

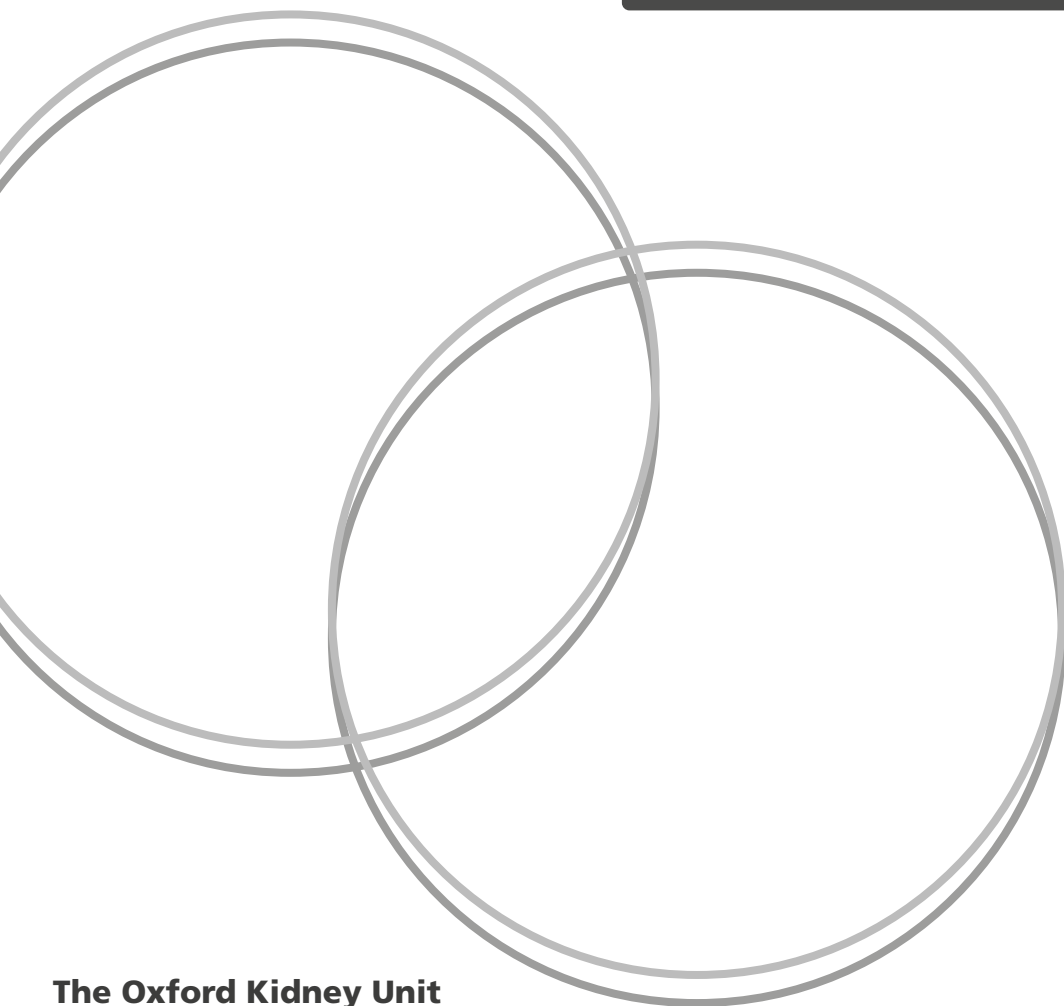


Oxford University Hospitals
NHS Foundation Trust

Access for haemodialysis

Part 2

**Starting haemodialysis
and looking after your
new fistula**



The Oxford Kidney Unit

You have been given this leaflet as you have a new fistula and are starting haemodialysis soon.

If you have any concerns or questions about anything in this leaflet, please speak to your pre-dialysis or dialysis nurse.

When you had your fistula made, you will have been taught how to feel and listen to it, to check that it is working.

A dialysis or pre-dialysis nurse will contact you 2 and 6 weeks after your operation. At this time they will:

- look at your scar to make sure it has healed, and may change or remove the dressing
- place their hand over your scar to check they can feel your fistula buzzing
- listen with a stethoscope to make sure they can hear it whooshing.

At the 6 week check, they will see if your vein is developing well, so that when you need to start haemodialysis the nurses are able to insert two needles into the fistula. If they feel that it is not developing as well as it should be, they will refer you to the vascular access team. The vascular access team will discuss what will happen next. You may see a surgeon or a radiologist.

After the 6 week check you will be seen regularly by your kidney doctor or your pre-dialysis nurse until you need to start haemodialysis.

How do I look after my fistula?

