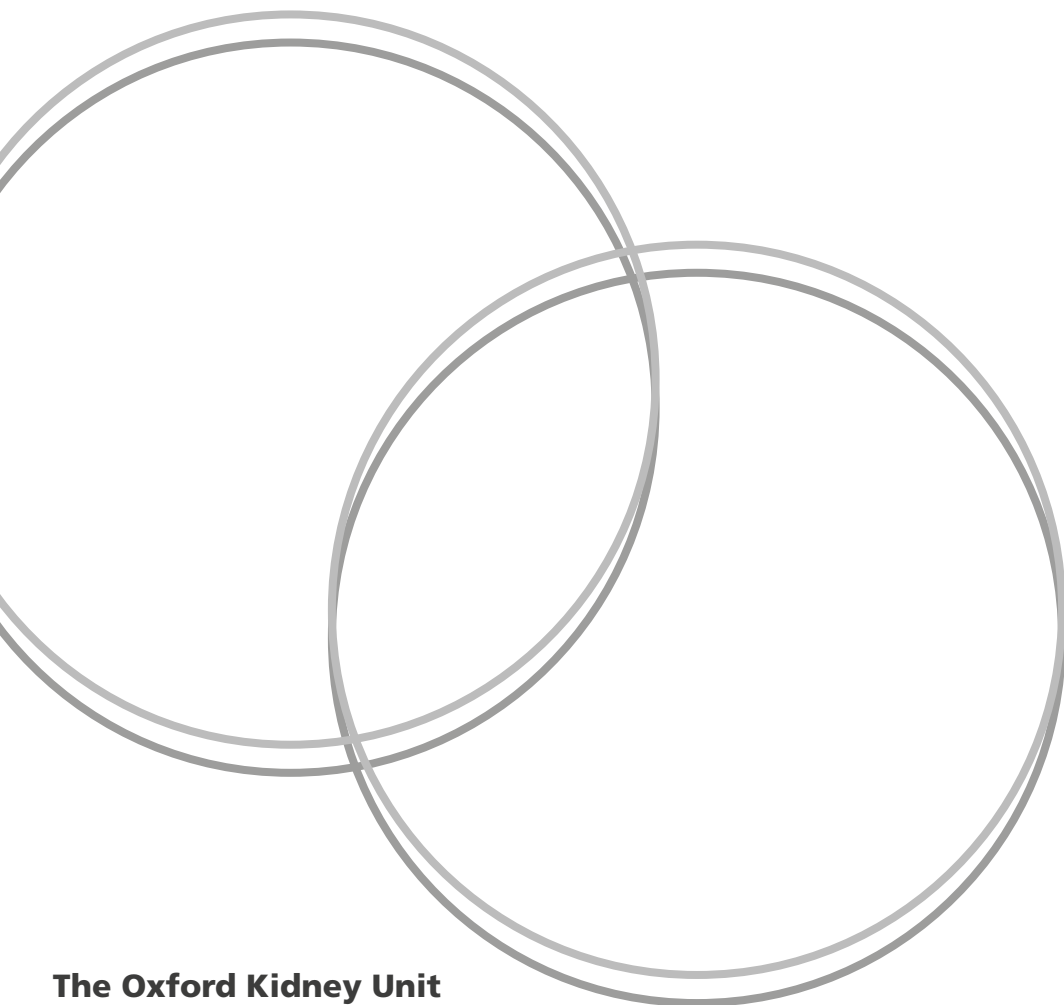


# Access for Haemodialysis

## Part 3

**Keeping your fistula or  
graft working well**



This leaflet has been written to help you care for your fistula. If you have any questions after reading this leaflet please talk to your renal team.

## **How to keep your fistula or graft working well if you are on dialysis**

If you are on haemodialysis, the dialysis nurses will check your fistula each time you attend for dialysis. They will check:

- For the thrill (buzz), by feeling your fistula for the buzzing sensation.
- They may also listen with a stethoscope for the bruit, this is a whooshing sound heard when listening to the fistula.

The dialysis nurse will report any concerns you may have to the Vascular Access team. This is very important, as it allows us to identify potential problems early on and act upon them quickly.

If you are not on haemodialysis please continue to check your fistula and let the Predialysis or Vascular Access Nurses know if you have any problems.

