

Wouldn't you Love to Get Back On Your Feet Again?



LOOK BETTER

FEEL BETTER

LIVE BETTER



Center for Vein
Restoration

Love your legs *again!*

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Restoration
Love your legs again!



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At the **Center for Vein Restoration** (CVR), we are committed to your complete vein care. We believe the treatment of varicose veins and its cause, venous insufficiency, is not a luxury but a necessity. We offer the latest advancements in minimally invasive vein care and strive to formulate a treatment plan to fit your individual needs. While working within the community to raise awareness and provide education about venous insufficiency and venous disease, our friendly staff is dedicated to improving the quality of life for all our patients.

Thank you for choosing CVR to perform your Varicose Vein Therapy. We realize you may have many questions regarding your upcoming procedure and hope this information will help explain the procedure to you.

**If you have further questions please call us at 1-855-835-8346 (1-855-835-VEIN)
For education or location information visit us at www.CenterforVein.com**

A WELCOME FROM OUR FOUNDER AND CEO



“A customer is the most important visitor on our premises. They are not dependent on us. We are dependent on them. They are not an interruption in our work. They are the purpose of it. They are not an outsider in our business. They are part of it. We are not doing them a favor by serving them. They are doing us a favor by giving us an opportunity to do so.”

-Mahatma Gandhi

Thank you for choosing Center for Vein Restoration – our staff is committed to the long-term treatment and monitoring of your venous insufficiency. As we continue to strive for excellence, we are inspired by the words of Mahatma Gandhi when he speaks of the importance of customers.

Venous insufficiency is a chronic ailment. The initial treatments will alleviate the majority of your symptoms. However, please remember that long-term follow-up is an essential component to maintaining your leg's health. As a result, I must emphasize that today we are entering into a partnership. For optimal results, we must both keep our respective promises.

The promises we seek from you include lifestyle changes if warranted, use of compression stockings when indicated, and keeping your appointments. During the course of your treatments there will be times when you may debate the need to call your doctor or nurse after hours. Instead, follow this simple rule: “When in doubt, always call.” We’re proud to offer the most advanced and patient-focused diagnostic and therapeutic methods for the treatment of venous insufficiency, but more importantly, we are committed to always being available to our patients.

Yours in good health,

A stylized, handwritten signature in dark ink, consisting of a large, fluid loop followed by a long, horizontal, slightly wavy line.

Sanjiv Lakhanpal, MD



"I'm able to experience freedom from pain! The discomfort is gone, and I enjoy my life better."

♥ - ERMA Maryland

Have you had to give up wearing your summer shorts because you're embarrassed about ugly varicose and/or spider veins?

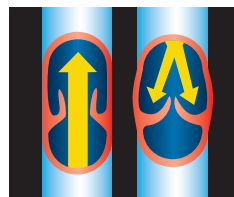
**WE CAN HELP YOU
FEEL CONFIDENT AGAIN!**

WHAT IS VENOUS INSUFFICIENCY?

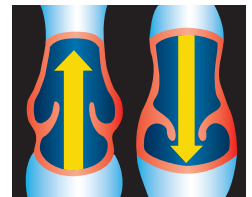
Veins normally carry blood from your body tissues back to the heart and lungs to be replenished with oxygen and to be re-circulated. To help the blood from your legs circulate upward, against gravity, each vein is equipped with tiny, one-way valves. When these valves fail or leak, the blood pools and stagnates. We call this condition venous insufficiency.

Venous Duplex Scan

Also known as "vein mapping". Pinpoints location of weakened valves so that effective treatment of varicose and spider veins can take place.



Healthy veins with normal valves



Diseased veins with weakened valves

VARICOSE VEINS

Often painful and unsightly, varicose veins are visibly bumpy or rope-like and may occur in almost any part of the leg, most often in the back of the calf or on the inside of the leg between the groin and the ankle. Common symptoms include itching, burning and fatigue. In more severe or chronic cases, varicose veins can be debilitating and limit a person's mobility. Left untreated, symptoms are likely to worsen, with some possibly leading to venous ulceration, a type of wound that forms on the skin.



Varicose Veins: Before and After

While unsightly and often the source of pain and discomfort, varicose veins can be treated quickly, bringing you genuine relief from symptoms and embarrassment.

SPIDER VEINS

Spider veins are the mildest form of venous insufficiency. They are tangled groups of tiny blood vessels just under the skin's surface that resemble spider webs or tree branches. Typically, they are red, blue or purple and clearly visible on the thighs, lower legs and face. Spider veins can sometimes cover large areas of skin, but they are primarily an appearance issue, rarely causing physical symptoms.



