

Vascular Unit

Ultrasound Guided Foam Injection (UGFS) and Multiple Varicosity Removal through many small incisions (MVR)

You have been advised that your varicose veins are suitable for treatment with minimal access UGFS or MVR under local anaesthesia. This is often performed in combination with radiofrequency ablation (VNUS closure), for which a separate information leaflet is available.

This information is designed to support the detailed explanation you will receive in the outpatients' consultation. However, if you have any further questions before the surgery, you should ask for another appointment as time on the day of surgery is extremely limited to answer detailed questions.

As a group of consultants we treat patients from all over Warwickshire. In order to speed up your treatment you might be offered surgery under the care of a different consultant if that gets your surgery completed faster. We will try to treat you as close to your home as possible. However, if you wish to be treated in a specific location, or under the care of a specific consultant, you need to let us know. Details of how to contact us are at the bottom of this leaflet.

Sites where venous surgery is performed include:

- UHCW main site
- Rugby St Cross
- Stratford hospital
- Warwick Hospital



Patient Information

The Procedures

- UGFS is a minimal access treatment for large, unsightly varicose veins mostly, and sometimes for the superficial vein trunk that has caused them. It uses needles to access the veins, although sometimes we also use a small amount of local anaesthetic when a small plastic tube (cannula) is needed to deliver the treatment.
- MVR is a long-used technique to physically remove large, unsightly varicose veins. On its own it is not used to treat superficial vein trunks, unless combined with VNUS closure. It requires multiple (but small) incisions to access the vein, but the physical act of removing the vein requires extensive infiltration with local anaesthetic. Because of safety limits to the volume of local anaesthetic used, this may not be suitable for extensive areas of varicose veins.

Both are performed in a clean facility as a day care procedure.

UGFS can take from 20-40 minutes, whereas MVR can take anything up to 90 minutes according to the number and size of varicosities treated.

However, for both procedures, there is additional time being admitted, waiting for your surgery slot and some recovery after, prior to discharge.

Generally only one leg is treated at a time, although in some circumstances both may be treated together on discussion with your consultant. Sometimes it is not possible to treat even one leg completely in a single session if both the front and the back of the leg need treatment.

Before treatment, your leg will be marked with pen by a member of the operating team, and you will be asked to sign a consent form. In the treatment room, your leg will be cleansed with antiseptic and sterile drapes applied, although this is often not required for UGFS alone.

Patient Information

For UGFS:

- Needles will be placed (on average) in 3 to 4 locations in the varicose target veins under ultrasound guidance with the bed on a slight downward slope. Sometimes it is necessary to site needles in a sitting or standing position in particular circumstances.
- After re-positioning the bed so the feet are higher than the heart, foam sclerosant will be injected and the effect monitored on ultrasound.
- Needles are removed, and foam is massaged into the vein network to distribute it and help to induce venospasm (contraction of the veins).

For MVR:

- Dilute local anaesthetic is injected over a wide field around the veins to be removed which stings for a while after injection.
- The bed is re-positioned into a head-down position.
- Once satisfactorily anaesthetised, small incisions are made. These will not be painful because of the anaesthetic, but it is not unusual to feel a pressure or pushing sensation.
- Once a few have been made then the veins are pulled out. As before, this shouldn't be painful, but there is once again this sensation, this time of pulling.
- Firm pressure is often applied over areas where veins have been removed to control minor bleeding.
- Once all areas have been treated satisfactorily, paper stitches are applied to close the skin wounds

After either procedure, bandages are applied with a full length support stocking over. If you have also had MVR, you may be asked to lie with your feet up for 30 minutes or so before leaving.

You should not drive yourself to the hospital for your procedure or drive yourself home after the procedure. You can start to drive again only when you are able to complete an emergency stop safely and for some patients this can be 48 hours or longer after surgery.

Patient Information

Care after discharge

Management of your stocking and bandage vary according to your specific treatment. This will be discussed with you at the time of surgery. However, *generally* any bandages are left in place for 48-72 hours. After that bandages can be removed and the stocking re-applied. This is generally kept on day and night (with removal for washing) until a week from the surgery and then just worn during the day for the second week.

