Varicose and Spider Veins

What are veins?

Veins are blood vessels that carry blood from your body’s tissues to your heart. The heart pumps blood to your lungs to pick up oxygen. The oxygen-rich blood flows through tiny blood vessels called capillaries, where it gives up its oxygen to the body’s tissues. Your blood then returns to your heart through your veins to pick up more oxygen. Veins have one-way valves that help keep blood flowing toward your heart. If your valves are weak or damaged, blood can back up and pool in your veins. This causes the veins to swell and can lead to varicose veins.

What are varicose and spider veins?

Varicose veins are abnormal, dilated blood vessels caused by a weakening in the vessel wall. They can look like swollen, twisted clusters of blue or purple veins under the skin. Varicose veins may be surrounded by thin, red capillaries known as spider veins (a group of tiny blood vessels located close to the surface of the skin).

What are the symptoms of varicose veins?

Symptoms usually start before the age of 40 and may include:

- Swollen, twisted clusters of purple or blue veins.
- Swollen ankles and feet.
● Muscle cramps, throbbing, soreness or aching in the legs.
● Legs that feel "heavy".
● Soreness behind the knee.
● Itching around the vein.
● Leg muscles that get tired easily.
● Brown discoloration of the skin, especially around the ankles.
● Skin ulcers (open sores).

What causes varicose veins?

Varicose veins are related to increased pressure in the leg veins or defective valves in the veins. They form when healthy vein walls swell and cause blood to back up and collect inside the vein. Normally, blood flows through the vein in one direction toward the heart. Varicose veins create new paths for blood flow.

There are several factors that increase your risk of getting varicose veins:

● **Sex:** Almost 50 percent of women between ages 40 and 50 have some form of varicose veins. Four times more women than men have varicose veins, and they become more prevalent with age.
● **Age:** There is an increased risk of varicose veins as we get older because the valves in the veins get weaker.
● **Being overweight/obese:** More weight on the legs causes more pressure in the veins.
● **Family history:** You have a greater chance of getting varicose veins if other members of your family have them.
● **Lack of movement and long periods of standing:** Blood flow in the veins is better when you are moving than when you are still.
● **Hormonal changes during pregnancy.**
● **The use of birth control pills.**
● **Post-menopausal hormonal replacement therapy.**
● **Prolonged sitting with legs crossed.**
● **Wearing tight undergarments or clothes.**
● **A history of blood clots.**
● **Injury to the veins.**
● **Conditions that cause increased pressure in the abdomen** including liver disease, fluid in the abdomen, previous groin surgery, or heart failure.

Topical steroids, trauma or injury to the skin, previous venous surgery and exposure to ultra-violet rays may also increase your risk of varicose veins.

How are varicose veins diagnosed?
Your doctor will examine you and check your legs while you are standing. You may need an ultrasound exam (Doppler scan) to check the blood flow in the veins near the skin’s surface and the deep veins.

**Do I need treatment?**

Not everyone needs treatment for varicose and spider veins. Call your doctor if:

- Varicose veins make walking or standing painful.
- A sore develops on or near a varicose vein.
- Your leg suddenly becomes swollen and painful.
- You have swelling in your feet or ankles.
- A sore or tender lump develops on or near a varicose vein.
- Skin over a varicose vein bleeds on its own or after an injury.
- You have any other symptoms that cause concern.

Varicose veins can be harmful to your health if they lead to:

- **Venous stasis ulcers**: Ulcers that form when the enlarged vein can’t drain enough fluid from the skin. As a result, the skin does not get enough oxygen and an ulcer forms.
- **Phlebitis**: Inflammation of the vein.
- **Thrombosis**: Blood clots that form in the dilated vein.
- **Venous hemorrhage**: Bleeding in the vein.
- **Fungal and bacterial infections** may occur if fluid buildup (edema) in the leg causes skin problems. These infections also increase the risk of tissue infection (cellulitis).

