

Having a fistuloplasty or venoplasty under a nerve block

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, but can act as a starting point for such discussions. If you have any questions about the procedure please ask the doctor who has referred you or the team who are going to perform the procedure.

What is fistuloplasty or venoplasty?

An arteriovenous fistula (AVF) is a modified blood vessel created by connecting an artery to a vein – used for haemodialysis treatment. Occasionally, the blood vessels that make up the fistula can develop a narrowing which is diagnosed by clinical examination, measurements during dialysis, on ultrasound or with a fistulogram. A small balloon is used to widen this narrowing. If the dilatation (widening) is in the fistula it is called a fistuloplasty, if it is in a central vein it is called a venoplasty.

Are there any alternative treatments?

In occasional specific circumstances surgical revision is considered but is more invasive and not necessary in most cases. If no treatment is given the narrowing gets progressively worse and the fistula becomes blocked and it can be impossible to get it working again.

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 (more than 90%) 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 by inflating the balloon for longer until the hole seals or occasionally using a stent (a covered metal tube used to hold the fistula/vein open and seal the hole). There is often bruising and discomfort around the fistula after a rupture
- Occasional the fistula may stop working and a haemodialysis line (plastic tube inserted in a vein in the neck) would be placed to allow dialysis and, sometime later, a new fistula created. 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 stop working.

What is a nerve block?

Fistuloplasty can be performed under a regional block (a numb arm) to make the procedure less painful. This involves an ultrasound-guided injection of local anaesthetic around the nerves near your shoulder to numb your arm.

What are the risks of a nerve block?

A regional block involves injecting local anaesthetic around your nerves. There is a small risk that the block may not fully numb your arm and may need a further injection. There is also a very small risk of injury to the nerve; however, this is rare. The anaesthetist will talk to you about the risks in more detail on the day of surgery.

Who has made the decision to perform fistuloplasty under nerve block?

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 if your blood is able to clot satisfactorily. We may ask you to see your renal nurse for these bloods. You may need an ECG (heart trace test) before you come for the procedure.

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 used in the procedure). 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 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. Usually the procedure will be done in the morning and you can go home at lunchtime. Occasionally, your appointment may be delayed if there are any emergencies in the X-ray department.

In the X-ray day unit, monitoring devices will be placed on your chest and your finger. The anaesthetist will inject the local anaesthetic in your shoulder area to numb your arm. Once your arm is numb you will go into the X-ray room. You will need to lie flat on the X-ray table but we will help to slide you across. You will need to be able to lie flat for the procedure, which will normally take 40-60 mins. You can bring an smart phone/iPod/mp3 player with headphones with you that you can listen to during this time.

The interventional radiologist will put a special needle into your fistula.

Through this a wire will be passed through the narrowing in the fistula. A small balloon is then passed over the wire and inflated for several minutes to widen the narrowing. X-rays are taken to check how effective the procedure has been.

Once the procedure is finished, a stitch will be put into your fistula to close the small hole made during the procedure. This stitch needs to 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?

You should not eat /drink in case you require sedation as well as a nerve block. The night before your appointment you will need to stop eating from midnight and only clear fluid (water, black tea/coffee) after midnight that will need to stop at 6:00am.

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, you can continue to take these unless advised otherwise by your renal doctors.

Can I drive home?

No. The local anaesthetic block will make your arm numb and heavy. This will last for about 6 hours. You will need your arm in a sling to go home so you will need someone to drive you. Your arm will not feel heat or pain and therefore you will need to take care not to scald or injure your arm with hot drinks etc.

How quickly can I leave after the procedure?

Provided that you have not had any sedation, once we have got your arm in a sling and are fully mobile you can go home. You will need a responsible adult to collect you before you can go. Occasionally you may need to go your regular dialysis session – this is fine and the fistula can be used immediately after fistuloplasty.

What do I do if the numbness does not wear off?

Occasionally local anaesthetic blocks last a little longer than 6-12 hours. If you are concerned in any way contact us on the numbers below.

Will I be sore afterwards when the numbness wears off?

You may be a little bit sore afterwards when the numbness wears off. 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.

Kidney Care	Tel 0118 322 7899
CAPD	Tel 0118 322 8555
Benyon Haemodialysis Unit	Tel 0118 322 8360
Huntley and Palmer Dialysis Unit	Tel 0118 322 8515
Windsor Dialysis Unit	Tel 01753 866008

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RAD_0015

Dept of Radiology, March 2019

Review due: March 2021