

# Vein Information

## Healthy Leg Veins

A vast network of veins manages blood flow for the entire body. The smallest surface veins drain into the reticular system, a web of tiny veins just below the skin. Blood then flows into the larger and somewhat deeper superficial veins. Perforating veins carry blood from the superficial veins to the deep veins. These larger veins carry blood back to the heart. The great and small saphenous veins are the main superficial leg veins.

## Returning Blood to the Heart

To get from the feet and legs to the heart, blood has to flow upward. This means that it must work against gravity. The action of the calf and thigh muscles helps pump blood upward. Valves (small flaps inside the veins) open to let the blood through, then close to keep it from flowing backward. This in turn, allows blood to move against gravity, to return to the heart.

What is venous reflux disease?

It is estimated that more than 80 million Americans suffer from some form of venous disease.

## Development Of Venous Reflux Disease

Venous disease, which includes spider veins (also called telangiectasias) and the larger varicose veins, is influenced by many factors including heredity, pregnancy, hormonal changes, excessive standing, weight gain and age. Venous disease is very common. Varicose veins, one of the more common forms of venous disease, affects 8% of females by ages 20-29 and 72% of females by the time they reach the 60-69 year-old age group. 43% of males in the 60-69 year-old age group are also affected.

## Symptoms Of Venous Reflux Disease

Symptoms of venous reflux disease can include aching, burning, swelling, unsightly cosmetic appearance, skin discoloration and ulcers. A heavy, aching pain in the legs is a very common symptom.

How leg veins work...

Blood flows through a system of blood vessels known as veins and arteries. The job of the veins is to carry blood from the organs and limbs to the heart. The job of the arteries is to carry oxygen-rich blood from the heart to the rest of the body. The blood then drains back into the veins, and the cycle begins again. Vein problems are not related to artery problems such as those that cause heart trouble.

Are you at risk?

## It May Be More Common Than You Think

Up to 60% of all Americans suffer from a venous disorder such as spider veins, varicose veins, leg swelling or stasis ulcers.

The cause of spider veins is uncertain, but factors that weaken vein valves include aging, obesity, leg injury, and prolonged standing.

Varicose veins often cause discomfort and look unattractive. Varicose veins, left untreated, usually enlarge and worsen over time. They can cause the legs and feet to swell. Leg muscles may feel fatigued or throb and cramp at night. The skin at or around the spider veins or varicose veins can itch or burn, and can lead to more serious problems such as ulcers.

The factors below may play a part in the development of varicose and spider veins:

**Heredity** - There is a significant relationship between heredity and the development of varicose veins and spider veins.

**Age** - The development of varicose veins and spider veins may occur at any age but usually occurs between the ages of 18 and 35 years, and peaks between 50 and 60 years.

**Gender** - Females are affected approximately four to one to males.

**Pregnancy** - Pregnancy is a common factor contributing to the formation of varicose and spider veins. The most important factor is circulating hormones that weaken vein walls. There is also a significant increase in the blood volume during pregnancy. This tends to distend veins, causing valve dysfunction which leads to blood pooling in the veins. Additionally, later in pregnancy, the enlarged uterus can compress veins, causing higher vein pressure leading to dilated veins. Varicose veins that form during pregnancy may spontaneously improve or even disappear a few months after delivery.

**Lifestyle/Occupation** - People who are involved with prolonged sitting or standing in their daily activities have an increased risk of developing varicose veins. Thus, the weight of the blood continuously pressing against the closed valves causes them to fail, leading to distention in the veins.

## If you're pregnant:

Varicose veins often develop or worsen during pregnancy. In most cases, they are not treated during pregnancy. Keep in mind that:

Self-care can relieve symptoms during pregnancy.

Abnormal veins may improve after pregnancy.

Your veins can then be reevaluated to see if treatment is needed.

You need not delay treatment until you're finished with childbearing. In fact, getting treated between pregnancies can reduce vein problems during future pregnancies.