

The Wall Street Journal

Monday, December 20, 2010

Circulation Solutions

Varicose veins can be disabling, but new remedies are easing removal

By LAURA LANDRO

Health Matters

Varicose veins are one of the more unsightly signs of aging. But new, less-invasive treatments are making it easier to remove them painlessly, bypassing a difficult surgical procedure that was often the only option in the past.

As many as 25% of women and 15% of men suffer from varicose veins; over the age of 50, one out of two people are affected. Heredity plays a part, but obesity, prolonged standing on the job and hormone therapy increase the risks. Sometimes, varicose veins have no signs or symptoms and require no treatment, though doctors may recommend wearing compression stockings and elevating the legs. Exercise can also help relieve pain. But often, varicose veins can be disabling and dangerous, as well as a warning sign of more serious problems in the circulatory system.

While vein problems aren't related to artery problems—such as those that can cause heart disease—serious complications of varicose veins can include deep vein thrombosis, a blood clot that can travel to the lungs and cause death, and venous ulcers, shallow wounds that develop on the lower leg and can be hard to heal. Veins near the surface of the skin can also rupture and bleed heavily.

Valve Trouble

Normally, the heart pumps blood filled with nutrients and oxygen to the entire body through the arteries, and then veins carry the blood from the body back up to the heart. The exact cause of varicose veins isn't known, but they develop when one-way valves in the veins that prevent blood from flowing backward stop working properly, so blood pools in the superficial veins under the surface of the skin and causes them to get larger and less elastic.

Darren Schneider, director of the Center for Vascular and Endovascular Surgery at New York-Presbyterian Hospital/Weill Cornell Medical Center, says determining the right treatment depends in large part on the size and location of the veins. Patients typically need an ultrasound study to see if there are any blood clots in the deeper vein system, and to assess the function of the valves.

Smaller veins can often be treated with sclerotherapy, which involves injecting a chemical solution into the vein to destroy it, and costs \$250 to \$500 per treatment. For larger veins, doctors may recommend endovascular procedures, which range in price

from \$2,500 to \$3,000. These involve threading a catheter into the vein and directing a heat source such as a laser or radio-frequency device into the vein to incinerate it.

Vein procedures are offered by a range of physicians, including vascular surgeons, dermatologists and cardiologists. **Dr. Schneider**, trained as both a vascular surgeon and an interventional radiologist, suggests that patients ask if a doctor is board-certified in a vascular specialty, or what specialized training the doctor has received in vein therapy.

The Old Way

In a procedure that dates to the 19th century, varicose veins can be removed by stripping—pulling them out with a wire threaded in through an incision. The surgery can cause bleeding, bruising, nerve injuries, scarring and infection, and legs may have to be wrapped with bandages for several weeks.

While some veins may still require stripping surgery, most can be treated with less invasive therapies. Last summer, the Food and Drug Administration approved an injectable drug for sclerotherapy that has been widely used in Europe for years, polidocanol—sold under the brand name Asclera—for use in the tiniest varicose veins, known as spider veins, and for so-called reticular veins that are one to three millimeters in diameter.

The drug has a strong safety record, and it also has anesthetic properties, which makes treatments more comfortable for patients, according to Suman Rathbun, director of the vascular medicine program at the University of Oklahoma Health Sciences Center in Oklahoma City. Although Asclera isn't approved to treat large veins, Dr. Rathbun and others are using it off-label for that purpose, converting the liquid into a foam. When injected, Dr., Rathbun says, it fills the vein better than the liquid, which sometimes leaks out, making it less effective.

Laser Procedures

Studies have shown that minimally invasive endovenous laser procedures that use local anesthesia are highly effective for removing the so-called saphenous veins—a large one that runs from the foot to the thigh and a smaller one up the back of the leg behind the knee—and have a high rate of success over time.

Nancy Neukam, 67, says she decided to try the procedure because the bulging blue varicose veins in her lower left leg were increasingly unsightly and painful. Though she feared treatment would be painful and difficult, Ms. Neukam took half a Valium and slept, feeling nothing as Baltimore dermatologist Robert Weiss guided a catheter and laser tip into the vein to seal it closed in 40 minutes.

Ms. Neukam had to wear compression stockings for three days afterward and had some bruising, but now, she says, "I play golf and don't mind wearing a skirt or Bermuda shorts anymore, and my legs look and feel wonderful."