Complications are more likely when varicose veins are due to a problem or disease in the deep veins or the perforating veins that connect the deep and superficial veins, such as deep vein thrombosis or chronic venous insufficiency. Ask your doctor about your risk of developing any of these conditions.

**What treatments are available?**

The goals of treatment are to reduce symptoms and reduce the risk of complications. Since not all patients need medical treatment, the goal of treatment may be to improve the appearance of the affected areas.

Wearing properly fitting support hose (also called compression stockings) is the most conservative treatment approach, especially when the veins don’t cause symptoms. It is important to talk to your doctor about the right compression level for you.

Other conservative treatment methods include:
● Practicing good skin hygiene.
● Losing weight if you are overweight.
● Exercising regularly (especially walking).
● Avoiding long periods of sitting or standing.
● Elevating your legs while sitting and sleeping.
● When you need to stand for long periods, take frequent breaks - sit down and elevate your feet.

Other treatment options include sclerotherapy, laser and light therapy, minimally invasive procedures and surgery.

**Sclerotherapy**

Sclerotherapy is a nonsurgical treatment that involves injecting a chemical solution into the veins to make them collapse. Because the veins can no longer carry blood, they will eventually disappear. Circulation improves because the work of carrying the blood is shifted to nearby healthy blood vessels.

It usually takes 1 to 3 sessions for the treatment to be effective, and treatments should be spaced 4 to 6 weeks apart. Up to 40 veins can be treated during each session. Once treated, the veins disappear over a period of six months and do not reappear. However, sclerotherapy treatment cannot stop new varicose or spider veins from developing.

The only discomfort during sclerotherapy is the sensation of small needle pricks. After treatment, you will wear medical-grade support stockings for 2 to 4 weeks. Walking and moderate exercise can help you recover faster.

Temporary reactions to the treatment can include slight swelling of the leg or foot, minor bruising, itching, redness and mild soreness. Rare complications include the development of telangiectasias – small clusters of red blood vessels, skin ulcers, and brown pigmentation around the treated vessels.

**Laser And Light Therapy**

**Laser and pulse-light therapy** are used to heat the blood vessel to shrink it. Laser therapy is most effective for the treatment of small varicose veins. Laser therapy may be used as an additional treatment after sclerotherapy, endovenous procedures, or surgery of larger veins. It may take several treatments, spaced at six-week intervals, for treatment to be effective.

High-intensity, pulsed light (**photoderm or light therapy**) is another treatment option. It is different than laser and pulse-light therapy because it uses a spectrum of light instead of a single wavelength. It can be used to shrink small spider veins, certain varicose veins and vascular birthmarks. This treatment may be recommended if sclerotherapy or laser therapy is not effective.

**Minimally Invasive Procedures**

**Endovenous thermal ablation** uses lasers or radio waves to create heat to close off a varicose vein. Your doctor makes a tiny cut in your skin near the varicose vein and inserts a small tube called a catheter into the vein. A device at the tip of the tube heats up the inside of the vein and closes it off. You will be awake during this procedure, but the area around the vein will be numbed. You usually can go home the same day as the procedure.
Surgery

Surgery may be the best treatment if you have varicose veins that are severe or cause problems such as bleeding, pain or swelling. Several surgical treatments are available. Your doctor can help you understand your options and the risks and benefits of each procedure. Surgical treatments are performed by a vascular specialist in either a hospital or outpatient center.

Ligation and stripping are often done at the same time. Vein ligation is a minor procedure that involves cutting and tying off the problem veins. Most patients recover in a few days and can get back to their normal activities.

Stripping is the surgical removal of larger varicose veins through two small incisions. Stripping is a more extensive procedure than ligation. It can take up to 10 days to recover and usually causes bruising that lasts several weeks.

Will my insurance cover the cost of treatment?

Many insurance companies cover the cost of treating varicose veins, but generally not spider veins. Please check with your insurance company before considering a particular treatment option.

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