treatment of varicose and spider veins

patient information

a publication by

American College of PHLEBOLOGY

advancing vein care

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introduction

If you suffer from varicose and spider veins, you are not alone.

It is estimated that there are more than 80 million Americans who suffer from some form of venous disorder. While some people seek treatment for cosmetic improvement, many seek relief from pain. Help is available. Phlebology is the field of medicine that deals with vein diseases and disorders. While phlebology has been an established medical specialty in Europe for more than 50 years, serious interest in phlebology has only developed over the past two decades in the United States. In 2005, phlebology was recognized by the American Medical Association as a medical practice specialty.

The American College of Phlebology (ACP) was founded in 1985 and is the largest phlebology society in the United States. The College was established to improve the standard of patient care related to the treatment of vein disorders. ACP members are physicians and allied healthcare professionals, with backgrounds in a variety of medical specialties, who share a common interest and expertise in the diagnosis and treatment of vein disease.

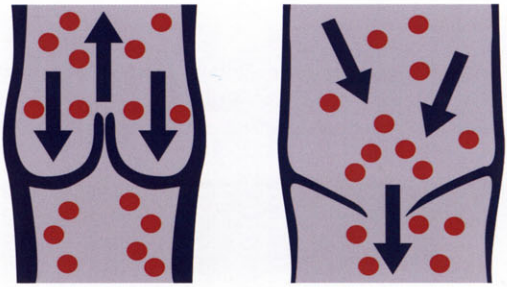
This brochure contains information about the evaluation and treatment of varicose and spider veins in the lower extremities. Special attention is given to recent advancements in these areas.

what are varicose veins?

Although veins and arteries are both part of the circulatory system, they work in very different ways from each other.

Blood is pushed throughout the arteries of the body by pressure created from the pumping of the heart. Veins, unlike arteries, carry blood against the force of gravity. They rely on leg muscle contraction and one-way valves inside the veins to carry blood back toward the heart.

If the valves in veins fail, gravity keeps blood from flowing back to the heart efficiently. This produces a back up, or congestion, of blood. As a result, pressure builds up and the diseased veins become enlarged, eventually bulging to the skin's surface. The same disease process can affect veins of any size; however when larger veins fail, they are typically called varicose veins. When smaller veins are affected, they are typically called spider veins.



Normal Vein

Varicose Vein

Pain in the legs is frequently related to abnormal leg veins. Severe varicose veins can compromise the nutrition of the skin and lead to dermatitis or a rash, discoloration, or even ulceration of the lower leg. Since most veins lie deep to the skin's surface, vein disorders are not always visible to the naked eye. As a result, diagnostic ultrasound is often used to determine the cause and severity of the problem.

what causes varicose veins?

Some predisposing factors include aging, standing occupations, and leg injury or trauma.

Heredity is the number one contributing factor that causes varicose and spider veins. Women are more likely than men to suffer from abnormal leg veins.

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Up to 55% of American women may be affected in their lifetime. Hormonal factors seen during puberty, pregnancy, menopause, and the use of birth control pills affect the disease. It is common for varicose veins to become more prominent during pregnancy and worsen with successive pregnancies.

how can phlebology help?

Varicose veins are known to cause symptoms that may include leg aching, pain, heaviness, fatigue, ankle swelling, muscle cramping, restlessness, itching and burning.

Symptoms often worsen with prolonged standing. Skin changes may occur. These include brownish discoloration over the veins or near the ankle. A purple discoloration related to congestion of small veins around the foot and ankle may also develop. Varicose veins may also lead to complications such as blood clots, bleeding, rashes, and ulceration. Vein treatment causes abnormal veins to disappear and symptoms to improve. It prevents more extensive vein disease from developing and also helps to keep serious complications from occurring.

when and how are veins treated?

The most commonly asked questions are: "Do veins require treatment?" and "What treatment is best?"

Veins that cause leg pain, swelling, recurrent superficial blood clots, bleeding, or ulceration are prime candidates for treatment. Veins that cause other symptoms, such as aching, heaviness, and fatigue, or that are cosmetically unappealing, may also benefit from treatment. There are two general treatment options: conservative measures, such as compression stockings and herbal preparations; and corrective measures, such as endovenous thermal ablation, chemical ablation, surgery, sclerotherapy, and light source/laser treatment. In many cases, a combination of treatment methods works best.

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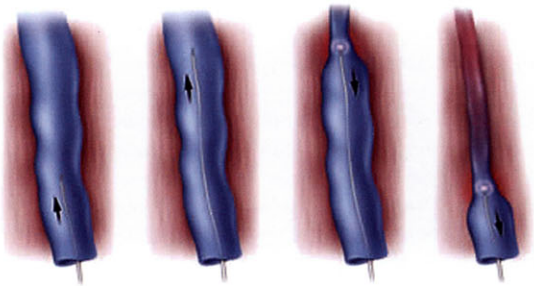
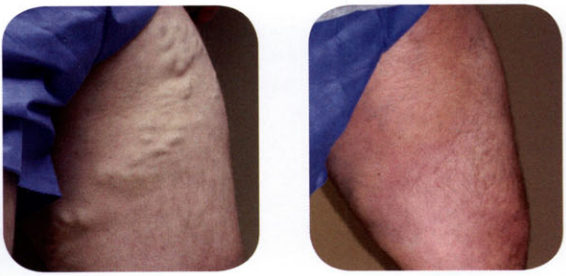
endovenous thermal ablation



Schematic of endovenous laser treatment.

