

## Endovenous Laser Therapy for Varicose Veins

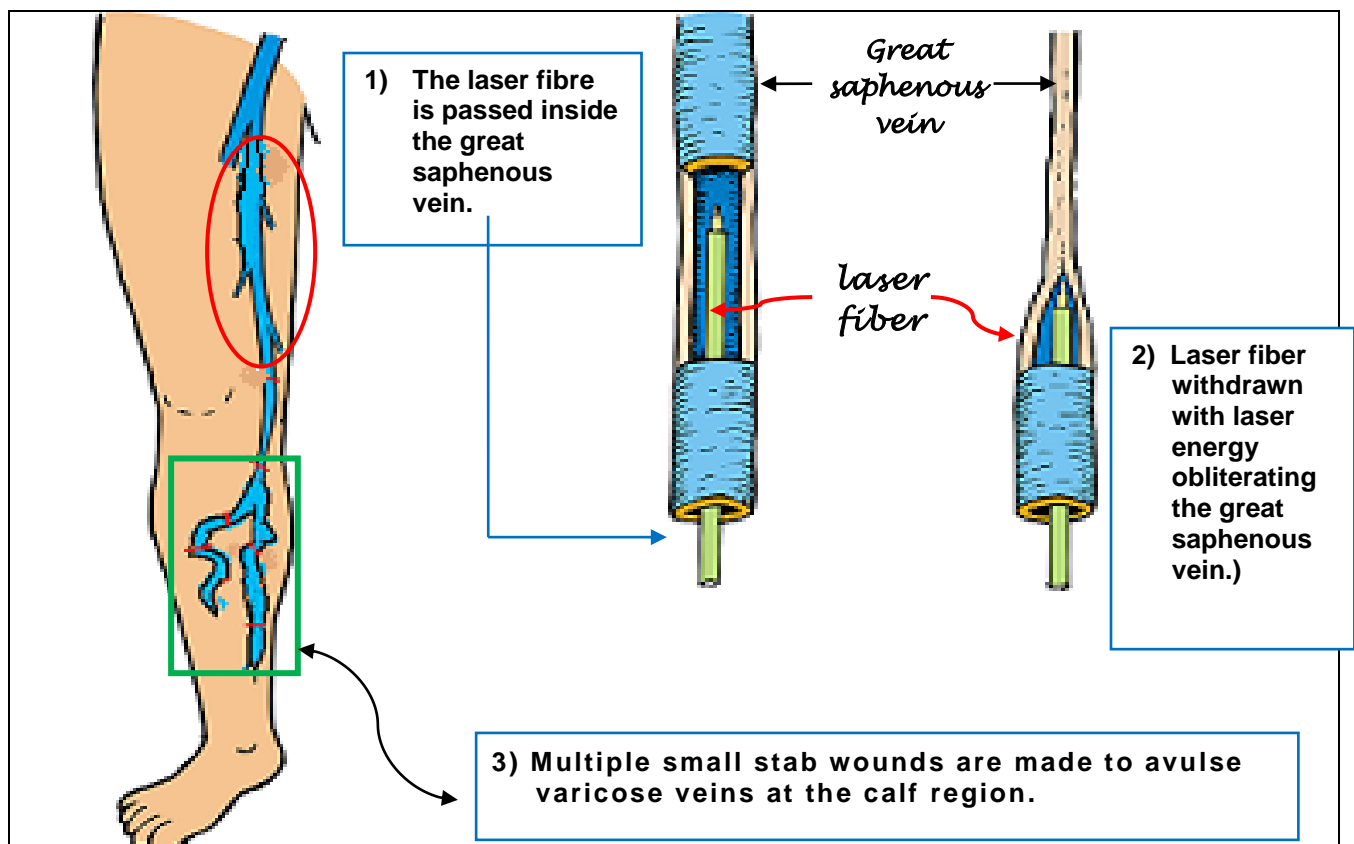
### 下肢靜脈曲張－微創靜脈腔內消融手術

#### Introduction

Peripheral veins have valves which prevent the reflux of blood and facilitate venous return to the heart. Venous valvular insufficiency or calf muscle pump malfunction may lead to reflux of blood, resulting in venous hypertension and dilated veins, known as varicose veins. Patients may also have calf/ankle swelling, tiredness/heaviness in legs, distending pain, skin changes, thrombophlebitis, ulcer or even bleeding. Surgery may be warranted to relieve symptoms / reduce the occurrence of complications / enhance the recovery of complications.

#### Procedure

Under general, spinal or local anaesthesia, a small puncture is made at the thigh. The laser fibre will be passed inside the great saphenous vein and laser energy will be applied to obliterate the vein. Multiple small stab wounds (0.5 cm to 1 cm) are then made to avulse varicose veins at the calf region. Most people will be able to walk independently and return home on the day of the procedure.



## Risks & complications

- A. Systemic complications
  - 1. Cardiovascular: myocardial infarction
  - 2. Pulmonary: pneumonia, respiratory failure
  - 3. Others: cerebrovascular accident
  
- B. Local complications
  - 1. Wound haematoma and bruising
  - 2. Wound infection
  - 3. Deep vein thrombosis
  - 4. Skin burn
  - 5. Nerve damage resulting in paraesthesia and neuralgia
  - 6. Recurrence of varicosities

## Before the procedure

- 1. You will be admitted on the day of the procedure. Preliminary tests including electrocardiogram, chest X-ray and blood tests will be arranged if necessary.
- 2. The vascular surgeon will explain to you and your relatives about the procedure and its risks. You have to sign an informed consent.
- 3. After marking the varicose veins, a local anaesthetic cream will be applied onto your thigh or leg if necessary.
- 4. Shaving at the groin/leg if necessary.
- 5. Fasting of 6 hours prior to the procedure.
- 6. You have to wear a clean surgical gown, a cap and stockings immediately before the procedure.
- 7. Intravenous infusion, premedication of antibiotic may be required.

## After the procedure

### General information/activities

- 1. After general anaesthesia, you may feel dizzy, tired or weak. These will subside gradually. You can resume usual activities gradually under the instruction of health care professional. Deep breathing and coughing exercise are helpful to prevent pneumonia.
- 2. After local anaesthesia, you can resume usual activities after rest.
- 3. Continue compression bandaging or graduated compression stockings after the procedure.
- 4. You should elevate your operated limb and perform ankle/calf exercise to promote venous return.
- 5. Avoid strenuous exercise within 2 weeks after the procedure.

### Wound care

- 1. Keep wound dressing clean and dry. Change dressings at the out-patient clinic according to instruction.
- 2. Mild bruising may occur over the thigh and leg region. They will resolve gradually.
- 3. Take the prescribed analgesic as needed.

4. Stitches will be removed 7 to 10 days after the procedure.

#### Diet

1. Resumption of normal diet depends on the individual situation/progress.
2. In general, you can take a well-balanced diet after the procedure unless you are on any special diet such as a diabetic or renal diet.

#### Care after discharge

- A) Continue measures to prevent/reduce recurrence of varicose veins
  1. Avoid prolonged standing or sitting.
  2. Activate the calf muscle pump to promote venous return, e.g. ankle/calf exercise, walking.
  3. Elevate the leg on a stool during the day, raise the leg above the heart level in bed.
  4. Weight reduction if indicated.
  5. Put on graduated compression stockings during daytime (below knee compression stockings: 20-30 mmHg at ankle).
- B) Follow up regularly as arranged.

#### Remarks

This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information please contact your doctor.