

## Ayurveda: A Fruitful Remedy for Varicose Veins

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### Abstract

Varicose veins are twisted, enlarged veins near the surface of skin most common in legs and ankles. It occurs when valves become weak allowing blood to leak back-down leading to varicose, engorged and painful veins. It occurs as a result of constant standing, sitting, driving, during pregnancy and after menopause. The incidence of varicose vein is 5% in general population among which mostly are women. Although it is not a severe problem, but continuous pain causes disturbance in daily life. Allopathy only provides symptomatic relief for pain and swelling or non-surgical treatment like sclerotherapy or surgery at a later stage. It can be treated by changing the life style and dietary habits. But in Ayurveda, herbs like *Guggulu*, *Kanchnar*, *Nimba* etc. and various *panchkarma* procedures like *abhyang*, *swedan* etc. are available which can help in reducing the symptoms and curbing the problem. This paper is an attempt to find a better treatment in the form of Ayurveda herbs and *panchakarma* procedures for varicose veins which not only provide symptomatic relief but also from the basic problems i.e., varicosity of veins.

### Keywords

*Varicose veins, Ayurveda, Ayurveda herbs*



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## INTRODUCTION

Varicose veins are veins under the skin of the legs, which have become widened, bulging, and twisted. Veins contain one-way valves to ensure proper flow of blood towards the heart. Failure of these valves allow blood to flow backwards down the veins and results in an overload of pressure when standing. This excess pressure leads to widening of the veins so that they do not close properly. Blood then flows back into the leg along these veins and causes varicose veins to develop. They commonly affect the lower limb because of erect posture and long column of blood pools in both the legs because of gravitational pull. Thus causes pressure on veins, ultimately damaging the blood vessels as weakness and incompetence, which leads to varicosities. Raised pressure in these veins also encourages the development of spider veins and discoloured areas which look like bruises<sup>1</sup>.

The incidence of varicose vein is 5% in general population, prevalence more common in women than in men.

### Causes-

Any condition that puts excessive pressure on the legs or abdomen such as stationary standing

for long periods of time results in varicose veins as it increases intra luminal pressure.

- Poor circulation, Weakness of vein walls and valves
- Compression of iliac veins & Hormonal fluctuations, like in pregnancy.
- Obesity, Sedentary lifestyle
- Chronic constipation
- Excessive physical activity

### Sign and symptoms:

- Heaviness, burning, aching, tiredness, or pain in legs which gets worsen after standing or sitting for long periods of time.
- Appearance of spider or tortuous veins.
- Ankle swelling, Itching over the vein, Leg swelling & calf pain
- Varicose ulcers at a later stage

Varicose veins are common and usually aren't a sign of a serious problem. But in some cases, varicose veins can be a sign of a blockage in the deeper veins called deep vein thrombosis<sup>2</sup>.

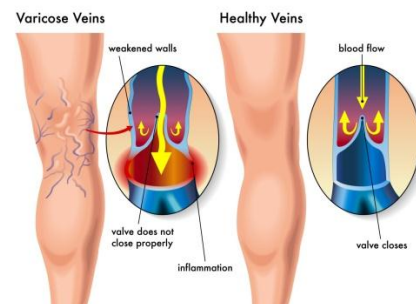


Figure showing pathology of varicose veins

**Ayurveda view for varicose veins:**

In Ayurveda literature varicose vein has no separate elaborate identity as a disease but considered as SiraVikriti (venous disorder) and named as Sirakautilya or Kutilsira. It can be correlated to Siragranthi (Granthi means protruded nodule like structure and Sira means Vein) and is due to aggravated Vata dosha. According to Ayurveda, a sudden change from warmth to cold and vitiation of Vata and Pitta dosha and Raktadhatu (blood tissue) may cause ramification of veins. Description of Siragranthi in Ayurveda -“If a person undertakes excessive exercise, his network of veins get affected due to aggravation of Vata dosha, which in turn compresses, squeezes and dries up and produces granthi (protruded nodule like structure), which is raised and circular”. The swollen, bulging and twisted bluish veins which become visible just beneath the skin surface and filled up with abnormal gathering of blood are known as varicose vein which may be superficial (just below the skin surface, filled with capillaries) or deep (located deep beneath the muscle).

