (Blood letting).

Assessment Criteria

CEAP Classification of lower limb varicose veins (2004) ³		B T	A T
C—Clinical signs (grade 0–6) A)for asymptomatic (S)for symptomatic presentation	0-No visible or palpable signs of venous diseases	C4 a (S)	C2 (A)
	1-Telangiectases, reticular veins, or malleolar flare		
	2- Varicose veins		
	3- Oedema without skin changes		
	4 -Skin changes due to venous diseases like pigmentation , eczema		
	4a- pigmentat ion; 4b- lipoderma tosis		
E— Etiological classification :	5- Skin changes as above with healed ulceration.	Ep	Ep
	6- Skin changes as above with active ulceration.		
	Congenital (Ec)		
	Primary (Ep)		
A— Anatomic distribution:	Secondary (Es)	As 3	As 3
	no venous etiology (En)		
	Superfi cial (As)		
	1– Telangiectases, reticular veins		
	2–Great saphenous vein above the knee ostial and preterminal		
	3–Great saphenous vein below the knee		
	4–Small saphenous vein		
	5– Nonsaphenous -43%		

	Deep (Ad)	From 6 to 15		
	Perforator (Ap)	17– Perforator vein (PV) of the thigh		
		18– Perforator (PV) of the calf and leg		
	No venous location identified (An)			
P— Pathophysiologic dysfunction:	Reflux (Pr)		Pr	Pr
	Obstructive (Po)			
	no pathophysiology identified (Pn)			

	CEAP score	Classification-clinical
Before treatment	C4a(S)	
After treatment	C2(A)	

Subjective parameters:

1. Pain: VAS scale¹³

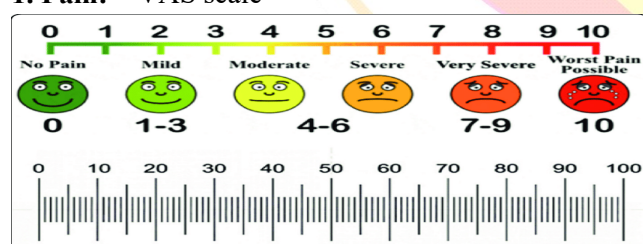


Fig. 1.1 Visual Analogue scale.¹³

Case Report

History Of Present Illness:

A 40-year-old patient presented to the outdoor patient department of the hospital on 6 June 2023. The patient complained of Dilated veins in the right lower limb since 7 years associated with pain in the right lower limb and discoloration of skin over the right ankle for 1 year.

The patient was well 7 years back when he noticed dilated veins on the right inner aspect of the right lower limb. They were insidious in onset and

gradually progressive. Veins increased in size on prolonged standing or walking and decreased on lying down. They are associated with intermittent episodes of dull aching pain since 1 year in the right calf and the lower leg, aggravating on prolonged standing and walking and relieving on lying down, associated with night cramps. The patient also noticed a blackish discoloration of the skin over the right ankle 3 months back, which was insidious in onset, gradually progressive, and not associated with itching. Patient was suffering from severe pain in right lower limb since 1 month and consulted allopathic doctors but temporary relief was obtained. The patient was advised for surgical management by an allopathic doctor. but the patient was not willing for surgery. Since the patient had already spent much time and money on all possible treatment options, he opted for Ayurveda management.

Past History:

- No h/o similar complaints in the past.
- No h/o edema of the leg.
- No h/o nonhealing wound in the lower limb.
- No h/o previous surgery for varicose veins.
- No h/o fever.
- No h/o abdominal distension, pain.
- No h/o breathlessness, cough, hemoptysis.
- No h/o trauma, prolonged immobilization of the limb.
- No h/o long term hospitalisation.
- No h/o diabetes mellitus, hypertension, asthma, epilepsy, tuberculosis.

Clinical Findings:

On examination, her vitals were found to be within the normal limits. Pallor, icterus, clubbing, and lymphadenopathy were absent. The patient was having vatakapittaja nadi (vata pitta/dominated pulse), Akriti (-body stature) was Sthoola (~overweight), with a body mass index of 25.6 kg/m². Her Vyayamashakti (-the power of performing exercise) was Alpa (~less), and Vaya (~age) was Madhayama (~medium). Systemic examination did not reveal any abnormality. There was no specific family history, surgical history, or history of past hospitalization

General Examination of Patient

BP-130/80 mm of Hg. P-78/min

Sleep - Disturbed

Bowel - Constipated

Micturition- Regular

Systemic Examination:

CVS- S1S2 normal

CNS- conscious and oriented

RS- air entry bilaterally equal, clear

PA-Soft, non-tender, no organomegaly.