## **What problems may I experience with my fistula or graft?**

- You may experience a rise in the pressure of the venous or arterial chamber on the dialysis machine (the pressure to and from your fistula or graft); this can cause the dialysis machine to alarm frequently.
- Difficulty inserting needles into your fistula or blood clots in the dialysis needle.
- Your fistula or graft takes longer than 10 to 15 minutes to stop bleeding, once the needles are removed after dialysis.

All of these are usually due to a narrowing within the fistula vein.

## **What test are needed on my fistula?**

Your haemodialysis nurse will perform a special ultrasound with a 'Trasonic' machine. A trasonic machine measures the amount of blood flowing through your fistula. Sensors are attached to the dialysis lines as you dialyse, the sensors measure the flow rate as blood passes through. This will be performed every 3 months.

A trasonic flow reading of 600 millilitres per minute or more is good. If the number falls below 600 millilitres per minute your Vascular Access nurse may need to refer you to the X-ray department (radiology), so that they can have a look inside your fistula or graft by performing a fistulagram. Your dialysis or Vascular Access nurse will talk to you about referring you to the radiology department.

If you are not on dialysis and your Pre-Dialysis nurse or Vascular Access nurse thinks your fistula is not working as well as it should be, they will also refer you to the radiology department.

A Vascular Access Nurse will talk with you about which procedure is recommended for you.

## **What will happen when I go to radiology?**

**Please contact the radiology department before your appointment if you have an allergy to X-ray contrast or iodine, as you may not be able to have X-ray images taken.**

## **What happens if I need a fistulagram?**

You don't need to make any changes to your medications. You can eat and drink as you normally would and go home immediately after your appointment.

## **What is a fistulagram?**

During a fistulagram a small injection of a dye (contrast) is injected into the vein of your fistula. An X-ray camera is then positioned over your fistula or graft and pictures are taken, so that the radiologist can look closely at your veins. The Vascular Access nurse or your Pre-Dialysis nurse (if you are not on dialysis) will discuss the results with you and what the next plan is.

## **What happens if I need a venoplasty?**

You will be asked to come to the Renal Day Case Unit. If you are taking any blood thinning medications such as warfarin, apixiban or clopidogrel, or diabetic medication such as metformin, please phone the Renal Day Case Unit for advice (the number is on page 9 of this leaflet).

You can eat food up to 6 hours before the time of your venoplasty. Then nothing to eat. You can drink clear fluids, black tea, water, diluted squash up until 2 hours before the procedure. Then you should not eat or drink anything. You cannot drive after the procedure, so will need to have someone to take you home. Please do not arrange to go home on public transport. Travelling by car will be more comfortable for you and also quicker for you to return to the hospital if there are any complications on the journey home.

If you need to arrange hospital transport, please phone the Renal Day Case Unit.

When you get to the Renal Day Case Unit the following will happen:

- Your blood clotting level (and INR if you are on warfarin) will be checked, to make sure they are at a safe level for the procedure to go ahead.
- You will be advised not to eat anything once you arrive on the unit, but you can have water up to an hour before the procedure.
- We will ask you what medications you are taking, including over the counter and herbal remedies.
- A cannula (a small plastic tube) will be inserted into your vein (usually in the back of your hand).
- If you are diabetic, your blood sugar will be checked.

We will ask you to change into a hospital gown and you will be collected by our porters to be taken to the radiology department the procedure.

## What is a venoplasty?

A venoplasty is a procedure to treat a blockage or narrowing in your fistula or graft. You will require a local anaesthetic injection for this procedure. This is a small injection of a solution, which will numb your skin and tissue near the start of your fistula or graft.

During a venoplasty, a small cut is made at the start of your fistula or graft. A small amount of dye (contrast) is injected in the fistula or graft, so that the radiologist can see on the X-ray images where the narrowing is in your vein. You may experience a warm feeling when the dye is injected into your vein.

A small deflated balloon is then inserted into the vein and inflated at the point where your vein narrows. This should widen the vein. It may feel slightly uncomfortable, but this should pass quickly. Sometimes, if your vein is very narrow, the radiologist may need to inflate the balloon several times.

Once the procedure is finished, the radiologist will place a stitch in the cut to close it. If you are on haemodialysis your nurse will remove the stitch at your next dialysis session. If you are not on haemodialysis the radiology department will talk to you about the best person to remove the stitch (this may be your local practice nurse).

