

## The Venous System Anatomy

The venous system is made up of a network of veins, including:

- Superficial veins- veins located close to the surface of the skin.
- Deep veins- larger veins located deep in the leg.
- Perforator veins- veins that connect the superficial veins to the deep veins.

The Closure procedure treats venous reflux disease in superficial venous system, often the underlying cause of painful varicose veins.

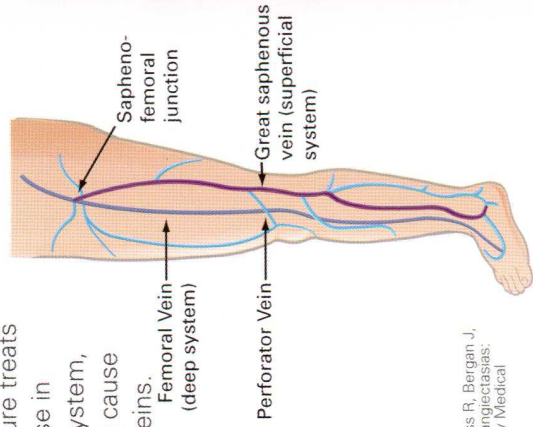


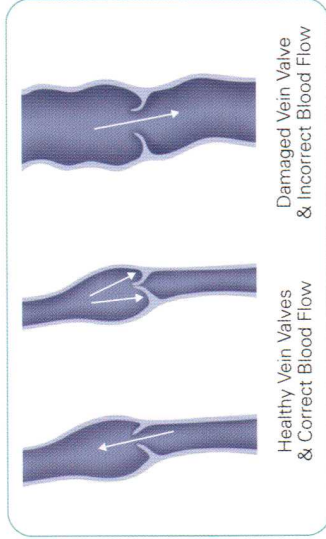
Image source: Goldman M, Weiss R, Bergan J, et al eds. Varicose Veins and Telangiectasias. Diagnosis and Treatment. Quality Medical Publishing, Inc. 1999

## Understanding Venous Reflux Disease

Healthy leg veins contain valves that open and close to assist the return of blood back to the heart. Venous reflux disease develops when the valves that keep blood flowing out of the legs and back to the heart become damaged or diseased. As a result, vein valves will not close properly, leading to symptoms of:

- Varicose veins
- Leg heaviness and fatigue
- Pain
- Skin changes and skin ulcers
- Swollen limbs

*Superficial venous reflux disease is progressive — symptoms can worsen over time if left untreated.*



## Are You a Candidate?

Many factors contribute to the presence of venous reflux disease, including:

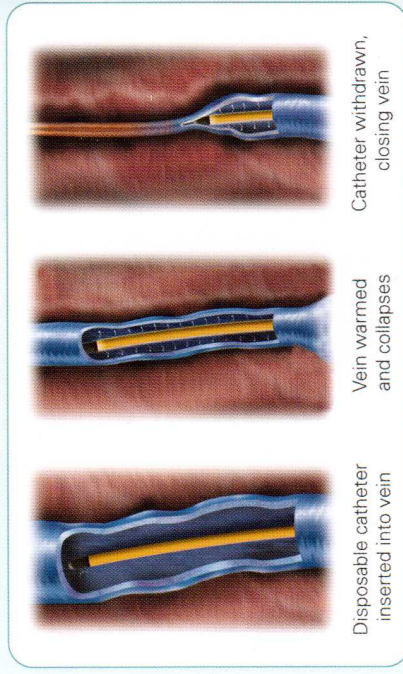
- Age
- Multiple pregnancies
- Gender
- Obesity
- Family history
- Standing profession

Using ultrasound to scan your leg(s), your vascular surgeon will determine if superficial venous reflux is present.

Speak with your surgeon about determining your candidacy for the Closure procedure.

## Experience the VNUS Closure® Procedure

The Closure procedure can be performed on an outpatient basis. Using ultrasound, your surgeon will position the Closure catheter into the diseased vein through a small opening in the skin. The tiny catheter powered by radio-frequency(RF) energy delivers heat to the vein wall. As the thermal energy is delivered, the vein wall shrinks and the vein is sealed closed. Once the diseased vein is closed, blood is re-routed to other healthy veins.



Following the procedure, a simple bandage is placed over the insertion site, and additional compression may be provided to aid healing. Your surgeon may encourage you to walk, and to refrain from extended standing and strenuous activities for a period of time.

Patients who undergo the Closure procedure typically resume normal activities within a day.

*“The veins on my legs were beginning to look like a road map! My legs were painful with ankle swelling and itching. Skirts were not worn except with thick tights and shorts certainly didn't feature in my wardrobe. I had the Closure procedure and was back at work the next day! I am so pleased with the results and apart from the cosmetic improvement I no longer have leg pain. It's great that I am not covering up and wearing shorts again.”*

-Christine T