Spider Veins: Before and After

Spider vein treatment is quick and easy, meaning you'll be able to show off your legs again in no time.

At Center for Vein Restoration, we offer five primary treatments: radiofrequency, laser, ultrasound-guided foam sclerotherapy and visual sclerotherapy. Each of these treatments is quick and relatively painless and most are covered by insurance. After a detailed evaluation by one of our trained vascular technicians, we can help you determine which treatment is most appropriate for your situation.

RADIOFREQUENCY

In this method, a thin catheter is inserted into the vein through the skin. The catheter emits radio waves, which heats specific areas of the affected vein, causing it to close. The catheter is withdrawn and the healing process begins. The closed veins are replaced with (internal) scar and no longer carry blood and blood returns through the heart through alternate routes.

LASER

Similar to the radiofrequency procedure, a catheter is inserted through the skin into the affected vein. This catheter is equipped with a laser, which heats the vein and closes it. The catheter is withdrawn and the healing process begins. The closed veins are replaced with (internal) scar and no longer carry blood and blood returns through the heart through alternate routes.

AMBULATORY PHLEBECTOMY

Often, this relatively minor surgical procedure is routinely conducted at the same time as laser or radiofrequency ablations. The technique is performed through

tiny stab incisions that usually do not require skin sutures to heal. The bulging vein is extracted through these small incisions.

ULTRASOUND GUIDED FOAM SCLEROTHERAPY

In this procedure, a medicine called a sclerosant is injected into the problem vein. It "foams," filling the vein and initiating a reaction that results in vein closure. Blood is then naturally rerouted around the affected area and the vein later is reabsorbed by the body. The physician administering the treatment uses ultrasonography – sound waves – to guide the procedure for maximum accuracy and safety.

VISUAL SCLEROTHERAPY

This procedure is reserved for spider veins, which are smaller than varicose veins and are more of an issue of appearance. Similar to ultrasound-guided foam sclerotherapy, a medicine called a sclerosant is injected into the veins, initiating a reaction that causes them to close and be reabsorbed into the body.

Unlike ultrasound-guided foam sclerotherapy, this treatment is done without the need for imaging equipment, but instead is done "visually" by a health professional. This appearance-related treatment is not normally covered by insurance.

Venous insufficiency often can be treated quickly through a variety of minimally invasive, outpatient procedures. You and your doctor can determine the best course of treatment based on your specific case.

In some cases, your doctor may prescribe conservative measures, such as weight loss, exercise or wearing compression stockings. In other cases, it may be necessary to close the affected veins so that the body can simply reroute the blood supply and restore healthy circulation. During the healing process, closed veins are replaced with (internal) scar and no longer carry blood and blood returns through the heart through alternate routes.

Who is at Risk? Venous insufficiency affects more than 30 million Americans. Several factors, ranging from family history to daily lifestyle factors can increase your risk of developing the disorder.



HEREDITY

People with a family history of varicose veins or spider veins have the highest risk of developing them. In fact, even elite athletes can develop varicose veins if they have a family history of venous insufficiency.



AGE

Getting older may raise your risk for varicose veins. The normal wear and tear of aging may cause the valves in your veins to weaken and not work well. In fact, one population study showed that about 25 percent of cases were seen in people under 50, with more than 75 percent occurring in people over 50.



GENDER

Women tend to get varicose veins more often than men. Hormonal changes that occur during puberty, pregnancy, and menopause (or with the use of birth control pills) may raise a woman's risk for varicose veins. A recent population study showed that about two thirds of cases occur in women while about a third occur in men.



PREGNANCY ("MOMMY VEINS")

During pregnancy, your body goes through monumental physical and hormonal changes. As your baby grows, the uterus puts increased pressure on your veins. Hormonal changes can also cause the walls of the veins to relax. These factors can combine to cause the one-way valve in one or more veins to stop working. So, blood that should return to the heart instead pools and stagnates. And, studies show that varicose veins can get worse with each subsequent pregnancy. Your doctor can recommend many ways to keep you comfortable during pregnancy, including regular,



moderate exercise, plenty of rest, support stockings and keeping your legs elevated, especially during the evening. It is best to wait at least three months postpartum to seek treatment for venous insufficiency.

