The treatment of varicose veins involves various steps that may take 6 months up to a year and involve six to twelve visits depending on the treatment protocol that Dr. Douglass selects for you.

# ULTRASOUND MAPPING OF VARICOSE VEIN DISEASE (MAP):

*Ultrasound mapping* is both the first and most important step in the evaluation of vein disease. Mapping of a leg takes about thirty minutes and is done by our ultrasound technologist who has extensive experience in the assessment of venous leg disease. This information is sent along with photographs to obtain written insurance approval for your treatment from your insurance company (if required).

### THE FIRST STEP IN TREATMENT-WHAT TO EXPECT AFTER ENDOVENOUS LASER ABLATION (EVLT):

*Endovenous laser ablation* treats the hidden "root source" of visible varicose veins via a laser catheter placed inside the saphenous vein. As the laser catheter is withdrawn the vein is sealed shut by the laser energy. The procedure lasts 20 minutes and is performed under local anesthetic. Nitrous oxide (laughing gas) is used to make you comfortable.

After the EVLT you will be asked to wear compression stockings and begin to take Advil or Aleve for one week. At the end of the week you may discontinue these. You are encouraged to resume your normal activities right after the procedure with the exception of heavy lifting over 40 pounds for one week. Most of the soreness of the vein treated with EVLT will be gone after a week or two. If at any time after stopping the anti-inflammatory medication and stocking, the leg begins to feel sore again you may resume wearing the stocking and restart the anti-inflammatory medication for another three days.

It is important to remember that most patients *will not see* a great difference in the appearance of their varicose veins immediately after EVLT. This is normal because there are still many varicose veins that are too narrow or twisted for an endovenous catheter to pass through. These will be treated later with microphlebectomy and/or ultrasound guided foam sclerotherapy. After your EVLT you will be scheduled to come back soon after to check the leg with ultrasound and make certain that the vein treated with laser is closed and to plan how soon to start the next phase of your treatment.

## THE SECOND STEP IN TREATMENT-WHAT TO EXPECT AFTER MICROPHLEBECTOMY (AP):

Patients with very prominent bulging veins will undergo *microphlebectomy* after the "root source" of the veins has first been treated with endovenous laser ablation. The procedure lasts about 20 minutes. After giving nitrous oxide to make you comfortable and local anesthetic directly over the bulging veins a needle puncture is made next to the bulging veins through which a small "knitting hook" device extracts the vein. You will not feel pain with this once the anesthetic is administered. Steri strips are placed and a bandage over the leg is worn continuously for 2 days. You will need to sponge bathe until the bandage is removed in two days to avoid getting the bandage wet. You will continue to wear the stocking during the day for five more days. Most, if not all, of the bulging veins will be gone then. There are no stitches. Mederma cream is applied to the puncture sites where the vein was removed. There is usually no visible scar. Normal activities are resumed immediately with the exception of heavy lifting. You should not lift over 40 pounds for the first week.

## THE FINAL STEP IN TREATMENT-WHAT TO EXPECT AFTER ULTRASOUND GUIDED SCLEROTHERAPY (ECA):

Ultrasound guided sclerotherapy addresses refluxing varicose veins that cannot be seen without ultrasound. Treatment of these veins is important for symptom relief and to prevent recurrence of other visible varicose veins.

Most patients will have three ultrasound guided treatments. These are typically an initial treatment followed by treatments in one and four months. After the ultrasound guided foam sclerotherapy you will be asked to walk for 15 minutes on our treadmill and later at home. You can resume your normal activities. Stockings will be worn for two weeks after each treatment.

After ultrasound guided foam sclerotherapy the varicose veins may sometimes feel as lumps and cords beneath the skin but these lumps will gradually disappear altogether. Some patients will develop a temporary brownish discoloration over where treated veins once were. Patients with a dark complexion or who tan easily are more likely to hyperpigment in this way. This hyperpigmentation will gradually fade in most patients though in a small minority of patients it may persist.

## WHAT ABOUT SPIDER VEINS?

At each session of sclerotherapy of large varicose veins in your legs, as time allows, Dr. Douglass tries to spend some time treating smaller veins at the ankles and lower legs. At the conclusion of treatment you will be given coupons for a discount towards spider vein treatment should you desire to refine the appearance of small spider veins in both legs.