

You or a member of your family has been referred to an interventional radiologist for varicose veins. This brochure will answer some of the questions you may have about varicose vein treatments.

For more information on interventional radiology, please contact the Society of Interventional Radiology at 1-800-488-7284 or visit our Web site at www.SIRweb.org



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INTERVENTIONAL RADIOLOGY **Varicose Veins and Venous Insufficiency**



Questions and Answers about Varicose Veins and Venous Insufficiency

Q. What is venous insufficiency?

A. Venous insufficiency is an abnormal circulatory condition with decreased return of blood from the leg veins up to the heart, with pooling of blood in the veins. Normally, stop valves in the vein close to keep blood from flowing downward with gravity. When the valves in the vein become weak and don't close properly, they allow blood to flow backward, or reflux.

Q. What are varicose veins?

A. Varicose veins are prominent veins that have lost their valve effectiveness and, as a result of dilation under pressure, become elongated, rope-like, bulged, and thickened.

Q. What are the symptoms of varicose veins or venous insufficiency?

A. Symptoms caused by venous insufficiency and varicose veins include aching pain, easy leg fatigue, and leg heaviness, all of which worsen as the day progresses. Many people find they need to sit down in the afternoon and elevate their legs to relieve these symptoms. In more severe cases, venous insufficiency and reflux can cause skin discoloration and ulceration which may be very difficult to treat. One percent of adults over age 60 have chronic ulceration.

Q. How common is venous disease and varicose veins?

A. Chronic venous disease of the legs is one of the most common conditions affecting people. Approximately half of the U.S. population has venous disease—50 to 55% of women and 40 to 45% of men. Of these, 20 to 25% of the women and 10 to 15% of men will have visible varicose veins. Varicose veins affect 1 out of 2 people age 50 and older, and 15-25% of all adults.

People without visible varicose veins can still have symptoms. The symptoms can arise from spider veins as well as from varicose veins, because, in both cases, the symptoms are caused by pressure on nerves by dilated veins.

Q. Who is at risk for varicose veins?

A. Risk factors include age, family history, female gender and pregnancy. In women, pregnancy, especially multiple pregnancies, is one of the most common factors accelerating the worsening of varicose veins.

Q. How is venous insufficiency diagnosed?

A. Your interventional radiologist, a doctor specially trained in performing minimally-invasive treatments using imaging guidance, will use duplex ultrasound to assess the venous anatomy, vein valve function, and venous blood flow changes, which can assist in diagnosing venous insufficiency. The doctor will map the greater saphenous vein and examine the deep and superficial venous systems to determine if the veins are open and to pinpoint any reflux. This will help your interventional radiologist to determine if you are a candidate for a minimally-invasive treatment, known as vein ablation.

Q. What is the vein ablation treatment?

A. This minimally-invasive treatment is an outpatient procedure performed using imaging guidance. After applying local anesthetic to the vein, the interventional radiologist inserts a thin catheter, about the size of a strand of spaghetti, into the vein and guides it up the greater saphenous vein in the thigh. Then laser or radiofrequency energy is applied to the inside of the vein. This heats the vein and seals the vein closed.

Reflux within the greater saphenous vein leads to pooling in the visible varicose veins below. By closing the greater saphenous vein, the twisted and varicosed branch veins, which are close to the skin, shrink and improve in appearance. Once the diseased vein is closed, other healthy veins take over to carry blood from the leg, re-establishing normal flow.

Q. What are the benefits of vein ablation?

A. The treatment takes less than an hour and provides immediate relief of symptoms. You can return to normal activity immediately with little or no pain. There may be minor soreness or bruising, which can be treated with over-the-counter pain relievers. There is no scar, because

the procedure does not require a surgical incision, just a nick in the skin, about the size of a pencil tip.

Traditionally, surgical ligation or vein stripping was the treatment for varicose veins, but these procedures can be quite painful and often have a long recovery time. In addition, there are high rates of recurrence with the surgical procedures, on average 10 – 25 percent.

Q. How successful is the vein ablation?

A. The two-year data show a 93-95% success rate. This is a much higher efficacy rate than surgical ligation or stripping.

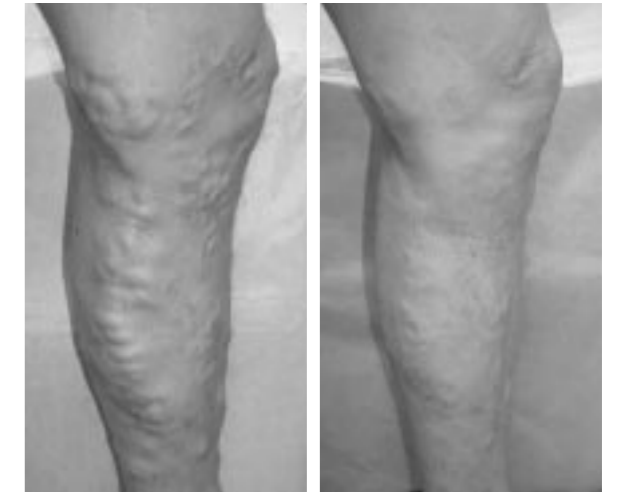


Before

After

Q. Are there other treatments for varicose veins?

A. Ambulatory phlebectomy and injection sclerotherapy are also used. Ambulatory phlebectomy is a minimally-invasive surgical technique used to treat varicose veins that are not caused by saphenous vein reflux. The abnormal vein is removed through a tiny incision or incisions using a special set of tools. The procedure is done under local anesthesia, and typically takes under an hour. Recovery is rapid, and most patients do not need to interrupt regular activity after ambulatory phlebectomy.



Before

After

Injection sclerotherapy can also be used to treat some varicose and nearly all spider veins. An extremely fine needle is used to inject the vein with a solution which shrinks the vein.

Q. Does insurance cover vein ablation?

A. Many insurance carriers cover venous insufficiency treatments, based on medical necessity for symptom relief.

Q. What does the procedure cost?

A. Generally, about \$2,000 – \$3,000 per leg.

Q. What is an interventional radiologist?

A. Interventional radiologists are doctors who specialize in minimally invasive, targeted treatments performed using guided imaging. They use their expertise in reading x-rays, ultrasound, MRI, and other diagnostic imaging equipment, to guide tiny instruments such as catheters, through blood vessels or through the skin to treat diseases without surgery. Interventional radiologists are board certified radiologists that are fellowship trained in nonsurgical interventions using guided imaging. Their specialized training is certified by the American Board of Medical Specialties. Your interventional radiologist will work closely with your primary care or other physician to be sure you receive the best possible care.