

Varicose Veins - Patient Information

What are varicose veins?

A varicose vein is an enlarged, twisted vein, usually occurring in the leg. The formation of a varicose vein is caused by an obstruction within the vein, which causes it to swell. Varicose veins become visible and may bulge, and tiny capillaries can overfill, causing purple discoloration. Varicose veins can occur anywhere on the leg but are often found behind the knee or in the groin. There is often an inherited tendency to varicose veins and twice as many women as men tend to be affected. They can appear at any time but become more frequent with age.

What are the symptoms of varicose veins?

The problems caused by varicose veins are not purely cosmetic although they are often unsightly. They can cause pain and discomfort and may itch. They can also cause a burning or throbbing sensation. After long periods of standing, swelling may occur. Sometimes in more severe cases, a vein can become inflamed (thrombophlebitis) or bleeding from a superficial vein (a vein near the surface of the skin) may occur.

What causes varicose veins?

Leg veins contain one-way valves that aid the return of blood to the heart. If there is increased resistance to blood flow in the leg because of pressure, the valves can become damaged and leaking may occur. Any leaked blood flows in the wrong direction, that is away from the heart and back down the leg, and causes the superficial veins to stretch and bulge.

There tends to be an inherited predisposition to developing varicose veins although other factors may influence whether or not they actually develop. Occupations that require people to stand for prolonged periods of time (e.g., hairdressing, nursing) put people at greater risk of developing varicose veins if they have a genetic predisposition. Pregnancy can often cause varicose veins, but in most cases, these are temporary and will disappear a few months after the baby is born. Being very overweight puts increased pressure on the legs and can increase the likelihood of developing varicose veins.

How are varicose veins treated?

Compression stockings can be used to alleviate many of the symptoms of varicose veins and can be useful for people in whom surgery is not advisable, for example, pregnant women. They may also be used to relieve symptoms and to prevent further damage in people whose veins are not severely affected. The stockings work by exerting pressure on the superficial veins to force blood into the deep veins of the leg and then back to the heart. They stop the blood from pooling and relieve the swelling of the veins. There are three different grades of stockings: light, medium and strong support. The appropriate grade should be chosen according to the severity of the problem. They are available in different sizes and colors and are prescribed by a doctor to ensure that the correct degree of support is chosen and that they fit correctly.

Sometimes varicose veins may be treated with sclerotherapy. This treatment involves injecting the affected vein with a sclerosing agent (eg, ethanolamine oleate [Ethamolin]), which damages the lining of the vein. The walls of the vein then stick together and the vein will remain empty of blood. Treatment is not always permanent as the damaged valves are not repaired or removed so other veins can become affected. Larger varicose veins tend to be recurrent and sclerotherapy may only be a short-term measure. This method is often used as more of a cosmetic treatment for smaller capillaries, which are causing discoloration of the legs.

The usual treatment for severe varicose veins is surgery. Leaking valves, particularly those behind the knee or in the groin, may be removed. Alternatively, long stretches of veins can be stripped if they contain faulty valves. This is usually done via an incision in the groin and further small incisions down the leg. Large swollen varicose veins may also be tied off and removed. As it is only the superficial veins that become varicose, the main drainage of blood from the leg via the deep veins is unaffected by these procedures. The leg contains a complex of superficial and deep veins and blood will find another route back after veins have been removed. Faulty valves need to be removed or these new routes may also become varicose in time. Surgery can often be performed as day surgery although in some cases an overnight stay may be advised. Following surgery most people are able to return to work or carry out normal activities after about two weeks.

Further information: www.nlm.nih.gov/medlineplus/varicoseveins
