

Venous Disorders

What are the causes of venous insufficiency?

In healthy veins, there is continuous flow of blood from the limbs back toward the heart. There are valves within the veins of the legs that prevent the backflow of blood. Venous insufficiency occurs when forward flow through the veins is obstructed, as in the case of a blood clot, or if there is backward leakage of blood flow through damaged valves. In many cases of venous insufficiency, patients have both obstruction of forward flow and backward leakage of the veins. The most common causes of venous insufficiency are previous cases of blood clots and varicose veins. In some cases, weakness of the leg muscles that help squeeze blood forward may also contribute to venous insufficiency.

Symptoms of venous hypertension such as heavy legs may be present without a visible venous pathology.

Varicose veins may be present without symptoms but typically progress and lead to chronic venous insufficiency.

Chronic venous insufficiency reflects a clinical syndrome of skin changes which may lead to serious consequences such as leg ulceration.

Acute manifestations of venous disease are serious disorders such as phlebitis, thrombosis, deep venous thrombosis (DVT). These acute disorders usually occur suddenly without pre-existing conditions, but can also be triggered by chronic venous disease.

How can venous insufficiency be prevented?

Prevention of venous insufficiency is important, especially if there is a strong family history. Strategies for prevention of blood clots can help you avoid chronic venous insufficiency. Prevention methods for each patient may be different; therefore, a physician should discuss and design a personal program for each situation.

You can help prevent venous insufficiency with the following steps:

- Maintain a healthy body weight
- Daily activity or exercise
- If you smoke try to quit. Smoking is harmful to the circulation
- Protect your legs from injury
- Do not sit or stand in one place or position for very long

How is venous insufficiency treated?

There are many treatment options for venous insufficiency, depending upon the condition that is causing it. The most common treatment for venous insufficiency is prescription-wear compression stockings. These special elastic stockings apply pressure at the ankle and lower leg and improve venous blood flow and reduce leg swelling.

Compression stockings are available in a range of prescription strengths and in different lengths (such as knee-high or thigh-high stockings). Your physician will determine the type of compression stocking that is most appropriate for your care. In some cases when a non-healing ulcer (sore) is present, a physician may prescribe special medicated wraps (such as an Unna boot) to reduce swelling and treat the skin ulcer.

To further help with the leg swelling caused by venous insufficiency, your doctor may also tell you to keep your legs elevated above your heart when you are lying down. He or she may also suggest that you get more exercise; for example, walking can improve your circulation. Weight loss can also be very helpful for treatment of venous insufficiency for patients who are overweight. For patients with venous insufficiency caused by blood clots, doctors commonly prescribe anticoagulants or blood thinners. This treatment works on existing blood clots and also prevents additional clots from forming.

What are the risk factors for venous insufficiency?

Some of the risk factors that can contribute to venous insufficiency are:

- Older age
- Varicose veins
- Previous deep vein thrombosis (blood clot)
- Family history
- Obesity
- Inactivity
- Muscle weakness
- Pregnancy
- Injury to the legs
- Cancer

What are the symptoms of venous insufficiency?

Symptoms of venous insufficiency include:

- Edema (swelling)
- Skin discoloration
- Prominent varicose veins or ropy veins
- Skin ulcers
- Aching, burning, or throbbing sensations in the legs/feet
- Cramping
- Leg weakness

Medications and immobility can also affect the muscles and veins of the legs. Patients should also consider signs and symptoms of venous insufficiency before traveling or having surgery.

For more information on chronic / acute venous disorders click [here](#).