If your vein doesn't stretch well with the balloon the radiologists may decide to insert a stent into the narrowing of your vein. A stent is a small metallic mesh which holds the wall of the vein open. It gets inserted in the same way as having a venoplasty. Once it is in place, you shouldn't be able to feel it and your dialysis needles can be inserted as normal.

Both procedures take about an hour. You will need to stay on the Renal Day Case Unit for about 1 to 2 hours after the procedure, to make sure you don't bleed (this is very rare). If you do not recover as we expect you to, we will ask a doctor to see you before you can go home.

If you are worried about your venoplasty site when you are at home, please contact the Renal Ward. If you notice that you have bleeding through the dressing, please press hard over the site and wait for 15 minutes. If blood continues to ooze through the dressing despite applying pressure, please phone the renal ward for further advice. If you are experiencing severe bleeding and pressure doesn't stop the bleeding, please phone 999.

## **How will I know if the procedure has been successful?**

Your dialysis nurse will repeat a Transonic reading to see if the procedure has improved the blood flow within your fistula or graft. About 90% of the time venoplasties are very successful. Sometimes the narrowing may return. If this happens, we will talk to you about having another venoplasty or stent.

Some people need frequent venoplasties to keep their fistula working properly. If you need frequent venoplasties, the Vascular Access team will refer you to see a surgeon in the Access clinic.



## **Useful contact numbers**

### **Vascular Access Nurses, Churchill Hospital**

Telephone: 01865 225 910 or 01865 225 373  
(Monday to Friday, 8.00am to 5.00pm)

### **Main Haemodialysis Unit, Churchill Hospital**

Telephone: 01865 225 807  
(Monday to Saturday, 7.00am to 7.00pm)

### **Tarver Haemodialysis Unit, Churchill Hospital**

Telephone: 01865 225 487  
(Monday to Saturday, 7.00am to 7.00pm)

### **Renal Ward, Churchill Hospital**

Telephone: 01865 225 780  
(24 hours, including weekends and bank holidays)

### **Radiology Department, Churchill Hospital**

Telephone: 01865 235 755  
(Monday to Friday, 8.00am to 5.00pm)

### **Milton Keynes Dialysis Unit**

Telephone: 01908 996 496

### **Stoke Mandeville Dialysis Unit**

Telephone: 01296 316 996

### **Banbury Dialysis Unit**

Telephone: 01295 229 812

### **High Wycombe Dialysis Unit**

Telephone: 01494 426 347

### **Swindon Dialysis Unit**

Telephone: 01793 605 286

### **Whitehouse Dialysis Unit**

(Monday to Saturday, 7.00am to 7.30pm)  
Telephone: 01295 228 552 or 01295 228 553

## Useful websites

### **Oxford Kidney Unit**

Lots of information about the Oxford Kidney Unit for patients and carers.

Website: [www.ouh.nhs.uk/oku](http://www.ouh.nhs.uk/oku)

### **Kidney Patient Guide**

Information for patients with kidney failure and those who care for them.

Website: [www.kidneypatientguide.org.uk](http://www.kidneypatientguide.org.uk)

### **Kidney Care UK**

A charity which has lots of practical support and information for people with kidney disease. There is a section all about fistula's.

Website:

[www.kidneycareuk.org/about-kidney-health/treatments/dialysis/haemodialysis-access-arteriovenous-fistula](http://www.kidneycareuk.org/about-kidney-health/treatments/dialysis/haemodialysis-access-arteriovenous-fistula)

### **Six Counties Kidney Patients Association**

The SCKPA is run for patients by patients or family members.

They offer support to people suffering from kidney disease or who are on dialysis. They work closely with the Oxford Kidney Unit and have branches in Oxfordshire, Northamptonshire, Buckinghamshire, and Milton Keynes, and parts of Wiltshire, Gloucestershire and Berkshire.

Website: [www.sixcountieskpa.org.uk](http://www.sixcountieskpa.org.uk)

## **National Kidney Federation**

A charity which has lots of practical support and information for people with kidney disease.

Website: [www.kidney.org.uk](http://www.kidney.org.uk)

## **OUH Patient Portal Health for Me**

Please ask a member of the renal team to sign you up to the patient portal.

Website: [www.ouh.nhs.uk/patient-guide/patient-portal](http://www.ouh.nhs.uk/patient-guide/patient-portal)

## Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

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Oxford University Hospitals NHS Foundation Trust

[www.ouh.nhs.uk/information](http://www.ouh.nhs.uk/information)



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