

Fistulogram, Fistuloplasty and Venoplasty

Information for patients



Your doctor has recommended that you have a procedure on your fistula. This leaflet will explain what this involves and the possible risks.

What is a fistulogram

This is an examination of the blood vessels that make up your fistula. A small needle is placed in your fistula and dye (contrast agent) is injected. This dye provides an image (like a map) of the blood vessels (these would otherwise be invisible on X-ray) and allows us to localise any problems with the fistula. In most cases we perform a fistulogram immediately before performing a fistuloplasty or venoplasty.

What is a fistuloplasty or venoplasty?

The blood vessels that make up a fistula can develop narrowings which can make dialysis less effective or can cause bleeding, arm swelling or other problems. To treat this, a small balloon can be inserted and inflated to stretch up the narrowed area. The balloon is then deflated and removed.

If the narrowing is in the fistula the procedure is called a fistuloplasty. If it is in a central vein (in the chest or pelvis) it is called a venoplasty. Sometimes a metal scaffolding called a stent is inserted into the fistula if the results of balloon treatment alone are not satisfactory. Unlike the balloon, the stent stays in the fistula permanently.

Why do you need this treatment?

Your kidney doctor thinks that there is a problem with your dialysis fistula (or graft). Most patients will have had an ultrasound or other test to confirm this problem though in some patients a diagnostic test is not required.

What are the risks?

Fistulogram and fistuloplasty are common procedures and are carried out daily in Leeds. They are very safe.

- Very occasionally bruising can occur at the site of needle puncture. Less commonly (1 in 100 patients), ongoing bleeding requires an inpatient stay or additional procedures or even surgery to manage it.
- There is a small risk of failure of treatment or of damage to the fistula. In very rare circumstances emergency surgery may be required or the fistula may cease to function, in which case alternative dialysis access (usually a dialysis line) is required while a new fistula is made.
- Narrowings in fistulae have a tendency to recur and you may need repeated procedures over your lifetime.
- Infection is very rare.

When considering these risks, it is important to bear in mind that leaving a narrowing in a fistula or vein untreated would ultimately result in failure of the fistula.

What are the alternatives?

The only alternative is a surgical revision of the fistula. This is a much more invasive procedure and in most circumstances is not necessary. The balloon treatment is usually effective.

There are no medications that can be used instead. We would not advise doing nothing as narrowings have a tendency to progress and will result eventually in the fistula thrombosing ('clotting off

Do I need to make any special preparations?

Fistulograms, fistuloplasty and venoplasty procedures are usually performed as an outpatient. Some patients who are not yet on dialysis will need a drip before and after the procedure.

If you are taking blood thinning medications (such as warfarin), these may need to be stopped before the procedure. You will be given specific instructions about this. Please contact the vascular radiology department in good time before your appointment if you have not received these instructions.

If you have any allergies or have previously had a reaction to the dye (contrast agent), you must tell the radiology staff before the procedure.

Who will I see?

A specially trained team led by an interventional radiologist. Interventional radiologists are doctors with special expertise in using medical imaging techniques to undertake procedures through tiny pinholes in the skin.

What happens during a fistulogram, fistuloplasty or venoplasty?

You will need to put on a hospital gown. A small needle may be placed in your non-fistula arm in case you need an injection of a painkiller or light sedative.

The skin over the fistula will be cleaned. Local anaesthetic will be injected to numb the skin. A fine plastic tube will then be placed in the fistula and dye injected. You may be asked to hold your breath for a few seconds while images are taken.

Occasionally we will need to place tubes in the groin, the neck or elsewhere. This is done in the same way (with local anaesthetic)

Will it hurt?

Local anaesthetic injections sting a little. When the balloon is inflated you may feel pain. This passes when the balloon is deflated. If you wish we can give you painkilling injections or gas-and-air to breathe during the balloon inflation. This usually controls discomfort well.

How long will it take?

The procedure usually takes between 30 and 90 minutes though every patient is different.

What happens afterwards?

Firm pressure is applied to the skin puncture site, just like after a session of dialysis. You will usually be able to go home shortly afterwards. Occasionally, a stitch is placed at the skin puncture site which needs removing after a short period.

Care at home

If you have bleeding at the skin puncture site press firmly over it and call 999 for an ambulance to take you to hospital.

Call your doctor or go to the nearest A&E if you have persistent pain, an enlarging lump, pus at the puncture site, chest pain or breathlessness after the procedure.

If you have other concerns you should contact the renal dialysis nurse specialist team on: 0113 206 4112

or by email: leedsth-tr.dialysisaccessteam@nhs.net

Queries about the scheduling of your appointment for the procedure can be made by telephoning **0113 206 6841** (radiology theatres at St James' University Hospital)

Finally

We hope some of your questions should have been answered by this leaflet. The interventional radiologist who will perform the procedure will discuss it with you beforehand and you will have the opportunity to ask questions. Please make sure you are satisfied that you have received enough information about the procedure before you agree to proceed.



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