**Pathogenesis according to Ayurveda:**

Varicose veins are primarily a Vata disorder, caused by an imbalance in VyanaVata,

which creates increased pressure that affects the valves and elasticity of the veins. In fact, VyanaVata, one of the subdoshas of Vata, is responsible for transporting oxygen-rich blood from the heart to the body's cells through the arteries. It also governs the flow of oxygen-poor blood from the body's cells back to the heart through the veins. To push blood back to the heart, the veins rely mainly on surrounding muscles and a network of one-way valves. As blood flows through a vein, the cuplike valves alternately open to allow blood through and then close to prevent the blood from flowing backwards.

When VyanaVata is out of balance, excessive dryness results in hardening and loss of elasticity of the valves and the veins. At the same time, an increase in blood pressure dilates the vein, and the valves no longer seal properly, making it difficult for the muscles to push the blood back to the heart. Instead of flowing from one valve to the next, blood collects in the superficial veins of the legs, which have less muscular support than the deep veins. The result is varicose veins just beneath the surface of the skin. As a secondary factor, once the blood has accumulated in the veins, an imbalance in Ranjaka Pitta can lead to ulcers in the

varicose veins. Pitta dosha is hot and sharp by nature and governs metabolic and hormonal functioning. One of the subdoshas of Pitta, called Ranjaka Pitta, maintains the purity of the blood. Ranjaka Pitta resides in the liver and the spleen and is responsible for blood composition and the distribution of nutrients to cells and tissues through the blood. If Ranjaka Pitta is out of balance, the blood can get impure by association with Ama (metabolic toxins), thereby becoming thick and sluggish, thus contributing to ulcers in varicose veins.

So varicose veins are primarily caused by poor circulation (as governed by VyanaVata) and its secondary complications such as ulcers are caused by impurities in the blood (as governed by Ranjaka Pitta)<sup>3</sup>.

In the ancient Ayurvedic text (*Charka Samhita*) we read that ‘Those who dip their feet in cold water right after prolonged exercise create sudden cold to the warm legs. As a result, the warm veins suddenly constrict and an imbalance of the Vata Dosha occurs leading to formation of varicose veins’<sup>4</sup>.

#### **Modern Approach for Varicose Veins:**

Non-surgical treatments include sclerotherapy, elastic stockings, leg elevation, exercise & analgesic medications

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 foam sclerotherapy, radiofrequency ablation and endovenous laser treatment, are available as well<sup>5</sup>. Surgical intervention is not a permanent remedy because even after surgical treatment, there are chances of recurrence.

#### **Ayurveda approach for Varicose Veins:**

Ayurveda herbs and herbal formulations, dietary changes and lifestyle modification appear to work by strengthening the walls of veins and other vessels. They primarily relieve symptoms of aching, heaviness, and swelling in the legs and ankles. The main line of treatment is to pacify aggravated Vata, Pitta dosha and Raktadhatu (blood tissue). Ayurvedic treatments include internal herbal health supplements and external treatment procedures.

#### **Ayurveda herbs and preparations and their mode of action:**

Ayurvedic herbal health supplements help to maintain healthy lifestyle, reduce the pressure effects, relieve pain and inflammation, and maintain normal tone of venous walls and their functions.

➤ Herbs which can be used are *Pure Guggulu* (Commiphoramukul), *Neem* (Azadirachta indica), *Kanchanara* (Bauhinia variegata), *Nagakesar* (*Mesuaferrea* Linn.), *Amalaki* (*Embelica officinalis* Gaertn.), *Bala* (*sidacordifolia* Linn.), *Shatavari* (*Asparagus racemosus* Willd.), *vidari* (*puerariatuberosa* DC), *Arjuna* (*Terminalia arjuna*), *Mandukparni* (*Centella asiatica*), *Daruharidra* (*Berberisaristata*), and *Ashwagandha* (*Withaniasomnifera*), horse chaste nut.

➤ *Guggulu* (Commiphoramukul), horse chaste nut and *Mandukparni* (*Centella asiatica*) are highly recommended to improve blood circulation and reduce inflammation.

➤ Common herbal preparations which are effective in varicose veins are Triphalaguggulu, Punarnavadiguggulu, Chandraprabhavati, Manjishtadivati, Arogyavardhinivati. These all preparations are tridoshnashak specially vatanashak, anti-inflammatory, diuretic, blood purifier, wound healing which ultimately helps in reducing discomfort of varicose veins.

