

# Endovenous Ablation Therapy

## What is this operation?

Endovenous ablation therapy is a group of minimally invasive, image guided techniques that utilise thermal energy to close/seal the varicose veins. The Circulation Clinic is able to offer endovenous laser ablation (EVLT) and radiofrequency ablation (RFA) to our clientele.

## Why is this operation being offered?

This operation will be offered to our clients who have varicose veins.

## What happens before your operation?

Before you undergo open varicose vein surgery a number of investigations and assessments will have been performed. Once the decision has been taken to proceed towards surgery further investigations may be required to assess your overall fitness.

These may include:

- Blood tests
- ECG

Once the decision has been made to proceed to surgery an admission date will be agreed between yourself and your surgeon. A pre-admission visit may be required to complete paperwork and undertake blood tests or other allied tests. Please bring all your medications to your pre-admission review.

## What happens on the day of admission?

These procedures are carried out as day cases. You will be told the time to arrive for your surgery and greeted by the medical staff upon arrival. The consultant will check with you that you fully understand what you are undertaking and ask you to sign your consent form for the procedure.

You will be asked to stand and the consultant will mark your veins with a marker pen or use a USS to confirm their location.

Most endothermal ablative therapies are performed under local anaesthetic. If you have elected to or require a general anaesthetic you will be visited by the consultant anaesthetist to discuss your anaesthesia before you are prepped for theatre.

Please do not stop any of your normal medications unless specifically instructed to by your surgeon

If you smoke, we strongly encourage you to stop as soon as possible to reduce the risk of peri-operative complications.

### What do I need to bring when I come into hospital?

You should bring the following items with you at the time of admission:

- All your normal medication
- A set of comfortable loose clothes for discharge

### What happens during the operation?

The procedure is usually performed under a local anaesthetic.

Initially you will undergo a USS scan to look at the vein again and check before surgery that nothing has changed.

Your consultant will numb your skin with a local anaesthetic injection over the vein before making a small 2mm cut over the vein low down the leg. Using USS image guidance, a narrow tube called a catheter is put into the vein that requires treatment. Local anaesthetic and a cooling saline fluid are injected around the vein prior to activation of the radiofrequency energy. At this point you will be placed head down to empty the veins. As the thermal energy is delivered, the vein wall shrinks and the vein is sealed closed. The catheter is slowly removed and an ultrasound scan checks that the procedure has been successful.

This will successfully treat 80% of visible varicose veins. however, some clients prefer concurrent phlebectomies or foam sclerotherapy to guarantee all visible varicose veins are treated during one treatment session.

With the vein sealed a steristrip or absorbable suture is used to close the wound and a dressing is applied. Depending on the consultant choice you may be placed in bandages or stockings with full instructions provided for your ongoing care upon discharge.

## What are the risks?

The vast majority of patients undergoing endovenous ablation therapy do not suffer any significant complications. The client's leg is sore for the first 1-2 weeks post-surgery and may be bruised, but this improves quickly.

Possible complications of endovenous ablation therapy include;

- Early complications:
  - Local
    - Wound related (rare):
      - Bleeding/oozing:
      - Infection
      - Fluid collection
    - Injury to surrounding structures
      - Thermal injury can occur to surrounding nerves (saphenous and sural nerves) resulting in numbness in the ankle/calf. This is rare but if it does occur may not improve with time.
    - Residual varicose veins:
      - Endovenous ablation therapy alone will successfully treat 80% of visible varicose veins by removing the underlying cause. Those visible varicose veins that remain at follow up can be treated with phlebectomies or foam sclerotherapy.
      - Small spider veins may temporarily become more prominent after most endovenous ablation therapy
    - Blood clot in leg (deep vein thrombosis (DVT)):
      - You will receive a dose of heparin during your procedure to reduce the risk of peri-operative DVT. It is important clients follow post-discharge recommendations of regular mobilisation, compression stockings etc.. to mitigate the risk of DVT during the first six weeks post-surgery.
      - Damage to the deep venous system: This is extremely rare and our surgeons have not encountered this as a complication of their practice.
  - Systemic
    - Systemic complications are very rare from this type of surgery

- Late complications
  - Recurrent varicose veins: If your surgeon reviews your leg 10 years post-surgery, he/she will identify recurrent varicose veins. These most likely will not be to the same extent as before your surgery and may not be causing symptoms, but the brutal reality of varicose vein surgery is that they do recur over time.
  - Scarring
    - There will be a subtle scar (1-2cm) evident in the leg at the site of catheter introduction. This will gradually fade with time but will not tan thereby becoming more prominent in the summer months.

### What happens after the operation?

You will be able to walk out of the hospital after your procedure and after the nursing staff have checked your blood pressure and dressings.

### What happens when I go home?

You will be discharged with appropriate post-operative instructions on your care to help reduce complications.

- You should not drive home and should arrange appropriate transport.
- You must have an able bodied person with you for 24 hours with full access to a telephone in case of emergency.
- Your leg may be uncomfortable once the local anaesthetic has worn off and your leg will be slightly swollen. You will be given painkillers to take home with you and you should follow the instructions on the packet.
- You should wear your compression stocking for one weeks during the day and night.
- We recommend that you take a minimum of three 20 minute walks each day for the first 4 weeks post-procedure.

## When Will I be able to drive or return to work?

We advise that you do not drive for at least 48 hours after the procedure and you should only drive when you are pain free and able to safely perform an emergency stop.

You can usually return to work within one week depending upon your recovery and the type of work that you do. Avoid strenuous exercise for a few days and then gradually build up the amount you do. We do not advise any form of air travel for at least six weeks after the procedure.

## Will I need to see the surgeon again?

You will be reviewed in clinic approximately 6 weeks following discharge.



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THE ARTERY AND VEIN SPECIALISTS