



Imaging



**Brighton and Sussex
University Hospitals**
NHS Trust

Fistulogram/ Fistuloplasty

Information for patients

What is a Fistulogram/Fistuloplasty?

An AV (arteriovenous) fistula is a surgical connection between an artery and vein created for haemodialysis. It helps to transfer blood into the dialysis machine and back again during haemodialysis.

A **Fistulogram** is a procedure that looks at the vessels of the fistula in detail to see if there are any problems with it. A **Fistuloplasty** is when a fistula has become blocked or narrowed and it needs to be treated by stretching the fistula with a balloon.

Why do I need a Fistulogram/Fistuloplasty?

A **Fistulogram** is used to assess the fistula by taking detailed pictures of the fistula to see if any further treatment is required.

A **Fistuloplasty** is a procedure used to treat the fistula if there are any narrowings or blockages. The fistula can age and problems such as scarring, clots or a decrease in function or the effectiveness of dialysis can occur. If these issues aren't treated then your fistula can stop working completely.

Who has made the decision?

The Consultant in charge of your case, and the Interventional Radiologist (the doctor who specialises in Imaging Procedures) who will be carrying out the Fistulogram/Fistuloplasty will have discussed the situation, and feel that this is the best option. However, you will also have the opportunity for your opinion to be taken into account and if, after discussion with your doctors, you do not want the procedure carried out, you can then decide against it.

Who will be performing the Fistulogram/Fistuloplasty?

A specialist doctor called an Interventional Radiologist. Interventional Radiologists are experts in using X-ray equipment and in microsurgical techniques.

Where will the procedure take place?

In the Imaging Department, in a special Interventional Radiology (IR) Procedure Room which is designed for these specialised procedures. You will be checked into the department by a nurse, who will ask some medical questions and fill out some paperwork. The Interventional Radiologist will then come and talk to you about the procedure, and you will have the opportunity to ask any questions or raise any concerns. Only if you are happy to continue with the procedure will you be asked to sign the consent form.

What actually happens during a Fistulogram/Fistuloplasty?

It is performed in the IR procedure room, where you will lie on your back on a special x-ray table and be covered with sterile drapes.

- The interventional radiologist will usually start by looking at your fistula using an ultrasound machine. The area will be cleaned and you will have local anaesthetic injected to numb the area.
- A small needle is inserted into your fistula and a wire is passed through the needle. The needle is removed and a small plastic tube is inserted.
- X-ray dye is then injected to see all of the vessels of the fistula (this is the Fistulogram).

- If a Fistuloplasty is required a small catheter is passed through the fistula and into the blockage. Then the catheter is taken out and a balloon is inserted. The balloon is then inflated for a few minutes, deflated and then removed. This will stretch the blood vessel and should relieve the blockage. This may need to be done a few times, to ensure the narrowing has been treated.
- Once the radiologist is finished the catheter will be removed and the radiologist will either press on the puncture site or place a stitch.

How do I prepare for a Fistulogram/Fistuloplasty?

To prepare for the procedure you will need to make sure you do the following:

You will need to have a blood test before your procedure.

Please let us know if you are taking any **antiplatelet medicines** (for example, Aspirin, Clopidogrel) or any medicines that thin the blood (for example, Warfarin), as these may need to be stopped temporarily before the procedure. Call the IR department for advice as soon as you get your appointment letter on **01273 696955 Ext. 4240/4278** and ask to speak to one of the IR nursing team.

If you are taking **medicines for diabetes** (for example metformin) or using insulin, then these may need to be altered around the time of the procedure. Call the IR department on the numbers above for advice as soon as you get your appointment letter.

You cannot eat or drink anything (except water) for four hours before your procedure. You can drink water up to two hours before your procedure.

Will it hurt?

When the local anaesthetic is injected it will sting for a moment but the stinging will wear off leaving the area of skin numb. After this the procedure should not be painful. However if you feel discomfort there will be a nurse with you who will be able to arrange for further anaesthetic or sedation, if it is required. After the contrast medium (x-ray dye) is injected you will get a warm sensation. You will be awake for the procedure and you will be able to tell the nurse or radiologist if you feel any pain or are uncomfortable in any other way.

How long will it take?

Whilst every patient and every patient's situation is different we allow an hour for the procedure.

What happens afterwards?

You may be asked to stay in the department for about an hour to recover, or if we need to remove your stitch. If you are going to dialysis you will be taken straight there.

What are the risks?

Fistulogram/Fistuloplasty is generally very safe but as with any procedure complications are possible.

- **Bruising** - There may be a bruise around the site where the needle has been inserted.
- **Infection** - This is a rare complication and it may require antibiotics or further treatment.
- Sometimes damage can be caused to the artery or fistula by the catheter or balloon. Stretching the fistula can sometimes accidentally cause a small tear which may need treated with a covered stent (a metal tube that stays in the body) or an operation.
- There is a risk that the procedure may not work. If this happens the radiologist will discuss other options with you.

What are the benefits?

If you are having a Fistulogram then it gives your doctors a clear picture of what is going on with your fistula.

- It can restore blood flow.
- It can improve the quality of your dialysis
- It may mean your fistula has a longer life span.

Afterwards

You will either stay with us for a period of recovery of up to one hour or go straight to the dialysis unit if you are due dialysis.

Continue with your normal medication as prescribed, unless otherwise advised.

If you are having some mild pain you can take over-the-counter painkillers (follow the instructions on the packet).

If you feel you need urgent medical attention or are worried about anything please contact the IR department Monday - Friday 9am - 5pm, your GP, or go to your nearest A&E department.

Finally

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 team looking after you.

Make sure you are satisfied that you have received enough information about the procedure before you sign the consent form.

**Interventional Radiology:
01273 696955 Ext. 4240/4278**

© Brighton and Sussex University Hospitals NHS Trust

Disclaimer

The information in this leaflet is for guidance purposes only and is in no way intended to replace professional clinical advice by a qualified practitioner.

Ref number: 852

Publication Date: February 2018

Review Date: February 2020