OVERWEIGHT ("HEAVY VEINS")

Being overweight puts added pressure on the entire body, your veins included. Increased pressure can cause the veins to enlarge and damage the valves that keep blood flowing toward the heart. Often, people with weight problems are not getting regular exercise, which can lead to circulation problems and can make varicose veins worse. If you have a body mass index (BMI) over 25 you are more likely to develop varicose veins or spider veins.



LACK OF MOVEMENT ("WORK VEINS")

If you stand on your feet all day, or sit for a long time, especially with your legs bent or crossed, you may pay a price: achy, tired, heavy legs caused by varicose veins. Standing forces blood in your veins to fight gravity to return to your heart; lack of leg movement also deprives your circulatory system of the help it requires to assist in proper blood flow. These factors can lead to blood flowing backwards and pooling, leading to varicose veins.



HISTORY OF DVT

Patients who have had deep vein thrombosis (DVT), a blood clot that forms in a vein deep in the body, commonly in the leg or thigh, also may be more prone to developing varicose veins and spider veins. You may have heard about DVT in relation to sitting for long periods, such as on airplanes.



“I’m able to exercise, and I’m back to being what I was before my leg problem”

♥ - DANNY
Virginia

Have you had to set aside your all-star dreams because varicose veins have curtailed your mobility?

**WE CAN HELP YOU
GET BACK IN THE GAME!**

WHAT HAPPENS DURING YOUR PROCEDURE?

Depending on your specific circumstances your CVR physician has recommended one of the following treatments. Please ask our staff if you have any questions about these procedures.

CATHETER PROCEDURES: Radiofrequency and Laser

In each of these similar procedures, a catheter is fed through the skin and into the area of the vein requiring treatment. In the case of the radiofrequency treatment, the catheter emits high-frequency radio waves that heat the vein tissue and collapse it. The body then naturally “re-routes” the blood supply around the closed vein, which later is reabsorbed into the body. In the case of laser treatment, the catheter emits light which heats the vein and collapses it. Both of these treatments are used to treat varicose veins but not spider veins.

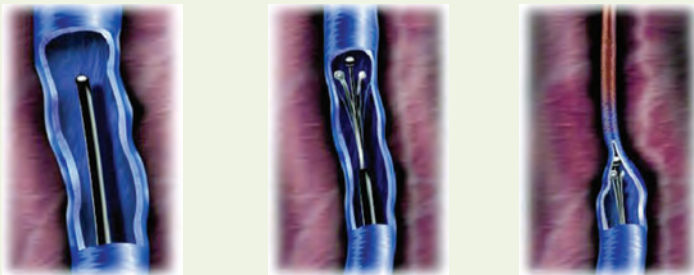
CATHETER PROCEDURES CONSIST OF FOUR PRINCIPAL STEPS:

1. Mapping the Saphenous Vein

A typical procedure begins with noninvasive ultrasound imaging of the varicose vein to trace its location. This allows our physician to determine the site where the ablation catheter will be inserted and to mark the desired position of the catheter tip to begin treatment.

2. Inserting the Closure/Laser Catheter

Our physician then typically injects a volume of diluted anesthetic fluid into the area surrounding the vein. This numbs the leg, helps squeeze blood out of the vein and provides a fluid layer outside the vein to protect surrounding tissue. Then our physician accesses the saphenous vein or the appropriate vein. The Closure or Laser catheter is inserted into the vein and advanced to the uppermost segment of the vein.



3. Deliver RF (Radio Frequency) or Laser Energy and Withdraw Catheter

Noninvasive ultrasound is used to confirm the catheter tip position and the physician then activates the RF generator, causing the electrodes at the tip of the catheter to heat the vein wall to a target temperature. As the vein wall is heated, the vein shrinks and the catheter is gradually withdrawn. During catheter pullback, which typically occurs over 1 to 2 minutes, the RF generator adjusts the power level to maintain the target temperature to effectively shrink collagen in the vein wall and close the vein over an extended length. The laser procedure is performed much the same way, using a different type of catheter. After local anesthesia is administered, a laser fiber is inserted through a catheter into the vein. The laser delivers short bursts of energy and the vein collapses around it. The collapsed vein soon shrinks and disappears. This technique rapidly treats the veins and takes 10–20 seconds to perform.

4. Follow up with Ultrasound Study

24–72 hours after your treatment, ultrasound imaging is used to check for a DVT (deep vein thrombosis).

