

## MINIMALLY-INVASIVE PROCEDURES VS. SURGERY

With today's advances in medicine, surgery for many conditions has taken a backseat to new procedures that are less invasive. This is true for varicose vein treatment. Patients and their physicians now have options that are more appealing than surgery for a variety of reasons.

- Safer
- Less pain following the procedure
- Shorter recovery time
- Higher success rate
- No scarring

### Varicose Vein Treatment Expertise

With nearly 50 years combined experience in vascular and interventional medicine, our board-certified physicians specialize in a wide range of procedures. This background includes new minimally invasive treatments for varicose veins and other conditions.



Before

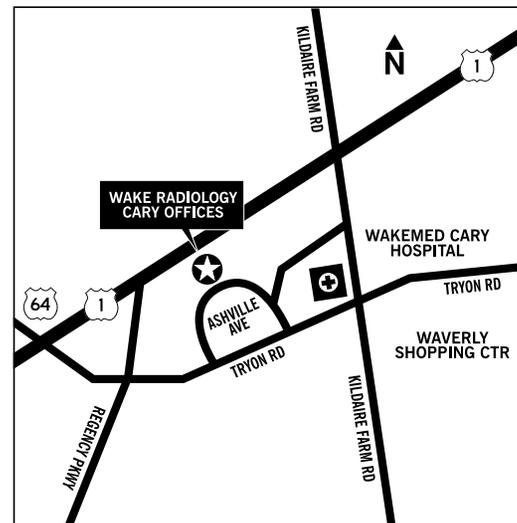


After

## ENDOVENOUS ABLATION OFFERS A REDUCED RISK OF COMPLICATIONS

Minimally-invasive procedures like endovenous ablation are typically safer, but all surgical procedures have the potential for complications. These risks will be discussed during your initial consultation.

Wake Radiology specializes in many forms of varicose vein treatment. For patients interested in treatment, a consultation appointment will be scheduled first. If your interventional radiologist deems it necessary to perform an ultrasound, one will be scheduled for your second visit. After reviewing the ultrasound results, treatment options will be discussed. If a treatment procedure is recommended and performed on your third visit, a follow-up appointment will be set up to monitor your recovery.



## WAKE RADIOLOGY INTERVENTIONAL SERVICES

300 Ashville Ave., Suite 160 | Cary, NC 27518  
Toll-free (800) 675-2232  
Phone (919) 854-2180  
Fax (919) 852-1566

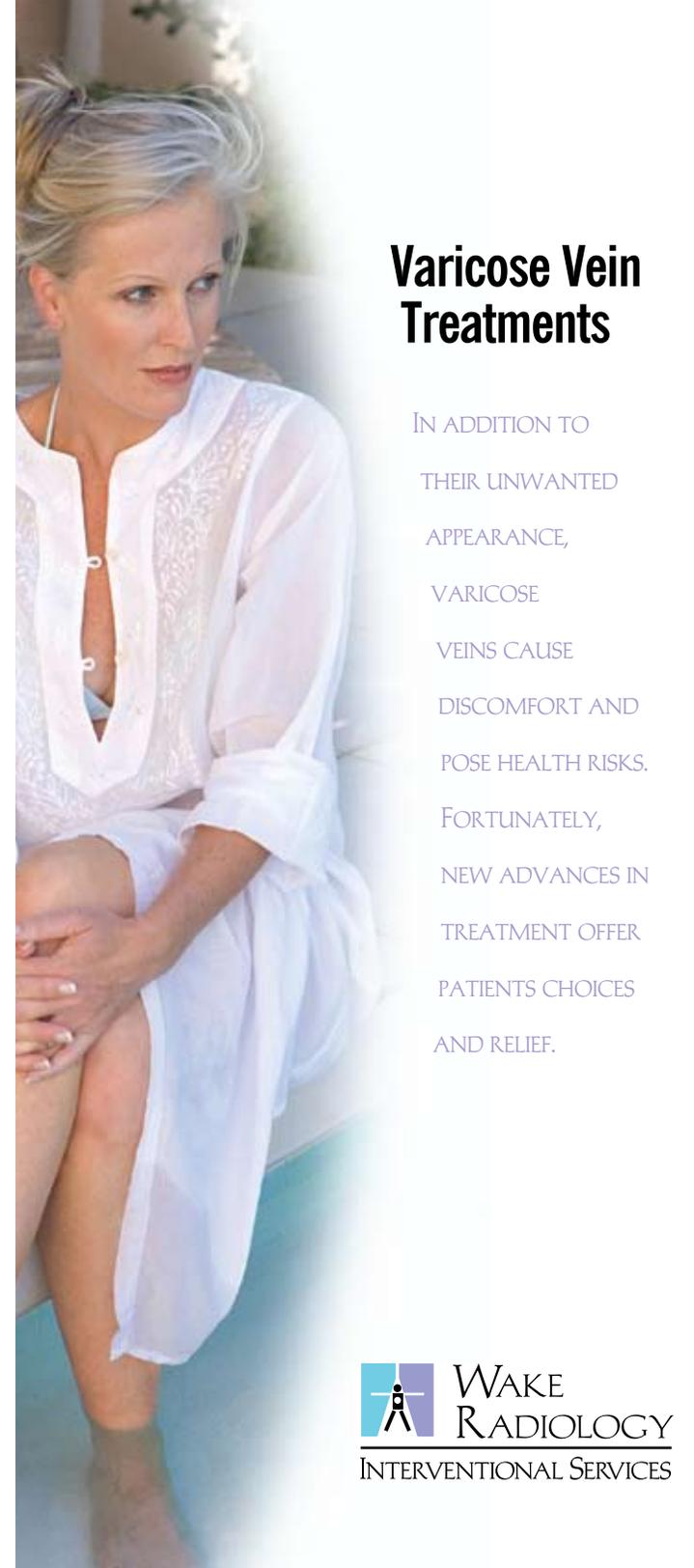
[wakerad.com](http://wakerad.com)

