



## MEDICAL GROUP

# Endovenous Laser Therapy Information Sheet

Endovenous laser therapy corrects venous insufficiency caused by reflux, or backward flow, of venous blood down the leg. In this procedure, a small laser fiber is inserted into the diseased vein, and the physician delivers laser energy through the fiber to close the vein. Endovenous laser therapy is performed under local anesthesia in the doctor's office. Generally, you may walk immediately following the laser therapy.

### PROCEDURE DESCRIPTION

At your first visit, the doctor will interview you and take a medical history. You will receive a physical examination and duplex ultrasound scan (to visualize the veins and record their size and shape). Photographs of the treatment areas may also be taken. If appropriate, an appointment for endovenous laser therapy will be scheduled.

During the laser procedure, you will be given special eye glasses to protect your eyes against accidental exposure to laser light. Next, the treatment area will be anesthetized with lidocaine. A sterile laser fiber will be inserted into the vein and positioned using ultrasound guidance in the leg, generally at a place above where you see your varicose veins. Laser energy will be delivered to selectively treat the target vein. The laser treatment time should take just a few minutes. After the procedure, a compression stocking will be applied and must be worn for at least one week following treatment.

You will return to the office within one week and the doctor will examine the treated vein. An ultrasound evaluation will be done and additional photos may be taken.

In very rare circumstances, a repeat endovascular laser treatment may need to be done to treat the varicose vein.

### POTENTIAL RISKS OF UNDERGOING ENDOVENOUS LASER THERAPY

If you undergo endovenous laser therapy for varicose veins, your symptoms associated with varicose veins may improve, remain the same, or worsen.

The potential side effects are thermal injury (burn) to the overlying skin or adjacent tissue, which could lead to scarring, perforation (puncture) or damage to the vein causing bleeding and bruising. Other risks are breakage of the laser fiber, superficial phlebitis (inflammation of the vein), paresthesia (numbing or prickling sensation) hyperpigmentation (darkening of the overlying skin), infection, creation of a blood clot which could dislodge, or neovascularization (growth of new veins).

For most people, needle punctures into the vein do not cause any serious problems. However, the needle puncture may cause dizziness, minimal bleeding, bruising, discomfort, pain, and rarely infection. Local anesthesia will be used to minimize discomfort. Rarely, people can have an allergy to lidocaine (the local anesthetic used in the procedure).

### POTENTIAL COMPLICATIONS OF NOT UNDERGOING ENDOVENOUS LASER THERAPY

The potential complications of not undergoing endovenous laser therapy will often result in the condition to get worse, i.e. an increase in the number of varicose veins or enlargement in the existing veins. In cases of large varicose veins, spontaneous superficial phlebitis or bleeding may occur. Patients with varicose veins associated with underlying venous insufficiency may develop ankle swelling and/or skin changes (eczema, hyperpigmentation, ulceration).

### ALTERNATIVE TREATMENTS

Since varicose veins are not life threatening, endovenous laser therapy is not mandatory. Some patients may get adequate symptomatic relief by wearing graduated compression stockings. Alternative treatments for varicose veins include surgical ligation and stripping, ambulatory phlebectomy, ultrasound-guided sclerotherapy, or a combination of these treatments.

### POTENTIAL BENEFITS

The potential benefits of endovenous laser therapy include a reduction in the size or closure of the treated varicose veins and improvement in varicose vein-related symptoms. There is no guarantee, however, that you will receive any medical benefit as a result of endovenous laser therapy treatment. It is also possible that your condition may remain the same or get worse following the treatment. Consult your physician with additional request regarding the endovenous laser therapy procedure.