



Varicose Veins

What Are Veins?

Veins are soft, thin-walled tubes that return blood from the arms and legs to the heart. Veins work against the force of gravity to push blood forward and have valves that prevent backflow. Contracting the muscles in the arms and legs during exercise also helps blood flow in the veins.

Your legs and arms have two major types of veins:

- **Deep veins** are located near the bones and are surrounded by muscle.
- **Superficial veins** are near the surface of the skin and are often visible.

What Are Varicose Veins?

Varicose veins are enlarged, bulging superficial veins. They are generally larger than 3 millimeters in diameter and are usually located on the inside of the calf or thigh.

Varicose veins develop due to weakness of the vein wall and the vein valve not functioning. Under the pressure of gravity, the veins continue to enlarge. Over time, they may become elongated, twisted, and thickened.

Spider veins (or telangiectasia) are similar. These are tiny, dilated veins, usually less than 1 millimeter in diameter, located on the surface skin layers.

Symptoms

Varicose veins may cause no health problems or symptoms. People who have symptoms may have:

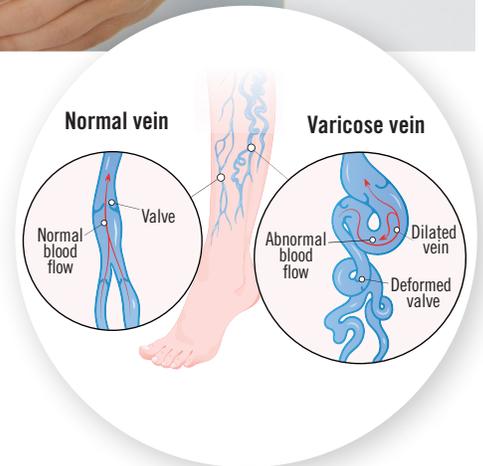
- Ankle and leg swelling
- Heaviness or tension in the legs
- Aching
- Restlessness
- Cramps
- Itching

Women report symptoms more than men. Itching is perhaps the most consistent symptom of varicose veins in men, while women most often complain of leg heaviness, tension, and aching.

Causes

The causes of varicose veins may be primary, secondary, or congenital.

- **Primary varicose veins** develop due to a genetic weakness in the wall of the vein. Varicose veins often occur in several members of the same family.



- **Secondary varicose veins** occur after trauma or deep vein thrombosis (DVTs, or blood clots in the legs).
- **Congenital varicose veins** are present at birth and are due to disorders in the natural development of the vein. People with these varicose veins often have birthmarks (port-wine stains) and may also have an enlarged and longer limb.

No matter the cause, vein valves that do not work well may cause blood in the veins to stay in the leg, leading to increased venous pressure. This may further enlarge the varicose veins and increase the likelihood of symptoms and complications, such as skin changes, ulcers, or sores.

A blockage of the veins in the pelvic or hip area can worsen the effects of varicose veins and may require a separate treatment.

RISK FACTORS

The most important factors leading to the development of varicose veins include:



Family history



Standing for long periods of time



Age



Heavy lifting



People who are born female



Multiple pregnancies



Carrying excess weight



Being less physically active

Diagnosis

Health care providers can diagnose varicose veins using a hand-held Doppler device that listens to the blood flow in the veins of the legs. The most accurate test is called a **duplex ultrasound exam**. This exam provides an ultrasound image of the vein to detect any blood clots that may be blocking the vein. It also determines whether the vein valves are working properly.

How Common Are Varicose Veins?

It is estimated that at least 20 to 25 million people in the United States have varicose veins. Venous problems are probably among the most common chronic conditions in North America and Western Europe. In one study, venous problems were present in 33% of women and 17% of men.

Varicose veins occur almost as often in men as in women. A large ongoing research project, called the Framingham Heart Study, found that 27% of the American adult population had some form of venous disease in their legs.

Prevention

While there are risk factors out of our control, like a family history of varicose veins, you can delay varicose veins from progressing by:

- Being active. Regular exercise helps keep blood flowing to leg muscles.
- Monitoring and maintaining a healthy blood pressure. Ask your health care provider what blood pressure level is best for you.
- Keeping off excess body weight

If you think you have symptoms or are wondering if you have varicose veins based on your risk factors, talk with your health care provider right away.

For more information, review this related flyer:

- Understanding Chronic Venous Insufficiency

Questions for Your Doctor



It is important to work closely with your health care provider about your diagnosis and treatment. You can bring this form with you to help talk to your medical provider about any questions and concerns you may have.

