Varicose Vein Ligation

What are varicose veins?

Varicose veins are abnormal, elongated, bulging, superficial, dilated blood vessels caused by a weakening in the vessel or valve wall. These veins and valves have permanently lost their ability to maintain the normal upward flow and allow reversal of blood flow. They may appear as clusters of blue or purple veins and are sometimes surrounded by thin red capillaries known as spider veins (group of small blood vessels located close to the surface of the skin).

Varicose and spider veins can appear anywhere, but most often appear on the legs and in the pelvic area. Most varicose veins develop near the surface of the skin. Deeper varicose veins can’t be seen but may cause the skin above them to swell, become darker or hard.

What causes varicose veins?

There are a number of factors that predispose a person to varicose and spider veins.

These include:

- Heredity.
- Occupations that involve a lot of standing, such as, nurses, beauticians, teachers and factory workers.
- Obesity.
- Hormonal influences during pregnancy.
- The use of birth control pills.
- Post-menopausal hormonal replacement.
- Toe and foot sores that do not heal.
Who is affected by varicose and spider veins?

Varicose and spider veins are seen more often in women than in men. They increase in frequency with age and have been reported to affect between 30 percent to 60 percent of the adult population.

What are the symptoms of varicose veins?

Symptoms usually appear before the age of 40 and may include:

- Swollen, twisted clusters of purple or blue veins.
- Swollen legs.
- Muscle cramps, soreness or aching in the legs.
- Itching around the vein.
- Leg muscles that tire easily.
- Brown discoloration of the skin.
- Leg ulcers.

How are varicose veins diagnosed?

During a physical exam, the doctor will check your legs while you are standing. Your doctor may also request that you have a Doppler scan, an ultrasound exam to check the blood flow in the veins near the skin’s surface (called superficial) and deep veins.

Should I be concerned?

Varicose and spider veins do not always require medical treatment. If varicose veins make walking or standing painful, you should call your doctor for advice. You should also call your doctor if a sore develops on or near a varicose vein or if your feet or ankles swell.

What are the treatment options for varicose and spider veins?

There are three major forms of therapy for varicose and spider vein problems.

Conservative Approaches

The most conservative approach is simply to wear properly-fitting support hose, especially when the veins cause painful or uncomfortable symptoms. These stockings can generally be purchased at any surgical supply store and some pharmacies. They come in below-the-knee, above-the-knee and pantyhose styles. They also come in different compressions, varying from 18 to 20 mmHg and up to 40 to 50 mmHg.
Sclerotherapy

Sclerotherapy, which has been available since the 1930s, is another treatment option. This procedure uses highly concentrated salt water or medication to obliterate the veins. The solution is injected directly into the vein, causing the vein to disappear gradually over 1 to 4 weeks. The procedure is simple and can be performed in an outpatient setting. Complications are minimal but do include blisters and rarely the formation of an ulcer. Patients are encouraged to maintain their active lifestyle immediately following the injections. They are able to drive themselves home after the procedure, as no sedation is needed for this relatively painless procedure. Unfortunately, sclerotherapy is not an effective means of treating large varicose veins.

Surgery

There are a number of surgical options for varicose veins. If the veins are severe and if they are accompanied by leaky valves in the groin, the large superficial vein (the greater saphenous vein) can be either tied off at the level of the groin, ligated, or removed entirely. When it is removed entirely, this procedure is called stripping.

Alternatively, if the veins are only of moderate size, a procedure known as a “stab avulsion” can be performed. In this procedure, tiny incisions are made to remove the veins. You may have as many as 10-30 tiny incisions on each leg. Sutures are not usually used and the incisions heal with a very tiny scar or almost no scar at all.

- In each case you will arrive in the morning, have the procedure (generally lasting less than one hour) and then return home on the same day after a short stay in the recovery room.
- Sutures (stitches) if used, will be under the skin, dissolvable, and therefore will not need to be removed. The incisions will be covered with steri-strips (small paper strips) applied over a sticky solution known as Benzoin. Plastic adhered dressing will be placed over these. You should leave these plastic dressings in place for one week, but then you can remove them yourself by gently pulling the plastic from one corner. The steri-strips may also be removed at this time.

Your leg will be wrapped in an elastic bandage. This bandage should be applied relatively firmly, especially when you are returning home following the surgery. However, once you are home the leg should be elevated above the level of your heart. Once the leg has been elevated above your heart, the Ace wrap may be removed. It is important, however, to reapply the Ace wrap before the leg is returned to a level below the heart. The Ace wrap should be worn for the first 36-48 hours following the procedure, but, again, it may be removed if the leg is elevated above the heart.

- After 36-48 hours: The Ace wrap will no longer be necessary. You may wear it, however, if it relieves some of the discomfort.
- Once the wrap has been removed, you may shower.
- At discharge, you will be given a prescription for an oral pain medication. Most patients, however, find that Panadol (Tylenol) alone is all that is necessary. If you do have more severe pain, the prescription pain medication may be substituted for Panadol (Tylenol).
- You will be given an appointment to see your doctor between 1-3 weeks following the procedure. If you have problems or concerns before this time (fever greater than 38.05 degrees Celsius or 100.5 degrees Fahrenheit, or redness around the wound), please do not hesitate to contact your doctor’s office.
- You should expect some moderate discomfort, swelling and bruising in the leg. You may also have some numbness around the inside of the leg and ankle.
Within the first two days of surgery you may experience some bleeding. This is especially frequent when sutures are not used. Should this happen, do not be alarmed; elevate your legs above your heart and re-wrap the bandage. You should stay in an elevated position for at least one hour after this occurs. In all cases, however, it is important to keep the leg elevated early after the operation.

Can I prevent varicose veins in the future?

Varicose veins cannot be prevented, however, there are some things you can do to slow down the tendency of varicose vein recurrence:

- Wear knee-high elastic support stockings during the day.
- Maintain a normal weight.
- Avoid prolonged sitting or standing.

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