



Having a fistuloplasty or venoplasty with local anaesthetic and sedation

This leaflet tells you about having a fistuloplasty or venoplasty. It explains what is involved and the possible risks. It is not meant to replace informed discussion between you and your doctor or nurse, but can act as a starting point for such discussions. If you have any questions about the procedure please ask the doctor or nurse who has referred you or the team who are going to perform the procedure.

What is a fistuloplasty or venoplasty?

Occasionally, the blood vessels that make up a fistula can become narrowed which can be diagnosed on ultrasound, on a fistulogram, on physical examination or from measurements from the dialysis or transonic machines. A special balloon is used to widen this narrowing. If the dilatation is in the fistula it is called a fistuloplasty, if it is in a central vein it is called a venoplasty.

What are the risks of fistuloplasty and venoplasty?

Fistuloplasty and venoplasty are very safe but occasionally complications do arise. There is a small risk of initial failure of treatment. There is a high chance the narrowing will recur after some months and further dilatation will be required. There is a small risk that the treatment may damage or rupture the fistula/vein. This can often be treated using a stent but may cause the fistula to fail and become unusable for dialysis. A small operation may be required at the time but more likely a central line would be placed to allow dialysis and, sometime later, a new fistula fashioned. When considering this risk, it is important to bear in mind that leaving a narrowing in a fistula or vein untreated is likely to cause the fistula to fail.

Who has made the decision to perform fistuloplasty?

Your renal doctors, the vascular access nurse, vascular access surgeon and the interventional radiologist will have discussed your care and feel this is the most appropriate next step. However, you will also have the opportunity for your opinion to be considered and if, after discussion with your doctors, you no longer want the procedure, you can decide against it.

What will happen?

A few days before the procedure you will need a blood test to check that your blood is able to clot satisfactorily. We may ask you to see your renal nurse for these blood tests.

If you are a pre-dialysis patient or a dialysis patient that passes more than about a cupful of urine a day, then you will require some additional care to protect your remaining kidney function from the contrast (dye). If this applies to you, please see the enclosed letter for full details.

You will come to the X-ray department in the hospital on the morning or afternoon of your fistuloplasty. We advise you to leave valuables at home although you may like to bring some small change for phone calls, newspaper etc. Occasionally, your appointment may be delayed if there are emergencies in the X-ray department.

In the X-ray day-case unit monitoring devices will be placed on your chest and your finger.

Usually, a cannula will be inserted into a peripheral vein of your hand or arm.

You will be asked to lie flat on the X-ray table. You will need to be able to lie flat for the procedure, which normally takes 40-60 minutes. You can bring an iPod/headphones to listen to during the procedure. If appropriate, intravenous sedation and pain relief will be given at this point.

The interventional radiologist will put a needle into your fistula (although occasionally, it may be necessary to put it in the vein in your groin instead). Through this needle a wire will be passed through the narrowing in the fistula. A tiny balloon is then passed over the wire and inflated to widen the narrowing. The balloon is then removed. Another X-ray is taken to check how effective the procedure has been. Very rarely, a special metal tube called a stent is inserted into the fistula. Stents are only used if the balloon does not improve the narrowing satisfactorily or if there is a complication.

Once the procedure is finished, a stitch will be used to close the small entry hole. This stitch should be removed in 1-2 days. If you are on haemodialysis, the nurses in the dialysis unit can remove the stitch. Otherwise, please make an appointment with the practice nurse at your GP's surgery.

Can I eat and drink before?

If you require sedation you will not be able to eat for 4 hours before the procedure. If you require no sedation then you can eat and drink as normal.

Should I take my normal tablets?

On the morning of your appointment take your medication as normal unless you have been instructed to stop any of your tablets. If you are diabetic you will also get advice on what to do regarding your tablets or insulin.

If you take Warfarin tablets, please speak to the nurse in your area as soon as you receive the fistuloplasty appointment. You will usually need to stop your Warfarin a few days before the procedure and the nurse will be able to advise you for how long. If you take Aspirin or Clopidogrel, please continue with these.

How quickly can I leave after the procedure?

Provided that you have not had any sedation you can go home once you are mobile. You will need a responsible adult or the hospital transport to collect you. Alternatively, you may need to go to your regular dialysis session – this is fine and the fistula can be used immediately after fistuloplasty.

Will I be sore afterwards when the anaesthetic and painkiller wears off?

You may be a little bit sore afterwards. If your arm aches take some paracetamol, following the dosage instructions on the packet.

What if I have any questions?

Some of your questions should have been answered by this leaflet, but remember that this is only a starting point for discussion about your treatment with the doctors looking after you. Make sure you are satisfied that you have received enough information about the procedure.

If you have any questions or concerns; or if you require hospital transport, please contact the nurses in the area relevant to you.

Vascular Access	Tel 0118 322 8526
Pre Dialysis	Tel 0118 322 7899
CAPD	Tel 0118 322 8555
Benyon Haemodialysis Unit	Tel 0118 322 8360
Bracknell Dialysis Unit	Tel 01344 662961
Huntley and Palmer Dialysis Unit	Tel 0118 322 8515
Windsor Dialysis Unit	Tel 01753 866008
Enborne Dialysis Unit WBCH	Tel 01635 273640

To find out more about our Trust visit www.royalberkshire.nhs.uk

Please ask if you need this information in another language or format.

RBFT Renal Medicine, December 2025. Next review due: December 2027.