

Venous Reflux

What is venous reflux disease?

Venous reflux disease is also known as venous stasis or venous insufficiency. Venous reflux disease refers to the "damaged valves" in the veins of the legs. Reflux can occur in the deep and/or superficial veins of the legs. Deep veins are those that are located inside the muscle; at least 80-90% of the blood from the legs return to the heart. Superficial veins are located outside the muscle and under the skin. The main superficial veins are the Major Saphenous Vein that runs through the middle of the thigh and calf and the Lesser Saphenous Vein, which runs along the back of the calf. Normally, there are unidirectional valves within the veins of the legs, which help direct blood flow in one direction: to the heart. This means that the blood makes its journey against gravity. The calf muscle also helps mobilize blood to the heart. When the venous valves are damaged, blood flows backwards (reflux) in the direction of the feet. Blood pools in the lower legs, causing protruding veins on the surface. Symptoms include heaviness, fatigue, and leg pain, swelling of the ankles, phlebitis (swollen and painful veins), restless legs at night, and night cramps. Venous reflux disease is progressive and worsens over time. The skin may also have changes, including darkening of the skin around the ankles. Darkening of the skin is sometimes referred to as skin changes from venous stasis. The skin may become dry and produce itchy (venous eczema). Eventually, the skin can break causing a wound, called a venous leg ulcer.

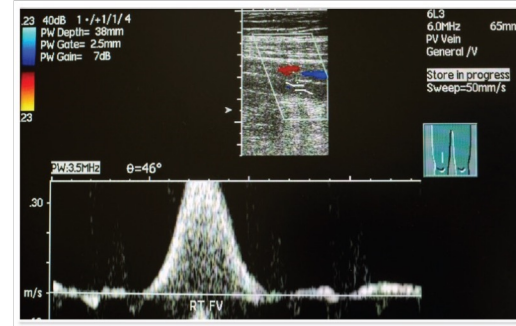


Stages of Development of Varicose



How is venous reflux disease diagnosed?

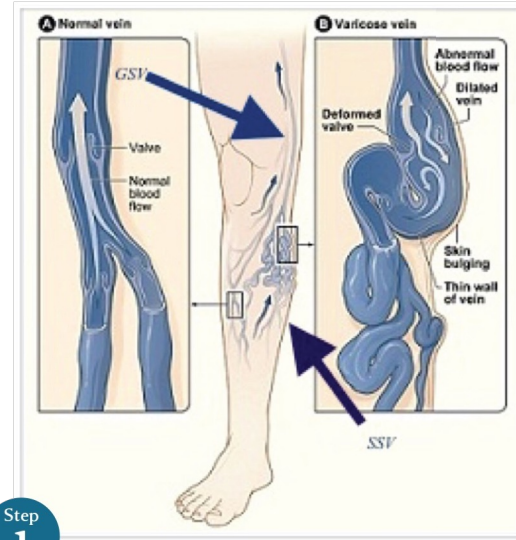
In addition to the findings in your physical exam and medical history, an ultrasound is an important tool in the evaluation of venous disease. Not all venous diseases are visible to the naked eye, and they usually arise from veins that are below the surface of the skin, only visible by ultrasound technology. The ultrasound allows us to visualize if the valves are damaged; it can detect the direction of blood flow and also detects blockages in the veins, for example, blood clots or scarring from previous clots within the veins. The ultrasound will determine exactly which veins are "bad" or incompetent. Reflux can be detected in deep veins (inside the muscle), the major and minor saphenous veins, and/or in the branches of the saphenous veins. This will help determine the treatment plan.



How Is Venous Reflux Disease Treated?

Step 1: The Underlying Problem

The first step is to treat the underlying problem, venous reflux. The specific pattern of venous reflux is detected by ultrasound. Venous reflux usually begins in the saphenous veins. Saphenous veins are most effectively treated with ablation procedures. This involves placing a small catheter inside the vein and using heat or a solution to produce injury and eventually closure of the vein. The most commonly used treatments for saphenous veins are radiofrequency ablation (RFA), laser ablation, mechanical-chemical ablation (MOCA or Clarivein) and, in some cases, Varithena foam. The treatment recommendation is personalized, depending on the location of the reflux and other clinical factors.



Step 2: Varicose Veins

After correcting the reflux of the underlying saphenous vein, the bulging veins (varicose veins) can be treated by injecting a foam-shaped medication that will cause them to heal and eventually dissolve (foam sclerotherapy) or to remove them through small incisions. The most common method is foam sclerotherapy. It is also known as ultrasound-guided foam sclerotherapy (UGFS).



Step 3: Spider Veins

The treatment of spider veins has always been considered a new procedure. If the improved complexion is a goal of treatment, be sure to discuss this with your doctor and plan to perform a treatment this way as the last step. The treatment of spider veins is performed by sclerotherapy, which is the injection of a liquid drug into spider veins. Most patients see an average of 3 treatment sessions. Ask your provider for an answer about how many treatment sessions/vials will be needed to get the results you want.