#### **Mode of action:**

***Commiphora mukul* (Hook ex stocks) Engl. (*Guggulu*):** It has a good tridoshnahak property, scraping activity, diuretic and anti-inflammatory property. It relieves tension and pressure of blood, breaks already formed blood clots. It improves blood flow,

promotes supple arteries and tonifies heart. It removes toxins from circulatory system<sup>6</sup>.

***Centella asiatica* Linn. (*Mandukparni* or *Brahmi*):** It contains a chemical called triterpenic fraction of *Centella asiatica* (TTFCA). TTFCA is particularly beneficial for varicose veins since it stimulates the production of collagen and elastin. These connective tissues are needed to strengthen the internal lining and walls of veins. In addition to helping with varicose veins, it helps with venous insufficiency by reducing swelling and improving blood flow<sup>7</sup>.

***Aesculus hippocastanum* (horse chaste nut):** Horse chestnut is an astringent, anti-inflammatory herb. Extracts of the seeds are the source of a saponin known as aescin, which promotes normal tone in the walls of the veins, thereby improving circulation through the veins and promoting the return of blood to the heart. It tones and protects blood vessels and may be helpful in ankle oedema related to poor venous return and therefore in varicose veins<sup>8</sup>.

***Bauhinia variegata* Linn. (*Kanchanara*):** Diuretic and scraping action (*lekhan karma*). It detoxifies the blood and helps in proper flow of blood, increases tonicity of veins.

Due to its scraping action, it helps in removing varicosity of veins.

***Terminalia arjuna* Roxb.(Arjun):** Diuretic, improves flow of blood and increases tonicity of veins.

***Embelica officinalis* Gaertn. (Amalaki):** It is tridoshar and diuretic. It pacifies burning and increases tonicity of veins.

***Sida cordifolia* Linn. (Bala):** It is specially vata and pitta shamak, diuretic, analgesic, improves flow of blood and increases tonicity of veins.

***Asparagus racemosus* Willd. (Shatavari):** It is vata pitta shamak, analgesic. It relieves tension and pressure of blood and increases tonicity of veins.

***Pueraria tuberosa* DC (Vidari):** It is vata pitta shamak, diuretic and reduces the burning sensations.

***Berberis aristata* DC.(Daruharidra):** It is diuretic, scraping, anti-inflammatory herb. It dilates veins thereby improves flow of blood.

***Azadirachta indica* A.Juss (Nimba):** It is anti-inflammatory, diuretic and blood purifier.

***Mesua ferrea* Linn.(Nagakesar):** Vatanashak, analgesic, increases tonicity of veins, proper flow of blood, detoxify blood.

Paste of nagakesar with shatdhautghrita is applied on burned wounds<sup>9</sup>.

#### **Ayurvedic external treatments :**

➤ *Abhyanga* (Gentle massage / Application of oil) – Daily application of medicated oils like *Sahachar oil*, *Pinda oil* or *Prasarini oil*, *Nimba* oil mixed with sesame oil around the affected part helps reduce inflammation, pain and improves circulation. Most effective oil is Sahachar oil.

➤ *Swedana* (giving steam to body)-*patrapindasweda* in the upward direction to make blood flow smoothly in the upward direction.

➤ *Upnaha* and *basti karma* with *Vataghnadravya* like *nirgundi*, *bala*, *dashmool*, *guggulu*, *shigru*, *agru*, paste of *nimba leaf* etc. as main line of treatment in varicose veins is to pacify *vata*.

➤ *Avagahan karma* (Dipping the legs in) with *dashmool decoction* and *eranda tail*<sup>10</sup>.

➤ *Udvartan karma* with ash of *mudga* and cotton seeds mixed with *ghrita*.

➤ Local application of powdered form of black cumin and *kampillak* mixed with *ghee*<sup>11</sup>.

➤ *Parasurgical procedures* -

❖ *Siravedhana* (*Venesection*) reduces local engorgement of pressure, helps in better circulation, and preserves vein valve competency and elasticity of vein walls.

❖ *Jaloukavacharana* (*Leech therapy*) is a blood-letting therapy with leech application on the affected part. This therapy improves blood

circulation, declines pressure on veins and surrounding areas, so elastic recoiling of veins are maintained and prevents over dilatation. The leech's saliva has anticoagulant, antibacterial and anaesthetic effect<sup>12</sup>.

