

Fistulogram and Fistuloplasty

Introduction

This leaflet gives you information about having a fistulogram or a fistuloplasty. This explains what is involved and what the possible risks are. It is not meant to replace an informal discussion between you and your doctor but can act as a starting point for such a discussion. The procedure will be performed in the Medical Imaging Department which may also be called the Radiology or X-ray Department.

What is a fistulogram?

A fistulogram is a picture of your dialysis fistula which is obtained by injecting some x-ray dye either into the vein itself or into the artery supplying the vein.

What is a fistuloplasty?

If there is a narrowing at any point within the vein of the dialysis fistula, then this will limit the flow of blood through the fistula and may eventually lead to the fistula vein blocking up altogether. This can be treated by passing a wire across the narrowing within the vein and passing a specially designed balloon across this narrow point and inflating the balloon such that the vein is stretched open again. This procedure of stretching open the fistula vein is called a "fistuloplasty".

Why do I need a fistuloplasty?

If the flow through the fistula vein is not adequate then dialysis cannot be performed and if the flow worsens then the dialysis vein may block up altogether.

What are the options or alternatives?

This only potential alternative would mean an open operation.

Who has made this decision?

Patients are usually referred for this procedure by either the team performing your regular dialysis or possibly from the surgeon who originally performed your dialysis fistula.

Who will be performing the procedure?

A specially trained doctor called an Interventional Radiologist will be performing the procedure, these doctors are specially trained in using this type of "pin-hole surgery".

Radiographers and Radiology Nurses will be present in the room to assist during the procedure, they will introduce themselves at the start of the procedure.

Occasionally Student Radiographers or Medical Students will be present to observe the procedure.

Where will the procedure take place?

In the Medical Imaging Department.

How do I prepare for this procedure?

- You may need to be an inpatient in the hospital, although many fistuloplasties can be performed as an outpatient / day case.
- You will have had some blood tests performed before the procedure to check that you do not have an increased risk of bleeding.
- You are asked **not** to eat for 4 hours prior to the procedure. You may drink a little water.
- You will need someone to drive you home and to look after you for 24 hours.
- You should be prepared to stay overnight if necessary.
- If you have any allergies or you have previously reacted to intravenous contrast medium, you must let the doctor know. Intravenous contrast medium is the injection we give you during some scans.
- If you are diabetic, please contact the Medical Imaging Department on **01392 402336 selecting option 2, in-patient enquiries, option 6 X-ray Special Procedures.**
- If you normally take any medication to thin your blood (anticoagulation or antiplatelet drugs) such as: **warfarin / clopidogrel / aspirin / non-steroidal anti-inflammatory drugs (NSAIDS / brufen / ibrufen / nurofen) / dabigatran (Pradaxa) / rivaroxiban (Xarelto) / Apixaban (Eliquis) / phendione / acenocoumarol – then these may need to be stopped or altered. Please contact the Medical Imaging Department on 01392 402336 selecting option 2, in-patient enquiries and then option 6 for X-ray Special Procedures.**
- Other medication should be taken as normal.

What actually happens during this procedure?

You will lie on the x-ray table on your back and a needle will be put into the vein or artery in your arm. Once the pictures “fistulogram” has been obtained, then you may require a second needle in order to allow the wires and balloons to be passed into the vein in order to stretch the vein open.

The Radiologist use a sterile trolley and wear a theatre gown and operating gloves. The skin near the point of needle insertion will be cleaned with antiseptic and local anaesthetic will be injected. This stings when it is injected but then makes the area numb.

Will it hurt?

Some discomfort is felt with the injection of the local anaesthetic. After this the placement of the needle or catheter should not be painful. The vein itself has some nerves and the stretching procedure (fistuloplasty) can be painful. It is occasionally possible to numb this area of vein although this is not always possible if the vein is deep or close to other structures such as an artery or a nerve.

How long will it take?

Every patient’s situation is different but most procedures such as this take less than 1 hour. You may be in the Medical Imaging Department for longer than this however.

What happens afterwards?

The puncture site where the catheter and wires have been inserted is usually closed with a stitch which stays in place for approximately 1 hour. You will be taken back to your ward on a trolley bed and routine observations performed. After the stitch has been removed, most patients stay in bed for a few hours until they have recovered and return home the same day. You may receive your dialysis during this period.

What will happen to the results?

A report of the procedure will be recorded in your notes immediately and also sent to your specialist within 48 hours.

Are there any risks or complications?

A fistulogram is a very safe procedure. Very occasionally a bulge may form on the vein or artery where the needle has been inserted, this is called a false aneurysm. A fistuloplasty (stretching open a narrowed area of vein) carries some risks. The vein may narrow again and require a second or occasionally a third procedure. Very rarely the vein may burst. This rare occurrence can usually be remedied by placement of a covered stent in order to cover up the hole in the damaged vein. A small amount of bleeding following this procedure is quite common due to the high flow and relatively high pressures within the vein. This is usually adequately controlled with the suture although some gentle local pressure is occasionally necessary.

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

Contact us

If you found reading your leaflet difficult, you do not understand what it means for you if you have any queries or concerns you can contact us on: 01392 402336 and we can talk it through or alternatively you can email us rduh.radiologyappointments@nhs.net

How to get to your appointment

Please refer to the enclosed "Welcome to the Medical Imaging Department" leaflet or use the Trusts website for the latest information:

[/www.royaldevon.nhs.uk/our-sites/royal-devon-and-exeter-hospital-wonford/](http://www.royaldevon.nhs.uk/our-sites/royal-devon-and-exeter-hospital-wonford/)

For more information on the Medical Imaging Department, please visit our website:

www.royaldevon.nhs.uk/services/medical-imaging-radiology-x-ray/medical-imaging-eastern-services/

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Designed by Graphics (Print & Design), RD&E (Heavitree)