



X-Plain

Varicose Veins

Reference Summary

Introduction

Varicose veins are very common, in both women and men. Varicose veins can be painful and unattractive.

Vein doctors use non-invasive ultrasound imaging to find the source of the varicose veins. It is essential that the veins not visible on the skin's surface are evaluated.

Commonly, a deeper vein called the saphenous vein is not working properly, causing the discomfort and varicose veins. This vein will also need to be corrected.

With ultrasound imaging, doctors may recommend treatment to correct the varicose veins and any underlying source. If your doctor recommends surgery, the decision whether or not to have surgery is also yours.

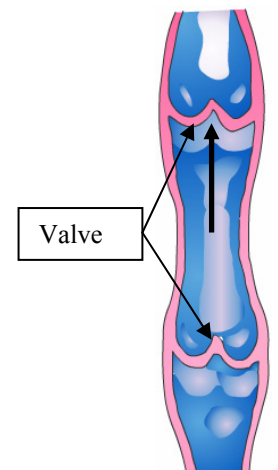
This reference summary will help you understand the benefits and risks of current varicose vein treatment options.

Anatomy

The heart pumps oxygen-rich blood into a large artery known as the aorta. The aorta divides into 2 main arteries, which continue to branch into smaller arteries delivering blood to the rest of the body.

Once the oxygen has been delivered, veins carry the blood back to the heart.

Unlike arteries, veins are dependent on one-way valves to keep blood moving in an upward motion.



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The muscles of the legs help push the blood through the veins; the one-way valves close and prevent the blood from falling back towards the feet.

Symptoms And Their Causes

When the one-way valves fail to close properly, blood can reverse its flow. This causes increased pressure in the veins, and over time can cause them to swell and become bulging, varicose veins.

The increased pressure can lead to significant symptoms such as: swelling of the ankles or legs, severe pain and aching, and complaints of tired legs. Skin changes, ulceration and phlebitis are all possible with long-standing varicose veins.

Because the blood is not flowing efficiently, clots can form in the veins causing hard lumps and severe pain. This is known as “superficial phlebitis.” This is not the type of clot that doctors worry will travel to your heart, lungs, or brain.

It is possible to have varicose veins without pain or swelling, and it is not necessary to have them corrected. If they worsen and become uncomfortable, it is considered medical and most insurance companies, including Medicare, will cover varicose vein treatment.

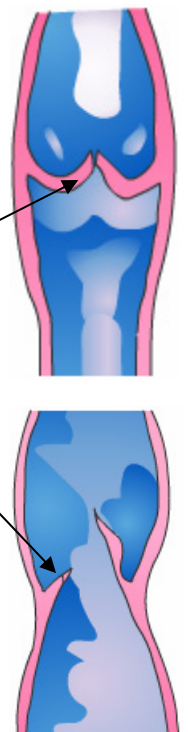
Notice how the valves of this vein come together and prevent blood from flowing backward.

Notice how the valves of this vein do not come together and therefore allow blood to flow backward and cause the vein to enlarge.

Heredity is the primary cause of the development of varicose veins. Pregnancy, obesity, hormonal influences, and environmental factors, such as prolonged sitting or standing, can also contribute to the development of varicose veins.

Preventive Measures

Measures that help the blood flow toward the heart can be helpful in slowing the progression of varicose veins, and in minimizing discomfort associated with vein problems.



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Graduated compression stockings are helpful in getting fluid out of the legs and back up to the heart. Knee-high stockings are not recommended, they should at least cover the thigh.

Staying active and minimizing sitting or standing for long-periods of time also help.

If none of these measures help alleviate the symptoms, treatment may be recommended.



Varicose Vein Treatment

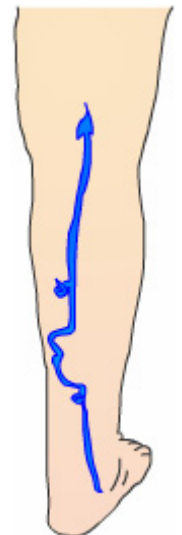
New techniques allow for a virtually painless correction of the problem. The newer techniques allow specialists to fix varicose veins in an office setting, without a trip to the hospital.

Patients will be awake, without need for a general or spinal anesthetic. The entire procedure is performed under a local anesthetic, which is administered around the vein. Patient comfort is monitored throughout the entire procedure.

Heat energy from a laser or radio frequency source is used to painlessly eliminate flow in the affected vein. This is called Endovenous Ablation of the Saphenous Vein.

Overall circulation will be improved, as the blood will be redirected into veins that have working one-way valves.

Once the source of the varicose veins (saphenous vein) has been treated the doctor will eliminate the individual varicose veins. This is called an Ambulatory MicroPhlebectomy.



Saphenous Vein

The phlebectomy is also performed in the office and under a local anesthetic. Small segments of the dilated veins are removed through 1-2 mm openings, similar to the size of a freckle.

Results are immediate; the body will begin the healing process leaving virtually no scarring.

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After one or both of these procedures are performed, a compression bandage will be applied to minimize bruising. Walking is encouraged immediately following a procedure.

After the Procedure

After the procedure, you will be required to wear compression stockings. You will be able to do light daily activities. When you rest, doctor recommends you elevate your legs.

Anti-inflammatory medication and/or analgesics may be given and should be taken as prescribed.

Heavy exercise should be avoided for one to two weeks. Avoid hot tubs, pool, and tub baths for two weeks.

You will be scheduled for a follow-up appointment to ensure you are healing properly and to use ultrasound to confirm closure of any deeper veins that were treated. Doctor will also confirm no clots have formed in the deep vein system.



Risks And Complications

Bruising is common, and should resolve on it's own in one to two weeks. Compliance with the compression stockings will help speed this process.

Bleeding is possible. Direct pressure should be applied and a compression dressing. Let the doctor's office know if you have trouble keeping a dressing dry.

Some discomfort is normal, especially with the endovenous ablation treatment. Anti-inflammatory medication is provided to help with this side effect. The pain should not be so intense that it affects walking or daily activities.



Infections are rare, but possible with any procedure.

Increasing redness and tenderness in a particular area should be reported to the doctor's office for evaluation.

It is possible that some varicose veins may remain after the procedure, and this is evaluated at the follow-up appointment.

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These procedures are very safe. There are risks, however, as no procedure is risk-free. Severe complications are extremely rare and unlikely. By being informed, you may be able to help your doctor detect problems early.

Summary

Patients considering treatment for vein problems should consult with a highly trained surgical specialist who is familiar with all aspects of vein disease.

Proper testing will give the doctor the information he or she needs to treat your varicose veins, and their source, giving long-lasting results.

More recent techniques such as Endovenous Ablation allow for safer, less expensive and superior cosmetic result.

New methods have less chance of deep vein thrombosis compared with older method such as high ligation and stripping.

Finally the patient is more comfortable and able to be up and around immediately, minimizing time off work and interference with obligations.



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