Endovenous Thermal Ablation is a treatment alternative to surgical stripping of varicose veins. With ultrasound visualization, a small catheter or tube is inserted into the damaged vein, usually through a needle. Thermal energy, or heat, is then delivered inside the vein, which causes the vein to collapse and seal shut. The procedure is typically done in the doctor's office under local anesthesia. Afterwards, a leg wrap or prescription compression stocking is usually placed on the treated leg for 1-2 weeks. Patients are able to walk immediately after the procedure and most individuals are able to return to work the next day.



Varicose veins before and after thermal ablation.
Individual results can vary.

endovenous chemical ablation

Also known as ultrasound-guided sclerotherapy, endovenous chemical ablation is another treatment alternative to surgical removal of varicose veins. With this procedure, a chemical irritant, called a sclerosant, is injected into the vein while the doctor observes the injection process on an ultrasound screen. This allows veins that are below the surface of the skin to be treated. Since these veins cannot be seen visually, they would otherwise require surgical removal. This technique causes the vein to collapse and seal shut, and may be performed with liquid or foamed sclerosant. The procedure is usually performed in a doctor's office and may not require local anesthesia. It is not uncommon for a leg wrap or prescription compression stocking to be placed on the treated leg for 1-2 weeks. Patients are able to walk immediately after the procedure and most individuals are able to return to work the next day.

surgery

Surgical techniques to treat varicose veins include ligation (tying off a vein), stripping (removing a vein by pulling it out with a special instrument), and ambulatory phlebectomy (removing veins through tiny incisions). Surgery may be performed using local, spinal or general anesthesia. Now done almost exclusively as an outpatient procedure, patients will usually go home the same day as the procedure. It is necessary to wear leg wraps and/or compression stockings for several weeks after surgery. Normal activities may generally be resumed after several days.

ambulatory phlebectomy

Varicose veins before and after ambulatory phlebectomy.
Individual results can vary.

Ambulatory phlebectomy is a method of surgical removal of varicose veins at the surface of the skin. Small incisions are made next to the vein and sections of vein are removed through these small nicks. This is frequently done in the doctor's office using only local anesthesia. Afterwards, a leg wrap and/or compression stocking is worn for a short period. Generally, normal activities may be resumed after several days.

sclerotherapy

Varicose veins before and after sclerotherapy.
Individual results can vary.

Sclerotherapy can be used to treat both varicose and spider veins. A tiny needle is used to inject the veins with one of several different kinds of chemical irritant, or sclerosant, that irritates the lining of the vein. In response, the veins collapse, seal shut, and are reabsorbed by the body.

(Sclerotherapy continued)

The number of sclerotherapy treatments needed is variable, depending on the number, size, and type of veins being treated. Typically, a patient will receive several injections per treatment session. The procedure is almost always performed in a doctor's office, and generally, normal activities can be resumed after sclerotherapy. Prescription compression stockings and/or leg wraps may need to be worn for several days after treatment.

surface laser/ light source treatment

A variety of laser/light source treatments are available today. A light beam creates heat inside treated veins that causes them to be sealed off and reabsorbed by the body. By and large, surface laser/light source treatments are used only to treat the smallest of spider veins. Multiple treatments are regularly required. This procedure is also usually performed in the doctor's office, requires no local anesthesia, and normal activity can be resumed following treatment. Prescription compression stockings may need to be worn for a few days after treatment.

what results can you expect?

Technological advances in evaluation and treatment methods allow spider and varicose veins to be treated more effectively and safely than ever before.

Nevertheless, the success of any treatment method depends on two things: careful assessment of the underlying problem, and the skill and experience of the phlebologist providing the treatment. The most important cause of varicose veins is heredity; thus, even successful treatment does not eliminate the genetic disposition that may cause other veins to fail in the future.

complications of varicose vein treatments

Generally speaking, complications related to varicose vein treatment are rare.

Serious complications, such as life threatening allergy and/or blood clots, may occur with any treatment for large varicose veins. Infection may occur with any surgery, and skin burns may occur with any form of laser/light source treatment or sclerotherapy. Minor complications may include temporary discomfort, bruising, swelling, discoloration, or reddish blushing of the skin following treatment. To understand more about the specific expectations of any varicose vein treatment, it is important to discuss these or any other concerns with your treatment provider when considering your procedures. Although these risks are small, no procedure is risk free.

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how can I get more information?

A visit to a phlebologist will help answer your questions. He or she can evaluate your condition, determine if any testing is necessary, and discuss the therapeutic options available. Treatment needs to be tailored to your individual needs, based on your physical examination and medical history.

To obtain a list of phlebologists in your area, please use our "Find a Physician or Provider" search function at www.phlebology.org, or contact the American College of Phlebology by phone or email.

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