Varicose Veins/Venous Insufficiency

**Definition:** Venous insufficiency is an abnormal circulatory condition. With this condition there is a decreased return of blood from the leg veins up to the heart, and pooling of blood in the veins. Valves in the vein normally close to keep blood from flowing downward with gravity. When the valves in the vein become weak and fail to close properly, they allow blood to flow backward, or reflux. Varicose veins are prominent veins that have lost their valve effectiveness. These veins become elongated, rope-like, bulged and thickened under pressure. A common cause of varicose veins is reflux within the greater saphenous vein in the thigh.

**Symptoms:** For some people varicose veins are simply a cosmetic problem. For others it causes more serious signs and symptoms, such as:

- Aching pain
- Muscle cramping
- Easily tired legs
- Swelling in lower legs
- Itching around the varicose veins
- Painful to stand or walk

**Risk Factors:** The following factors may increase your risk of developing varicose veins:

- Increasing Age – Age causes wear and tear on the veins
- Sex – Women are more likely then men to develop this condition
- Genetics – If you have family members who have varicose veins, there is a greater likelihood you will as well.
- Obesity – Being overweight puts more pressure on your veins
- Standing for long periods of time – Your blood does not flow as well when you are in the same position for long periods of time

**Tests and Diagnosis:** A doctor will examine your legs for obvious signs of varicose veins. He/She will also ask about signs and symptoms you are currently experiencing. An ultrasound test will often be ordered to see if your veins are functioning normally, or if there are abnormal blood flow changes or a blood clot.

**Prevention:** There is no 100% method to prevent varicose veins. Following the below guidelines can help to reduce your risk of developing varicose veins or to prevent yourself from getting additional or worsening varicose veins.

- **Exercise** – A great way to promote increased blood circulation, as well as vein and muscle strength. Talk to your doctor if you are unsure which exercise plan may be right for you.
- **Losing weight** – Losing weight takes excess pressure off your legs. Also following a low-fat, low-salt diet will help to prevent swelling in your lower legs.
- **Clothing** – Be sure to wear loose comfortable clothing to help promote good circulation throughout your body.
**Elevate your legs** – Take several short breaks throughout the day to elevate your legs above your heart level. This will improve venous circulation.

**Compression Stockings** – Compression stockings are worn all day. They steadily squeeze your legs, helping veins and leg muscles move blood more efficiently. Compression stockings come in different strengths, styles and colors. Compression stockings are often tried first before moving on to other treatments. Please consult with your doctor to determine the right fit and strength for you.

**Treatments:** There are many minimally invasive treatments for varicose veins that can be dealt with on an outpatient basis.

**Sclerotherapy** – Sclerotherapy is a minimally invasive procedure that can be performed in your doctor’s office. Your doctor will inject small to medium size veins with a solution that scars and shrinks or closes the veins. Those veins which were treated should fade away within a couple of weeks. Some veins may need retreatment, but most patients can expect to see a 50% - 90% improvement following their first procedure.

**Laser Ablation** - Laser Vein Ablation for Varicose Veins is a minimally invasive treatment that is performed under local anesthesia in an outpatient setting. The interventional radiologist inserts a thin catheter about the size of a strand of spaghetti into the vein. Laser or radiofrequency energy is then applied to the inside of the vein, which heats the vein and seals it closed. When the greater saphenous vein is closed, the twisted and varicosed branch veins close to the skin shrink and improve in appearance. Healthy veins reestablish normal blood flow to the leg once the diseased vein is closed.

**Phlebectomy** – Phlebectomy is a minimally invasive procedure used to treat varicose veins that are not caused by saphenous vein reflux. The abnormal vein is removed through a tiny incision or incisions using a special set of tools. The procedure is done under local anesthesia.