SURGICAL PROCEDURE: Ambulatory Phlebectomy

Ambulatory phlebectomy is a minor surgical procedure aimed at removing unsightly and symptomatic superficial varicose veins. This procedure is performed in an office-based, outpatient setting using local anesthesia. Complete surgical removal of varicose veins segments may be achieved in a single session or in separate sessions depending on the location and how extensive the network of veins to be removed. Often, ambulatory phlebectomies are routinely performed at the same time as a laser or radiofrequency ablation. The technique is performed through tiny stab incisions that usually do not require skin sutures to heal. The bulging vein is extracted through these small incisions. Any bruising or swelling after the procedure is temporary. The small slit-like incisions heal quickly and after 6-12 months, they are practically imperceptible.

Recovery time is immediate and ambulation after this surgery is encouraged. A postoperative bandage is kept in place for 24 hours, then replaced with daytime compression stockings for 1-2 weeks. The use of compression stockings aid in healing and reduce postoperative pain.

INJECTION PROCEDURES: Visual Sclerotherapy and Ultrasound Guided Foam Sclerotherapy

Each of these treatments is administered by syringe. Spider veins are treated by a safe and quick procedure called visually guided sclerotherapy. A chemical called a sclerosant is injected into the problem vein, filling it and initiating a reaction that results in vein closure. Blood is then naturally re-routed to other healthier veins around the affected area. The treated veins are eventually reabsorbed by the body.

Ultrasound guided foam sclerotherapy is designed for treatment of varicose veins. The sclerosant foams to fill the veins, which are often larger in diameter than normal veins due to pooling of blood; this is what causes the “ropey” or bumpy look associated with varicose veins. The physician administering the treatment uses ultrasonography — sound waves — to guide the procedure for maximum accuracy and safety.

The foam solution has the consistency of shaving cream, which improves treatment in two distinct ways. First, the foam displaces blood within the vein, permitting the full strength of the sclerosing agent to be in direct contact with the vein wall for an extended period of time without any dilution effects. Second, the foam is visible via ultrasound imaging and can be easily tracked and guided to the source of the venous problem.



*"I'm more active, and
I'm able to keep up with
my grandchildren!"*

♥ - EMILY
Michigan

Have you been avoiding your favorite activities because your varicose veins make your legs feel heavy and tired?

**WE CAN HELP
YOU FEEL FREE TO
ROAM AGAIN!**

Visual sclerotherapy is used only for smaller, spider veins. It is administered "visually," meaning your doctor does not require the use of ultrasound to guide the procedure.

Sclerotherapy, or "injection therapy," is the most common treatment for spider and varicose veins on the legs. During treatment, a mild chemical solution is injected into the incompetent vein or small vessel. The sclerosing agent irritates the walls of the vessel, causing it to collapse. The body then absorbs the vein and blood is re-routed to a healthy vein, restoring proper venous circulation in the area.

A single sclerotherapy treatment session involves multiple injections. Patients describe the injections as feeling like a pinprick or mosquito bite. The number of treatment sessions needed will vary from patient to patient, depending on the number of veins treated, healing time and the level of cosmetic perfection desired. Following injections, a compression stocking needs to be worn to help keep the vein closed. Normal daily activities can commence immediately after treatment.

Pre-Operative Instructions

(For Laser and Radiofrequency Treatments)

- Drink plenty of water.
- If you were prescribed sedative medication, please take 1 hour before your procedure.
- If you have taken a sedative prior to your procedure make sure you have someone available to drive you to and from your appointment. (Taxi lists are available upon request.)
- Bring your compression stockings with you the day of our procedure.
- Wear loose, comfortable clothing such as long pants, shorts or a skirt.
- Undergarments may get stained, as the doctor preps the entire leg including the groin area.
- Bring a referral to your first procedure if required by your insurance. If you have any questions concerning this please call us. (Each patient treatment plan and insurance plan is different. An additional referral may be needed.)

Post-Operative Instructions

(For Laser and Radiofrequency Treatments)

- Avoid prolonged sitting or standing.
- Refrain from strenuous activities and heavy lifting for 2 weeks. Walking, however, is encouraged.
- Compression stockings will help with the closure procedure. The more you wear them, the better you will feel.
However, wearing them for 3 days after the procedure is mandatory. (Take them off at night.)
- Schedule your follow-up Duplex (ultrasound) scan within 24–72 hours after your procedure.
- If you plan on sitting for more than 3 hours, try to get up and move around every hour. The use of baby aspirin is highly recommended.
- You may shower, but no tub baths, swimming, or hot tubs for the first week.
- In rare occasions bleeding through the bandages may occur. Lie down, elevate your leg and apply direct pressure until bleeding has stopped. If bleeding persists, please call your CVR physician.
- It is normal to experience some tenderness and possibly bruising along the areas where local anesthesia was administered.