### **Dietary recommendations in varicose veins:**

- Preference to be given to cooked, warm and unctuous food in diet.
- Foods that are naturally sweet are good to be included in diet.
- Diet should be rich in proteins, fibres, vitamins and minerals but low in fat, low sugar and salt.
- Protein rich diet is important for building up the tissues.
- One should take fibrous diet to avoid constipation as it can build up pressure and aggravate varicose veins. Refined carbohydrates and red meat should be avoided.
- Take meals on time daily.
- Nutritious diet with fresh fruits, legumes, whole grains, especially, buckwheat, millet, foods which are high in fibre and rich in vitamins should be consumed as they restore health to veins.
- Blackberries and cherries help heal varicose veins.
- To disperse build-up of a protein that makes skin near varicose veins hard and

lumpy, more garlic, onion, ginger, and pineapple, which contains bromelain, an enzyme that promotes break-up of fibrin, should be consumed.

- Vitamin A, which speeds varicose ulcer healing, is found in cantaloupe, carrots, pumpkins, sweet potato, winter squash and leafy greens such as collards.
- Vitamin B, which help maintain strong blood vessels, are found in all seasonal fruits, lassi (yogurt drink), whole grains, lentils, pulses (legumes) and dals.
- Vitamin C and bioflavonoids, which help circulation, promote healing of sores and strengthen vein walls to prevent dilation, are found in melons, grapes, pomegranate, lemon, lime and other citrus fruits.
- Rutin, one of the bioflavonoids used routinely to treat varicose veins, is present in citrus fruits (especially on the white area inside the rind), apricots, blueberries, blackberries, cherries, rose hips and buckwheat.
- Vitamin E, which helps to improve circulation, reduces susceptibility to varicose veins and relieve pain, is found in almonds and almond oil.

- Lecithin, which helps to emulsify fats and improve circulation, is found in tofu and garlic.
- Zinc, which assists with healing and collagen formation, is found in pumpkin seeds and sweet, fresh fruits.
- Amalaki (Indian gooseberry / *Embelica officinalis*) and other citrus fruits are essential since Vitamin C deficiency is a primary cause of varicose veins, which is necessary formation of collagen in connective tissues and essential in maintenance of integrity of intercellular cement in many tissues particularly capillary walls.
- Garlic and ginger can break down the protein content in the body and distribute it evenly. This increases the protein supply to the lower limb region. Hence, the condition of varicose veins can be prevented.
- Onion helps in the proper assimilation and distribution of protein in the human body. It is said to increase inner strength<sup>13</sup>.

#### **Life style changes for varicose veins:**

- Simple exercise regularly helps to keep leg muscles toned, improves blood circulation and drainage of blood from the legs and helps prevent varicosities. Walking and swimming are good. Also certain inverted yoga postures such as the Sarvangaasana, Halaasana, Shirasasana and Pawan mukta asana are helpful in restoring the normal drainage of blood from the legs.

- Crepe bandage application helps to prevent excess dilatation of vein and ulcer formation making a support for better circulation.
- Weight should be kept under check.
- Use of high heel footwear should be avoided as it stops normal muscle contraction in the lower leg, affecting circulation.
- Keep legs elevated while sleeping. This helps gravity to ease backpressure on the veins at night.
- Stationary long standing or continuous sitting for long periods should be avoided. Take frequent breaks to stretch and exercise legs as often as possible to restore circulation and reduce pressure build-up.
- In case of pregnancy, one should sleep on her left side rather than on back. This minimises pressure from the uterus on the veins in pelvic area. It also improves blood flow to the foetus.
- Quit smoking. It may contribute to high blood pressure, which can aggravate varicosity.
- Gentle oil massages daily help to improve circulation and helps the skin, muscles and veins to regain their elasticity.
- Legs should not be crossed when sitting to prevent blood from pooling.



- Tight clothing that constricts waist, groin, or legs should be avoided.
- Avoid contraceptive pills<sup>14</sup>.

## CONCLUSION

Varicose veins are a problematic disorder of today's life which doesn't have a permanent treatment. But Ayurveda provides promising results by not only reducing discomfort of venous insufficiency but also assisting in healing of varicosity, ulcers, helps in collagen formation which in return increases tonicity of veins. Ayurveda herbs also improve circulation of blood which is the basic cause of disease. Therefore Ayurveda is a treatment regime which can give promising results for varicose veins if one follows all the regimens strictly which are required for the disease.

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