There are no restrictions to general exercise or activities; providing the stocking is worn as advised. However, low impact exercise such as walking is encouraged, together with good hydration with clear fluids. High impact exercise (like aerobics or jogging) may be uncomfortable in the first few weeks due to bruising, but this is less commonly seen with combination UGFS. Strength training which involves strenuous exertion and straining is not encouraged for 4-6 weeks.

You should not plan to fly for 4 to 6 weeks following treatment.

If you have had combination MVR, the paper strips used to close the incisions will normally drop off on their own. They can be peeled off after 5 days if still present.

Progress after discharge

MVR tend to cause more general discomfort than UGFS initially. This can generally be managed with paracetamol or ibuprofen such as might be used to treat a headache. If you have any sore red lumpy patches over the areas treated particularly with UGFS, topical ibuprofen or Voltarol cream or gel can be soothing. Your local pharmacist should be able to advise on any of the above.

Complications Following MVR or UGFS

Both MVR and UGFS are safe treatments for varicose veins. MVR can cause bruising, with discomfort from this and the stab incisions. These incisions eventually scar to thin pale lines, but may be very red and noticeable initially. UGFS doesn't remove the veins, but works by creating intense inflammation. As a result thrombophlebitis is more common. These phlebitic veins disappear by scarring and so treated areas are more commonly felt after as thickening from scarring veins, although this softens over time.

- If you have had MVR, these will leave very small scars which will eventually hardly be noticeable.
- MVR often cause bruising which can be sore, leading to brownish skin pigmentation that settles over time.
- UGFS can, very unusually, cause some visual disturbance lasting a few minutes. If you get this during the procedure, please tell your surgeon. Generally, however, this only lasts a few minutes.
- Some patients get tenderness and lumpiness around treated veins (phlebitis). This is more common with UGFS, because it is *by this method that the veins scar and involute* (disappear).
- Many patients get areas of skin pigmentation with either MVR or UGFS. This tends to reduce in intensity, but may take 2 years to complete
- Some patients get areas of vein thickening (due to the intended vein scarring, particularly with UGFS) which can be felt under the skin in a similar way to that mentioned above. These also soften over a few months following surgery.
- Where dressings are applied under bandages, and particularly when a stocking is placed over, this can create mild blistering due to friction with the skin. This is nothing to worry about and will resolve a few days after bandage removal.
- A small break in the skin (ulcer) is rare with UGFS, but occurs in about 1 in 500 injections. This should be kept clean and dry. It will heal to a small white mark.
- Recurrence – even with the best surgical treatment varicose veins can return.

Patient Information

- There is a rare incidence of deep vein thrombosis following varicose vein surgery by either method. Although uncommon, it is the most important potential complication of this surgery. Although this is treatable, it can lead to an even more serious complication of pulmonary embolus. If you get increasing pain, swelling, bluish discolouration of your treated leg or foot in the weeks following surgery, seek help from your GP or A&E department without delay.

Review after MVR & UGFS

You will normally be seen in the outpatient clinic by your operating consultant in the weeks following your surgery who will check on your recovery. Here you will have the opportunity to ask any questions or discuss aspects of your treatment. **Please contact your consultant's secretary if you have any questions or concerns in the meantime. The contact number can be found at the top of your copy of the consultation letter.** Otherwise, telephone 024 7696 4000 (Hospital Switchboard) and ask for your consultant's secretary.

We hope that you have found your treatment by the vascular surgery team to your satisfaction. We welcome your comments, compliments and feedback concerning the care that you have received, in our continual attempt to provide the very best possible care. We are constantly looking to improve our service. This can be done by the PALS details below:

Useful Contacts

Your consultant secretary's number can be found at the top of your consultation letter copy

PALS (Patient advice and liaison service): 0800 0284203

Stop smoking Coventry: 0300 200 0011 www.covwarkpt.nhs.uk

Stop for life: 0800 612 4580 help@stop4life.co.uk

Stop smoking Services: 024 7696 4760 stop smoking.services@uhcw.nhs.uk

Benefit Enquiry Line: 0800 882200

Patient Information

The trust has access to interpreting and translation services. If you need this information in another language or format please contact 024 7696 5569 or 024 7696 6914 and we will do our best to meet your needs.

The trust operates a smoke free policy

To give feedback on this leaflet please email feedback@uhcw.nhs.uk

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