Additional information for ultrasound-guided foam sclerotherapy patients

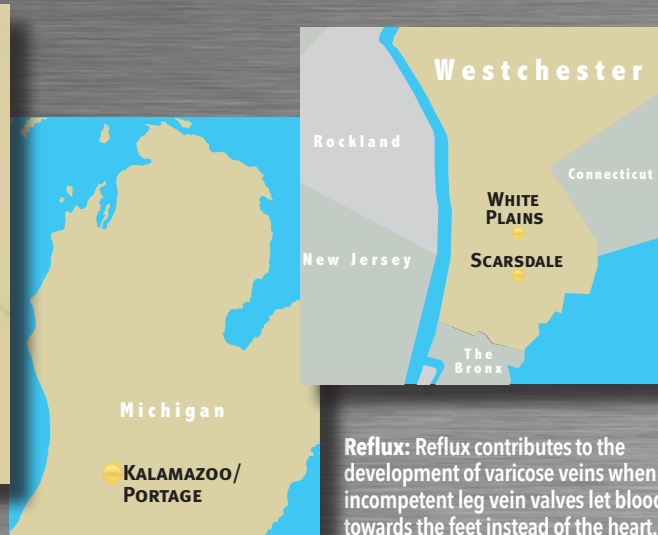
Pre-procedure Instructions:

- Please do not shave the area(s) to be treated on the day of your appointment.
- On the day of your treatment please do not wear makeup, perfume, cologne, lotions or powder on the area to be treated.
- You will need to bring your compression stockings with you on the day of the procedure. If you do not have compression hose, you will need to see one of the office staff for fitting and purchase of the compression hose.

Post-procedure Instructions:

- Compression will promote clearance of the medication in the vein and reduce staining. Therefore, we ask that you wear your compressions stockings at all times for the next 3 days. You may remove them temporarily to shower.
- After the first 3 days, continue to wear your compression stockings daily except for showering and sleeping for the next 2 weeks. They may be worn at your discretion after that.
- Avoid very hot showers and no tub baths, hot tubs or swimming for 1 week. Pat the skin dry after showering. Soothing aloe vera gel or cool packs may be used to ease any discomfort. Tylenol or ibuprofen may also reduce post treatment discomfort. Avoid the use of aspirin.

LOCATIONS & GLOSSARY OF TERMS



Catheter: Used during EVLT, a thin long tube designed to move within the vein, and close it by delivering laser energy.

Duplex scan: Ultrasound system that uses color to indicate the direction of blood flow. This is particularly helpful in visualizing and evaluating both the deep and superficial venous systems.

Compression therapy: A non-surgical therapy for venous insufficiency. Often involves compression stockings with varying degrees of pressure to improve blood flow and reduce symptoms caused by venous insufficiency.

Deep veins: Non-surface veins in the leg, which are near to the leg bones. They return blood directly to the heart.

Deep vein thrombosis (DVT): Thrombus or blood clot, within a deep vein.

Doppler: Ultrasound device to detect the presence and movement of blood inside vessels.

Endovenous: Inside a vein.

Endovascular: Inside a blood vessel.

Incompetent Vessel: Blood vessel that allows blood to fall back under the effect of gravity.

Lumen: Interior of a blood vessel.

Edema: Swelling caused by fluid. Frequently occurs in the legs and ankles of people with varicose veins.

Paraesthesia: Numbness or tingling often associated with damage to sensory nerves.

Perforator veins: Veins connecting the superficial veins and deep veins.

Radiofrequency ablation: A minimally invasive technique which closes the great or small saphenous vein using microwave energy delivered through a fine catheter. This interrupts the feed to the visible varicose veins avoiding open surgery and allowing a quicker recovery.

Reflux: Reflux contributes to the development of varicose veins when incompetent leg vein valves let blood flow towards the feet instead of the heart.

Saphenous vein: The long saphenous vein is a large vein running from the ankle to the groin; the short saphenous vein runs up the back of the leg from the ankle to the knee.

Sclerotherapy: The injection of unwanted veins with a chemical. Often used for treatment of small diameter (1-2 mm) surface veins, such as thread veins.

Superficial veins: Veins just beneath the skin. Because they enjoy less support from nearby muscles and bones, they can develop areas of weakness in their walls and are more likely to become varicose than deep veins.

Ulcer (venous): Lesion on skin caused by tissue loss (in the presence or caused by varicose veins).

Valves: Flaps in the leg veins that open and close to prevent blood from flowing backwards.

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