TIMELINE: [Table]

6 June 2023 [1 st visit]	C/O - Dilated veins, associated with pain in the right lower limb and discoloration of skin over the right ankle. Siravedha 1st sitting was done. CEAP Score: C4aEpAs3Pr Pain: VAS score- 9
12 June 2023 [2 nd visit]	C/O- Dilated veins in the right lower limb, associated with discoloration of skin over the right ankle. Siravedha 2 nd sitting was done CEAP Score: C4aEpAs3Pr Pain: VAS score- 5
19 June 2023 [3 rd visit]	C/O- Dilated veins in the right lower limb Siravedha 3 rd sitting was done. O/E - a slight reduction in skin discoloration CEAP Score: C3EpAs3Pr Pain- VAS score-3
26 June 2023 [4 th visit]	C/O- Dilated veins in the right lower limb. CEAP Score: C2EpAs3Pr Pain- VAS score-0

Inspection:

- The attitude of the limb is normal.
- The other limb appears to be normal.
- Localized multiple dilated veins present on his right lower limb: lower 1/3rd of the medial aspect of the thigh, medial aspect of the leg just below the knee, and in front of the medial malleolus.
- Blackish discoloration of the skin over the right ankle.
- The skin is not stretched and shiny, no eczema.
- No ulcer, scar, scratch marks, or loss of hair.
- Saphena varix is not present.

Palpation:

- No local rise of temperature & edema.
- All inspectory findings confirmed.
- Regional lymph node not palpable.
- All peripheral arterial pulses were felt.
- Sensation & proprioception - not disturbed.
- Brodie-trendelenburg test.
- TEST 1: Saphenofemoral incompetence present.
- TEST 2: Perforator incompetence present.
- The tourniquet test - was positive, indicating incompetence below knee, & above ankle perforators.
- Schwartz test positive- Impulse felt at the saphenous opening-implies valves along GSV are incompetent and involve a single continuous column of blood.
- Morrissey's cough impulse - Expansile cough impulse felt at SFJ.
- Fegan's method- depression felt at above knee, below knee, & above ankle perforator sites.
- Pratt's test- not done
- Modified Perthes test- not done.
- Percussion - Schwartz sign positive.
- Auscultation- no bruit heard.

Diagnostic Assessment:

The patient was examined in OPD on 6th June 2023 and clinically diagnosed as a case of Varicose veins of the right lower limb.

On local examination findings were as follows:

❖ Local Examination

The patient was examined in standing & supine position with both legs exposed up to the umbilicus

- ❖ Routine blood investigations were carried out before treatment and reports were analyzed. The investigations, including HIV and HBsAg, were negative, and bleeding time and clotting time were in the normal range.

- ❖ **Colour doppler:** (venous system) Right lower extremity
Findings s/o multiple

- Multiple dilated superficial varicosities are seen involving GSV at below knee region.
- Incompetent perforator involving GSV [GSV appears dilated in caliber at the level of Saphenofemoral Junction (9.1 mm) and normal at Mid-thigh level (5.0 mm)] Saphenofemoral Junction is incompetent. Significant reflux noted.
- SPJ are competent. No reflux was noted.
- No obvious incompetent perforators and superficial varicosities along SSV.
- No e/o deep venous reflux.
- No evidence of deep venous thrombosis.

Therapeutic Intervention Procedure Of Siravedha [14]

Purva karma

- The patient was explained about the procedure and informed written consent was taken
- All the vitals like pulse, BP, and Spo2 were checked and ensured within normal limits.
- The patient was advised to take Yavagu 1 hour before Siravedha.
- All the sterile materials required for Siravedha are kept ready. (Figure1)
- Part preparation was done by performing Snehana and Naadi swedana below-knee.

Pradhan karma

- Then he was made to lie down on the examination table in the supine position.
- Siravedha was done with Scalp vein set number 22 from the more prominent and visible vein of the right lower limb.
- Around 10 to 15 ml of blood letting was done during each sitting of siravedha (Figure 1.4).

Paschata karma

- Then tight bandaging was done after stopping bloodletting.
- The patient was observed for up to half an hour for any complications.
- This same procedure was repeated after 7 days and total 3 sittings of siravedha were done.

Follow Up And Outcome:

The patient was examined on the 2nd, 3rd, and 4th visit after the siravedha procedure. After completion of treatment follow-up for at least 1 year

on every 3 months was maintained. The patient had a significant reduction in the signs and symptoms.

After 7 days (1st sitting), there was a considerable reduction in Pain i.e from 8 to 4 on the VAS scale. burning sensation reduced after 14 days of treatment i.e., 2nd sittings. Afterward, the patient had significant relief in burning sensation and the VAS scale was reduced to grade 1. The patient was observed for 1 year, every 3 months.

