

Varicose Vein Treatment (Endovenous Ablation of Varicose Veins)



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Varicose vein treatment, also known as endovenous ablation, uses radiofrequency or laser energy to cauterize and close varicose veins in the legs. It may be used for cosmetic purposes, but it is most commonly used to help ease varicose vein related symptoms such as aching, swelling, skin irritation, discoloration or inflammation. Endovenous ablation is safe, less invasive than conventional surgery, and leaves virtually no scars. In addition to that, sclerotherapy is also available to treat such abnormality, in which the vein is injected with a sclerosing agent or other substances that causes the veins to scar and close. The scar tissue is absorbed by the body over time.

Our center is proud to be one of the first centers in the area that uses the most advanced technology of VenaSeal. The VenaSeal™ closure system is the only non-tumescent, non-thermal, non-sclerosant procedure that uses a proprietary medical adhesive delivered endovenously to close the vein. This unique approach eliminates the risk of nerve injury when treating the small saphenous vein, which is a risk sometimes associated with certain thermal-based procedures.¹ Clinical studies have demonstrated that the procedure is safe and effective.¹⁻⁴ The procedure is administered without the use of tumescent anesthesia, avoiding patient discomfort associated with multiple needle sticks

and the tissue damage that can be caused by the thermal or laser therapy.

Varicose veins are abnormally large veins commonly seen in the legs. Normally, blood circulates from the heart to the legs via arteries and back to the heart through veins. Veins contain one-way valves which allow blood to return from the legs against gravity. If the valves leak, blood pools in the veins, and they can become enlarged or varicose.

Endovenous ablation is an image-guided, minimally invasive treatment for varicose veins. It uses radiofrequency or laser energy to cauterize (burn) and close the abnormal veins leading to varicose veins. Now a days, Insurance covers varicose vein ablation because of the considerable discomfort this condition can cause, and because of the condition's link to more chronic and serious venous conditions. In addition to the very high prevalence of this disease among men and women equally, it has been shown to cause significant discomfort and disability related to pain, inability to stand for long period of time and the lost working days as a consequence.

What are the common symptoms of Venous insufficiency?

Although this procedure may be used for

cosmetic purposes, it is more commonly used to help ease symptoms related to varicose veins in the legs. Leg symptoms can include:

- aching or throbbing pain
- leg heaviness/fatigue
- swelling
- skin irritation or sores (ulcers)
- skin discoloration
- inflammation in the vein (phlebitis).

What are the benefits of vein ablation?

- No surgical incision is needed—only a small nick in the skin that does not have to be stitched.
- When compared with traditional vein stripping techniques, endovenous ablation is more effective, has fewer complications, and is associated with much less pain during recovery.
- Endovenous ablation is generally associated with low rate of complications.
- This procedure leaves virtually no scars.
- Endovenous ablation offers a less invasive alternative to standard surgery.
- Most of the veins treated are

effectively invisible even to ultrasound 12 months after the procedure.

- Most patients report symptom relief and are able to return to normal daily activities immediately, with little or no pain.

Before the procedure:

- You should report to your doctor all medications that you are taking. Your physician may advise you to stop taking aspirin, nonsteroidal anti-inflammatory drugs (NSAIDs) or blood thinners for a specified period of time before your procedure.
- You should wear comfortable, loose-fitting clothing. You will need to remove all clothing and jewelry in the area to be examined.
- You should plan to have a relative or friend drive you home after your procedure.
- You may be asked to wear a gown during the procedure.

What does the equipment look like?

