

AYURVEDIC AND MODERN APPROACH OF VARICOSE VEIN - A LITERARY REVIEW

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ABSTRACT

Varicose veins are large, swollen veins that often appear on the legs and feet. They happen when the valves in the veins do not work properly, so the blood does not flow effectively. The veins rarely need treatment for health reasons, but if swelling, aching, and painful legs result, and if there is considerable discomfort, treatment is available. There are various options, including some home remedies. In severe cases, a varicose vein may rupture, or develop into varicose ulcers on the skin. These will require treatment.

KEYWORDS: Swollen veins, discomfort, ulcers.

INTRODUCTION

Varicose veins are vein that have become enlarged and twisted. The term commonly refers to the veins on the leg, although varicose veins can occur elsewhere. Veins have pairs of leaflet valves to prevent blood from flowing backwards (retrograde flow or venous reflux). Leg muscles pump the veins to return blood to the heart, against the effect of gravity. When veins become varicose, the leaflets of the valves no longer meet properly, and the valves do not work. This allows blood to flow backwards and the veins enlarge even more. Varicose veins are most common in the superficial veins of the legs, subject to high pressure when standing. Besides being a cosmetic problem, varicose veins can be painful, especially when standing. Severe long-standing varicose veins can lead to leg swelling, venous eczema skin thickening (lipoNon-surgical treatments include sclerotherapy, elastic stockings, leg elevation and exercise.) The traditional surgical treatment has been vein stripping to remove the affected veins. Newer, less invasive treatments which seal the main leaking vein are available. Alternative techniques, such as ultrasound-guided form sclerotherapy, radiofrequency ablation and endovenous laser treatment, are available as well. Because most of the blood in the legs is returned by the deep veins, the superficial veins, which return only about 10% of the total blood of the legs, can usually be removed or ablated without serious harm.^[4,5]

Secondary varicose veins are those developing as collateral pathways, typically after stenosis or occlusion of the deep veins, a common sequel of extensive deep venous thrombosis (DVT). Treatment options are usually support stockings, occasionally sclerotherapy and, rarely, limited surgery.

In Ayurveda literature the Varicose vein has no its separate elaborative identity as a disease but considered as a siravikruty (venous disorders) and named as sirakautilya or kutilsira disease by commentators. The scrutinize shows, may correlation with siragranthi and is due to vatadosha. Siragranthi mentioned like charak sushruta, Vagbhatta, Madhavnidan etc. Sushruta described its cause as a person undertakes excessive exercise get his network of vein affected due to Vayu dosha which in turn compresses squeezes and dries up and produce granthi which is raised and circular. The swollen bulging and twisted bluish veins that become visible just beneath the skin surface and filled with abnormal gathering of blood, are known as varicose vein.

Aetiology of varicose veins

Varicosities are more common in lower limb because of erect posture and long column of blood has to be supported which can lead to weakness and incompetency of valves. Incidence is 5% of adult population.

Primary varicosity is due to

- Congenital incompetence or absence of valves.
- Weakness or wasting of muscles
- Stretching of deep fascia.
- Klippel – Trenaunay syndrome, avalvulia, parkes-weber syndrome. Here varices are of atypical distribution.

Secondary varicosities

- Recurrent thrombophlebitis
- Occupational-standing for long hours.
- Obstruction to venous return like abdominal tumour, retroperitoneal fibrosis, lymphadenopathy, ascites.
- Pregnancy ,obesity, chronic constipation
- Iliac vein thrombosis.
- Tricuspid valve incompetence.

Clinical Features

- Dragging pain, postural discomfort.
- Heaviness in the legs.
- Night time cramps-usually late night.
- Oedema feet, itching(feature of CVD).
- Discolouration /ulceration in the feet/painful walk.

Complications

Most varicose veins are reasonably benign, but severe varicosities can lead to major complications, due to the poor circulation through the affected limb.

- Pain, tenderness, heaviness, inability to walk or stand for long hours, thus hindering work.
- Skin conditions / dermatitis which could predispose skin loss.
- Skin ulcers especially near the ankle, usually referred to as venous ulcer.
- Development of carcinoma or sarcoma in longstanding venous ulcers. Over 100 reported cases of malignant transformation have been reported at a rate reported as 0.4% to 1%.
- Severe bleeding from minor trauma, of particular concern in the elderly.
- Blood clotting within affected veins, termed These are frequently isolated to the superficial veins, but can extend into deep veins, becoming a more serious problem.
- Acute fat necrosis can occur, especially at the ankle of overweight people with varicose veins. Females have a higher tendency of being affected than males.