- Every day, place your hand over your fistula to feel the buzzing and listen for the whooshing with the stethoscope.
- Do your hand exercises, such as squeezing a rubber ball or a rolled up pair of socks, to help your fistula develop.
- Avoid tight clothing around your fistula, such as tight shirt or blouse sleeves.
- Avoid wearing tight wrist watches or bracelets if you have a wrist fistula.
- Don't let anyone take a blood test or blood pressure from your fistula arm.
- Don't let anyone put a needle (cannula) into your fistula arm.
- Let your nurse or kidney doctor know if you notice anything different about your fistula, such as it feeling hot, painful, or if it has increased in size.
- Avoid heavy lifting or carrying heavy shopping on your fistula arm.
- Avoid laying on your fistula arm and raising it above your head when sleeping.

We can provide you with an alert wrist band to wear on your fistula arm. Please speak to a member of the haemodialysis team if you would like more information. There may be a small cost.

What if I can't feel my fistula buzzing or hear a whooshing?

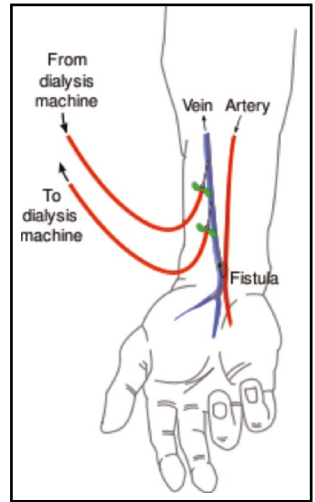
If you are concerned about your fistula, please contact your pre-dialysis nurse or a member of the vascular access team. If it is a weekend, please phone the hospital switchboard and ask to speak to a transplant doctor. The telephone numbers are at the end of this leaflet.

If you are on haemodialysis and are concerned about your fistula, please contact your local unit immediately. Do not wait until you are next due haemodialysis.

Starting haemodialysis

When you need to start haemodialysis, you will be given a regular time slot at one of our two Oxford haemodialysis units. This will be either in the morning or afternoon on a Monday, Wednesday and Friday, or on a Tuesday, Thursday and Saturday. We will try our best to accommodate your other commitments, such as childcare and work, but we may not be able to offer your preferred time and days immediately.

If you don't live in Oxford we will transfer you to your local unit as soon as a space becomes available. This may take a few months. Transport can be provided, but you may prefer to ask a friend or family member to bring you to your haemodialysis treatment.



When you arrive for haemodialysis, a nurse will ask you some questions about how you have been at home. You will need to wash your hands and fistula arm before the needles are inserted into your fistula. You should do this every time you come for haemodialysis. Your dialysis nurse will also clean your arm with a special cleaning solution. This helps to prevent you getting an infection.

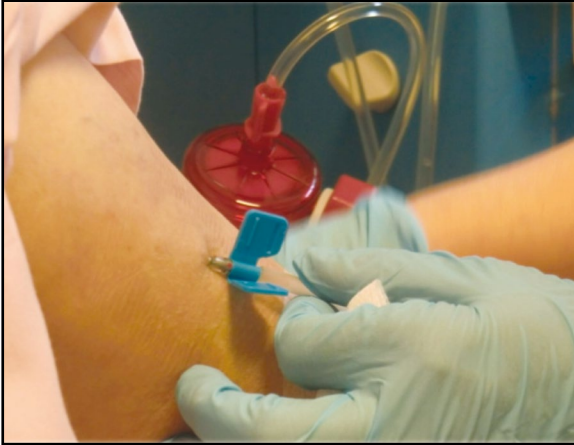
At the beginning of every haemodialysis session you will have two needles inserted into your fistula vein. One needle takes blood out, to be cleaned through the machine, and the other needle returns the cleaned blood back to you.

Small needles will be used at first. As your fistula develops and becomes stronger, larger needles will be used. This will give you a better haemodialysis treatment, as the dialysis nurses will be able to increase the speed of the machine. This means you should be able to have a greater amount of your blood cleaned in one session.

When the needles are inserted it may feel a little uncomfortable. The dialysis nurses can offer you an anaesthetic cream or spray, which will numb your arm where the needles will be placed.

Needling your fistula

To keep your fistula working well the dialysis nurses will place the needles along the entire length of your fistula (moving the needles up and down at each session). This is known as the “rope ladder” technique. This helps to protect your fistula from becoming scarred and forming large swellings (aneurysms).



You may know of some patients who use an alternative technique called “button hole needling”. As this technique may increase the risk of infection, we no longer recommend this type of needling.

What is a blown fistula?

When your fistula is new the veins are not very strong. This is because it takes a few haemodialysis treatments for the walls of the vein to become thicker and stronger. A 'blow' usually happens when your fistula is new, however it can happen at any time on haemodialysis.

A blown fistula means that some blood has leaked out of the vein around the needle site and has moved into the surrounding tissues. This may lead to bruising and swelling. If this happens, a nurse will place an ice pack on your arm to help reduce the swelling; this should get better in a few days.