After completion of the treatment protocol, the patient was assessed for any recurrence of symptoms. The patient got complete relief from symptoms and there was no recurrence of symptoms within 1 year of the follow-up period.

Result And Discussion:

In this case report, a 40-year-old male with Varicose veins of right lower limb complaining of Dilated veins in the right lower limb since 7 years associated with pain in the right lower limb and discoloration of skin over the right ankle for 1 year was treated with 3 sittings of Siravedha experienced complete relief from pain. Every 3-month follow-up was maintained for up to 1 year during which the effect of Siravedha treatment was sustained. Further, the follow-up clinical findings revealed that the Varicose veins growth was arrested and the patient experienced no pain even after the presence of varicose veins. Also, skin discoloration reduced gradually.

The assessment was done before and after treatment based on relief in signs and symptoms i.e. Relief of Pain, and CEAP clinical examination score. A partial reduction in Lower limb pain was seen after 1st sitting of Siravedha. Complete pain relief was seen after 3rd sitting of siravedha. Pigmentation of skin gradually reduced after 2nd sitting of siravedha and at the end of treatment, skin colour was near normal.

In this case, the possible explanation for the effectiveness of Siravedha is that In Ayurveda, signs and symptoms of Sirajagranthi² are closely linked to varicose veins. Because of Vataprakopaka nidana which includes physical exertion and straining, vitiated vata enters the Sira, inflicting Sampeedana, Sankocha, and Vishoshana², resulting in round and protruding siragranthi. Because of this samprapthi, siravyadham will make a big difference in the

medical manifestations of Siragranthi.¹⁵ The siras are the ashrayasthana of siragata vata. Due to apathyahara and viharas, the dosha, particularly vata, becomes vitiated, obstructing blood flow in the siras of the lower limb. The kutila sira manifests in adho-kaya, a major seat of vata. As a result, tulya dosha and tulya desha produce the sickness and is durupakrama,¹⁶ which means it is difficult to cure and has a long duration. Rakta, which moves in their sira, conducts activities such as transferring nutrition to the tissue, as well as colour and a variety of other tasks. When rakta becomes vitiated, it accumulates in its siras and presents a variety of ailments in the body, one of which is siraja granthi, which has been linked to varicose veins. Varicose veins can cause a variety of symptoms, including fatigue and painful sensation in the affected lower limb, particularly in the calf,¹⁷ dilated and convoluted leg veins, swelling of the ankles in the evening, the skin over the varicosity may be itchy and discolored, eczema on the afflicted area of the skin, ulceration of the veins.¹⁷ Siravyadha is the remedy of choice for siragranthi by Acharya Vagbhata⁸. It is considered as Ardhachikitsa of Shalya Tantra which offers faster effects than Snehadi Karmas.¹⁸ Vein dilation and tortuosity within the siras is due to the accumulation of rakta and vitiation of vata. Via repeated Siravyadha, swelling, pain, discoloration, etc. in the vicinity is reduced. This encourages quality circulation, which facilitates to the dissolution of coagulated blood. Decrease in localized intravascular pressure consequences in reduction of heaviness in lower limb and pain. By puncturing and the ejection of static blood, tortuosity can be reduced which restores elasticity. In the siras, the accumulation of rakta and vitiation of vata causes vein dilatation and tortuosity. The local shotha and local congestion in the sira is reduced by siravyadha. It also relieves discomfort, nocturnal cramps, itching, ankle flare, and skin discoloration caused by vata and raktha in the siras. It also aids in the relief of vein tortuosity and dilatation. It also aids in the reduction of venous pressure in the veins. This encourages adequate circulation, which helps to break up the stasis. There are obvious signs that circulation is improving. Improved circulation causes a reduction in margavarana, which reduces vata dosha morbidity. Positive Brodie Trendelenburg test indicates requirement of operative measures for the

management of Varicose veins. But by following conservative treatment with Siravedha the surgical measure can be delayed or avoided.

Conclusion:

From this Case report, we can say that Siravedha has a significant effect on the management of Varicose veins. Siravedha is a simple economical procedure with minimum or no side effects and can be performed at the OPD level. However, to establish its effectiveness, further large-scale studies are required.

Patient Perspective

The patient suffered from severe pain which was aggravating after Walking and prolonged standing. She is currently free from right lower limb pain. She can now walk comfortably even in the evening.

Informed Consent

The patient gave written informed consent for the publication of this case report.

Conflict of interest - None

Source of finance & support – Nil

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IMAGES:



Fig:1.2 Material of Siravedha



Fig. 1.3 Siravedha for Varicose veins of lower limb



Fig.1.4 Procedure of Siravedha