In this procedure, an ultrasound machine, vascular catheter, radiofrequency electrode



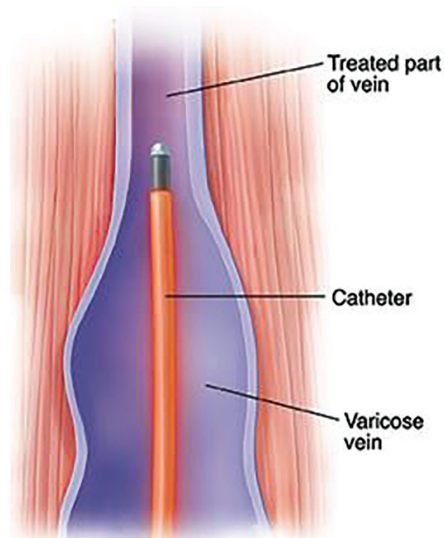


Image of the tip of the laser fiber ablation catheter inside the vein.

or laser fiber catheter, and console are used. A catheter is a long, thin plastic tube that is considerably smaller than a "pencil lead", or approximately 1/8 inch in diameter. Laser fibers or radiofrequency electrodes carry laser or electrical energy from their respective power generators into the body. In the instance that sclerotherapy is needed, a small needle is required to deliver the sclerosing agent to the vein. That is associated with no or little pain.

How does the procedure go?

Ultrasound is used to visualize the varicose vein. A laser fiber or radiofrequency electrode is advanced to the desired location within the vein through an IV. Local anesthesia is injected to collapse the vein around the laser and act as insulation for the heat of the radiofrequency or laser energy. Laser or radiofrequency energy is then applied, heating the vessel and causing it to close. Following the procedure, the faulty vein will shrink and "scar down." Eventually, the body reabsorbs the venous tissue that is destroyed, as other veins take over and empty blood from the legs, re-establishing normal flow and blood-return back to the heart. The treatment is a quick, outpatient procedure, and many patients begin to feel relief immediately. The patient's legs are wrapped for a day to aid healing, and the patient may return to normal activity within a

day or two. Patients are encouraged to start walking immediately after the procedure, but they should avoid any strenuous exercises involving the legs (such as weight training) for two to three weeks, to enable adequate time for healing and for the treated veins to remain closed. There is bruising and mild discomfort in the treated leg for two to four weeks.

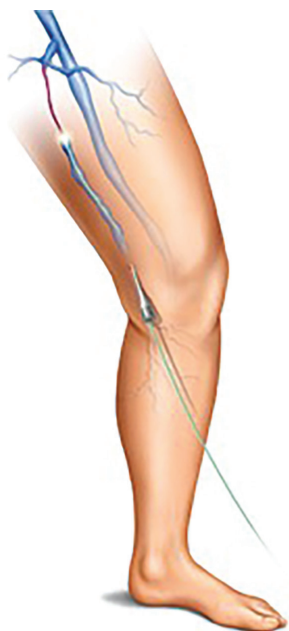


Image of Endovascular ablation of the left saphenous vein. Access around knee area with ablation catheter in action. "Courtesy of Medtronic."

Simple advices for preventing occurrence or reoccurrence of varicose veins:

- Don't make a habit of sitting with your legs crossed at the knees.
- Stay at a healthy weight. - Avoid high heels, which restrict circulation in the lower legs.
- Limit the wearing of restrictive clothing that can inhibit blood flow in the upper and lower legs.
- Try not to sit or stand, especially in a fixed position, for extended periods of time.
- Take opportunities to stretch and move your legs, or elevate them, when you can. *ng*



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Dr. Bisharat is an interventional cardiologist and endovascular specialist, with vast experience in endovascular therapy and cardiovascular procedures. Dr. Bisharat at finished his training. In interventional cardiology and cardiovascular treatment at the prestigious Tulane University School of Medicine, and has been in clinical practice for 5 years. He is part of the Ashchi heart and vascular center, the center offers top notch technology to treat vein disease with the best experienced team in the metro Jacksonville area. Experience, compassion and technology is what we offer to take care of our patients. Our staff manage a large population of patients with venous disease, and we manage a variety of both common and complex cases. The unique needs of patients with varicose veins are recognized by everyone at our practice, and we strive for exceeding the expectations of our patients.



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