A small blow should not cause any problems for your future haemodialysis. A dialysis nurse may need to avoid needling the area which is bruised, whilst it settles.

A large blow (which is rare) may cause pain and a lot of swelling, which could make it difficult to needle your fistula. You may need to miss a haemodialysis session. If this happens, your kidney doctor or vascular access nurse will discuss the best treatment for you.

Taking care of your fistula

Your named nurse will work closely with the vascular access team to make sure your fistula is working well and your blood is being cleaned effectively.

Every three months, we measure how much blood is flowing through your fistula every minute, by using a transonic machine. The transonic machine sensors are attached to your haemodialysis lines to measure the amount of blood through your fistula. This measurement is usually done within the first hour of starting your haemodialysis treatment.

A normal level is about 600 millilitres per minute. If your blood flow is less than this or the flow rate is decreasing each time we perform the test, you may need to be seen by one of the radiologists or surgeons. The vascular access team will explain the best treatment for you.

Complications and risks of having a fistula

For most people a fistula can work well for many years. There are some complications or risks that can occur.

- **Thrombosis:** this is when a blood clot blocks the fistula and stops it from working. You would normally need a small procedure, either in radiology (X-ray department) or in theatre to unblock the fistula. If the surgeon is unable to unblock your fistula you may need a temporary line for haemodialysis.

A temporary line is a line which is inserted into the large vein in your groin or neck, to allow you to dialyse. If you would like more information about temporary lines, please ask for a separate leaflet.

In the hot weather you may need more fluid. Talk with your dialysis nurse, they will probably suggest you drink an extra cup of fluid per day.

- **Stenosis:** a narrowing within your fistula vein, which causes a reduced blood flow. You will need to see a radiologist to have a procedure called a venoplasty. This is where a small balloon is inflated inside your fistula, to stretch it wider at the point where it narrows. More information about having a venoplasty can be found in part 3 of this series of leaflets.
- **Infection of the fistula or graft (rare):** If your arm is red, hot or swollen you may have an infection. Contact your haemodialysis unit immediately for advice.

- **Steal syndrome (rare):** your hand may be painful, cold, blue in colour, feel weak or numb. This usually happens because the blood flow to your hand is reduced. You would need to see a surgeon urgently. There are 2 options depending on the severity of the steal. There are carried out in theatre usually under a local anaesthetic.
- The fistula flow is reduced by narrowing the flow (the fistula can still be used for haemodialysis). This is known as banding.
- The fistula off is tied off (the fistula is no longer able to be used for haemodialysis). This is known as ligation.
- **Aneurysm (rare):** a weakening of the wall of your fistula vein can occur if your fistula is being needled in the same area at every haemodialysis session. This can lead to your fistula vein swelling in one area. Your dialysis nurses will needle the whole length of your fistula to avoid this happening.

- **Bleeding from your fistula or graft (AVF or AVG)**

Blood flow through your fistula or graft is under high pressure, from the joining of the artery to the vein. This increases the amount of blood flowing through your fistula.

Although rare, bleeding from a fistula or graft can be life threatening. If the bleeding does not stop once you have applied pressure for 15 minutes, please seek urgent medical help.

We will give you a separate leaflet and a card explaining what to do if your fistula or graft starts bleeding.

Please let your dialysis nurse know if you would like to speak to any of the vascular access nurses about your fistula.

Useful websites

Oxford Kidney Unit

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

Website: 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

Kidney Care UK

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

Website: www.kidneycareuk.org

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

National Kidney Federation

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

Website: 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

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

Tarver Haemodialysis Unit

Churchill Hospital

Telephone: 01865 225 487

Renal Ward

Churchill Hospital

Telephone: 01865 225 780 or 01865 225 790

24 hours, including weekends and bank holidays

Transplant Ward

Churchill Hospital

Telephone: 01865 235 010 or 01865 235 112

24 hours, including weekends and bank holidays

Radiology Department

Churchill Hospital

Telephone: 01865 235 755

Monday to Friday, 8.00am to 5.00pm

Oxford University Hospitals NHS Foundation Trust

Switchboard

Telephone: 0300 304 7777

Milton Keynes Haemodialysis Unit

Telephone: 01908 996 496

Stoke Mandeville Haemodialysis Unit

Telephone: 01296 316 996

Banbury Haemodialysis Unit

Telephone: 01295 229 811 or 01295 224 130

High Wycombe Haemodialysis Unit

Telephone: 01494 426 347

Swindon Haemodialysis Unit

Telephone: 01793 605 286

Whitehouse Dialysis Unit

Telephone: 01295 228 552 or 01295 228 553

Monday to Saturday 7.00am to 7.30pm

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.

Author: Jo Carter, Specialist Nurse Vascular Access
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Oxford University Hospitals NHS Foundation Trust
www.ouh.nhs.uk/information



Making a difference across our hospitals

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