*All physicians certified by the American Board of Radiology.*

## Varicose Vein Treatments

IN ADDITION TO THEIR UNWANTED APPEARANCE, VARICOSE VEINS CAUSE DISCOMFORT AND POSE HEALTH RISKS. FORTUNATELY, NEW ADVANCES IN TREATMENT OFFER PATIENTS CHOICES AND RELIEF.

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## WHAT ARE VARICOSE VEINS?

VEINS CLOSE TO THE SKIN'S SURFACE THAT HAVE BECOME SWOLLEN & RAISED ARE VARICOSE VEINS. A COMMON PROBLEM, THEY ARE USUALLY FOUND ON THE INSIDE OF LEGS, BACKS OF CALVES OR GROIN AREA.

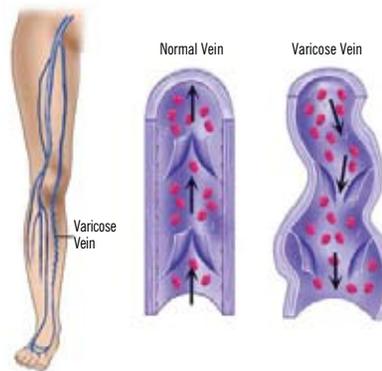
### WHY DO VEINS BECOME VARICOSE?

All veins have valves. Valves open to let blood flow to the heart, and close to prevent backflow. Deep veins are assisted by muscles, but superficial veins don't receive any help. Because they pull blood from the farthest parts of the body back to the heart and against gravity, valves in superficial veins often wear out. Age and hormones can also cause veins to lose elasticity, which can prevent the valve from working correctly.

When the valve can't open and close, blood flows backwards (venous reflux). When this happens, blood pools in the veins and causes them to take on the bulging, rope-like appearance that characterizes varicose veins.

#### Risk Factors for Developing Varicose Veins

- Heredity
- Prolonged standing
- Hormones
- Weight gain
- Pregnancy
- Leg injuries
- Age



**CALL ONE OF OUR INTERVENTIONAL RADIOLOGISTS FOR A CONSULTATION IF YOU HAVE THESE SYMPTOMS IN YOUR LEGS, ANKLES, OR FEET**

- Cramping or aching pain
- Heavy or tired feeling
- Burning or tingling
- Swelling or throbbing
- Tenderness around the veins
- Sores or skin ulcers near your ankles
- Symptoms have not improved with exercise, weight loss, elevating your legs, avoiding long periods of standing or sitting and the use of compression hosiery

### TREATMENT OPTIONS

#### • Endovenous Ablation (e.g. Laser)

Many physicians prefer this latest advance in treatment over surgery. It is both highly effective and minimally invasive, with few side effects.

First, a small catheter is inserted into the vein and extended up into the groin. A laser fiber is then inserted through the catheter and aimed at the internal vein wall. After the wall has been lasered, the vein will seal off and be absorbed by the body. A similar effect can be gained using electrically generated heat delivered through electrodes, an older version of this technology.

The procedure can be done in less than one hour in the physician's office using only a local anesthetic. No hospital stay is needed. It is successful at providing relief in 93-98% of all cases, with no scarring and a lower risk of complications. In most cases, normal activity can be resumed in one to two days.

#### Other Treatment Options

#### • Compression Stockings

A conservative but life-long approach to treatment, compression stockings squeeze veins in order to stop excess blood from pooling in your veins. Exercise, weight loss, keeping your legs elevated and avoiding sitting or standing for long periods of time are included in this treatment regimen.

#### • Sclerotherapy

Used to treat smaller varicose veins and spider veins, sclerotherapy involves a chemical injection into the vein that causes it to close and eventually be absorbed by the body. Minor stinging or itching at the injection site may occur.

#### • Revolutionary New Laser Treatment

For patients who want to diminish the appearance of leg veins, spider veins and smaller broken capillaries, a new laser treatment technology offers almost immediate results and reduces the redness and bruising caused by traditional treatments. Your physician will use a hand-held device with a cooling tip to protect skin and deliver laser energy into your body. This laser energy is absorbed by the pigment in your blood and collapses the vein. Results can be seen almost immediately as the veins fade or disappear during the 15 to 30-minute treatment. However, complete results are seen after two to eight weeks and over the course of one to three treatments. This laser treatment is successful on all skin types and tones, including dark skin.

#### • Microphlebectomy

Used for veins too large to treat with other methods, Microphlebectomy involves multiple, small incisions in the skin through which the vein is removed with a special instrument. Except for mild stinging from the local anesthetic, the procedure is painless. For multiple veins or veins that are very long, the procedure may be done over the course of two visits.

**CARROLL C. OVERTON, MD**  
Interventional Radiologist  
Director of Interventional Radiology