Clinical test

Clinical tests that may be used include:

Trendelenburg test– to determine the site of venous reflux and the nature of the sapheno -femoral junction.

Trendelenburg test 1

Vein is emptied by elevating the limb and a tourniquet is tied just below the sapheno-femoral junction. Patient is asked to stand quickly. When tourniquet or thumb is

released, rapid filling from above signifies sapheno-femoral incompetence.

Trendelenburg test 2

After standing position tourniquet is not released. Filling of blood from below upward rapidly can be observed within 30-50 seconds.it signifies perforator incompetence.

Perthe's test- The affected lower limb is wrapped with elastic bandage and the patient is asked to walke around and exercise. Development of severe cramp like pain in the calf signifies DVT.

Three tourniquet test- To find out the site of incompetent perforator, three tourniquet are tied after emptying the vein.

- 1- At saphenofemoral junction
- 2- Above knee level
- 3- Another below knee level

Patient is asked to stand and looked for filling of veins and site of filling. Then tourniquets are released from below upwards, again to see for incompetent perforators.

Investigations

- With the patient standing, the Doppler probe is placed at saphenofemoral junction and later wherever required. Basically by hearing the changes in sound, venous flow, venous patency, venous reflux can be very well-identified.
- **Doppler test**- When a hand held Doppler is kept at SFJ, typical audible whoosh signal >0.5 sec while perforating valsalva manoeuvre is the sign of reflux at SFJ. It is also used at SPJ and at perforators.
- **Duplex scan**- It is highly reliable U/S Doppler imaging technique, which along with direct visualisation of vein, gives the functional and anatomical information, and also colour map. Examination is done in standing, lying down position and also with valsalva manoeuvre. Hand – held Doppler probe is placed over the site and visualised for any block and reversal of flow. DVT is very well-identified by this method.

Treatment

- Conservative treatment-
- Elastic crepe bandage application from below upward or use of pressure stockings to the limb-pressure gradient of 30-40 mmHg is provided.
- Elevation of the limb –relieves oedema. Two short times, during day and full night, elevation of foot with feet above the level of heart and toes above the level of nose is the method.
- Pneumatic compression method- Provide dynamic sequential compression.
- **SCLEROTHERAPY**- By injecting sclerosants into the vein, complete sclerosis of the venous wall can be achieved.
- Foam sclerotherapy

- Microsclerotherapy

3. Mnipal manual of surgery.
4. SRB Manual of surgery.

Use of single herbs in Ayurved

- Pure guggulu, neem kanchanara Nagkesar trifla churna Ashwagandha. It helps to maintain healthy lifestyle, reduces the pressure effects, relief in pain and inflammation and maintains tone of venous walls and their functions.
- Amlaki and other citrus fruits are essential since vitamin c deficiency is a prime cause of varicose vein, Which is necessary for formation of collagen in connective tissue .
- Onion helps in the proper assimilation and distribution of protein in the human body.it is said to increase inner strength.
- Arjuna and Guggulu are highly recommended to improve blood circulation and reduce inflammation.
- Garlic and ginger can break down the protein content in the body and distribute it evenly. The increase the protein supply to the lower limb region. Hence the condition of varicose vein can be prevented.
- Drugs like Arogyavardhini vati, punarnavadi guggulu, kanchnar guggulu lasunadi vati are also useful.

Leech Application

In Astang Hridaya siravedha is indicated in siragranthi and among bloodletting procedures leech therapy is safe and easier. Leeches are applied as a normal method on site of varicose vein and followed general procedures. First purify the leeches by putting them in turmeric mix water for 5 minutes then keep in fresh plain water for 5 minutes. Clean the use site thoroughly with plain water and adequate numbers of leeches are applied to the area of maximal congestion. When jaluka starts sucking the blood it attains shape of Ashvakhuravadanana. Its mouth end becomes the hoof of horse by raising its neck region. Put wet gauze covering the leechs body and continuously pouring of fresh water is done. Once the leech attached, it wil remain safely in place until fully distended and then detached itself. After this leech are purifies and preserved it with patient identity details and again applied to the same patient weekly nearly 7-8 times. The leechs reduce the local pressure on vein and surrounding having, its saliva having anticoagulant, antibacterial anaesthetic effect.

CONCLUSION

Ayurvedic drugs and leech therapy is a best treatment varicose vein. Leech therapy is easily applicable at indoor-outdoor level, no harmful side effect and result oriented, if done properly. Leech therapy can be considered as an option for poor and surgical unfit patients.

REFERENCE

1. <https://en.m.wikipedia.org/wiki/varicosevein>.
2. Sushrut samhita.