



Oxford University Hospitals
NHS Foundation Trust

The Oxford Kidney Unit

Access for haemodialysis

Part 2 – Starting dialysis and
looking after your new fistula



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

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

How do I take care of my haemodialysis fistula?

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. This is to make sure a dialysis nurse can needle your fistula in preparation for dialysis. 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 dialysis.

What can I do to 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.

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.

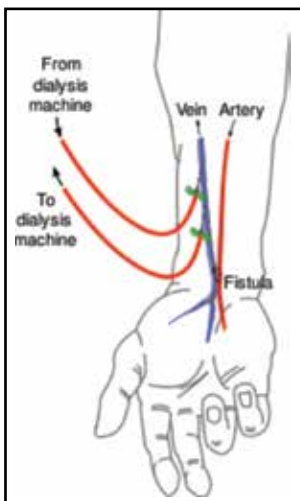
What happens when I need to start dialysis?

When you need to start dialysis, you will be given a regular time slot at one of our two Oxford dialysis 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.

You are likely to start your dialysis treatment in Oxford, before transferring to your local unit. As soon as there is an available slot we will transfer you to your local unit; please be aware that 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 dialysis treatment.

The first dialysis session



On your first day, your nurse will ask after your health. You will be asked to wash your hands and fistula arm, before it is needed. You should do this every time you come for dialysis. Your dialysis nurse will also clean your arm with a special cleaning solution. This helps to prevent you getting an infection.

What happens to my fistula when I have dialysis?

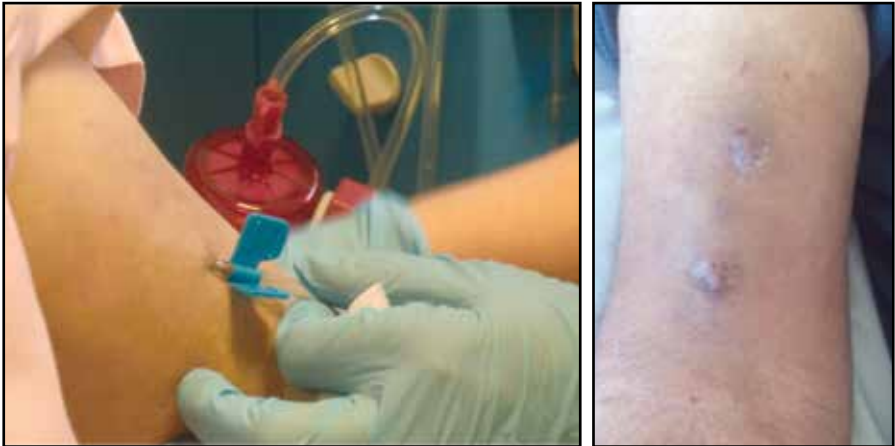
At the beginning of every haemodialysis session you will have two needles inserted into your fistula vein. One needle takes blood out, to be cleaned through the machine, and the other needle returns the cleaned blood back to you.

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 dialysis 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.

How will the nurses needle my 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.



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

What does it mean if my fistula has 'blown'?

When your fistula is new the veins are not very strong. This is because it takes a few dialysis 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 dialysis.

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 dialysis. Your nurse may need to avoid 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. This may mean you need to miss a dialysis session. If this happens, your Kidney doctor or Vascular Access nurse will discuss the best treatment for you.

How will the nurses take care of my 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, your dialysis nurse will check how much blood is flowing through your fistula every minute, by attaching a transonic machine to your dialysis lines. A transonic machine measures the amount of blood flowing through your fistula with sensors attached to your dialysis lines. This measurement is usually done within the first hour of you starting your dialysis treatment.

The normal level to aim for is about 600 millilitres per minute. If your blood flow is less than this you may need to be seen by one of the radiologists or surgeons. The Vascular Access team will explain the best treatment for you.

What can go wrong with my fistula?

For most people a fistula can work well for many years. However, you may experience the following:

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

Blood flow through your fistula or graft is under high pressure, as your artery and vein have been joined up together. Bleeding will not stop without proper treatment.

Although rare, bleeding from a fistula or graft can be life threatening. If the bleeding does not stop once you have applied pressure, 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.

- **Thrombosis:** this is when a blood clot blocks the fistula and stops it from working. You would normally need a small operation to treat this and unblock the fistula. If the surgeon is unable to unblock your fistula you may need a temporary line for dialysis.

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.

- **Stenosis:** a narrowing within your fistula vein, which causes a reduced blood flow. This leads to poor dialysis. If this happens, you will be referred to 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 dialysis unit immediately for advice.

- **Steal syndrome (rare):** your hand may be painful, cold, blue in colour, weak or numb. This usually happens because the blood flow to your hand is reduced. You would need to see a surgeon urgently and may need to have your fistula vein tied off (disconnected), so that the blood flow returns to your hand. This would mean you no longer have a working fistula and may need to have a tunnelled line inserted for dialysis. For information about tunnelled lines, please ask for our separate leaflet. If you are worried about any symptoms please speak to your nurse.
- **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 dialysis 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.

Please let your dialysis nurse know if you would like to speak to any of the Vascular Access Nurses about your fistula.

Where can I get further information?

If you would like any further information, the following websites may be helpful:

Oxford Kidney Unit

www.ouh.nhs.uk/oku/

NHS Choices

www.nhs.uk/Conditions/Dialysis/Pages/How-haemodialysis-is-performed.aspx#haemodialysis

Useful contact numbers

Vascular Access Nurses

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

Main Haemodialysis Unit

Tel: 01865 225 807
(Monday to Saturday, 7.30am to 7.00pm)

Tarver Haemodialysis Unit

Tel: 01865 225 487
(Monday to Saturday, 7.30am to 7.00pm)

Renal Ward

Tel: 01865 225 780 or 01865 225 790
(24 hours a day)

Wytham Ward

Tel: 01865 235 010 or 01865 235 112
(24 hours a day)

Radiology Department

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

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALS@ouh.nhs.uk**

Making a difference across our hospitals

charity@ouh.nhs.uk | 01865 743 444 | hospitalcharity.co.uk

OXFORD HOSPITALS CHARITY (REGISTERED CHARITY NUMBER 1175809)



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