



# Having an arterio-venous (AV) fistula

**This leaflet is to help you understand what a fistula is, how it is used and how to care for your fistula after it has been created.**

## About arterio-venous fistulas

Your doctor will have discussed with you that it is either necessary now, or in the near future for you to start haemodialysis. Haemodialysis requires regular vascular access (access to the blood stream).

For most patients, the best type of vascular access for haemodialysis is an “AV (arterio-venous) fistula”. Creating a fistula requires advanced planning because a fistula takes a little while to develop after surgery (4-8 weeks) before it is ready for use. At present, it can take up to 4 months from referral to having the fistula created and it being ready to use.

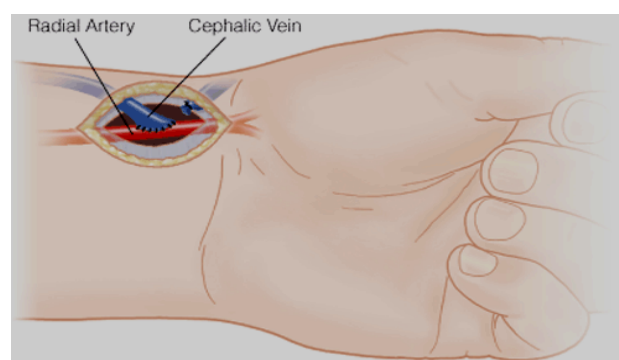
This is why you will have been referred some time before you need to start dialysis. A fistula will last longer than any other form of vascular access and is the ideal way through which to dialyse.

## What is a fistula?

A fistula is a connection made between an artery and a vein in your arm (*see diagram, right*).

As a result of this, the vein in your arm will grow larger and stronger as the artery causes more blood to flow through the vein. This process, called maturation, takes between 4 to 8 weeks. The dialysis nurses can then place needles into this mature vein through which you will dialyse.

The fistula is either created at the wrist, or higher up your arm at the level of the elbow.



## Planning your fistula operation

You will be given an outpatient appointment, either in the Royal Berkshire Hospital on Huntley and Palmer Dialysis Unit or at the Windsor Dialysis Unit. There you will meet the surgeon who will assess your arms and decide which arm is the best to use. For most patients, an ultrasound of the blood vessels in the arms is required first to help the surgeon identify the best veins to use. If this is needed, it will be done in the Royal Berkshire Hospital X-ray Department as an outpatient. Usually, the surgery will follow within the next 3 to 4 weeks, at a time convenient to you.

The operation is carried out by the surgeon, under local anaesthetic, as a day case in the Churchill Hospital, Oxford. You may be in a little discomfort after the surgery, but the doctors will prescribe painkillers if necessary. Occasionally, you may need a general anaesthetic and the surgeon will discuss this with you if required. Usually there are no stitches to be removed.

Oxford will notify you of the surgery date by letter or telephone.

If you require transport, please call 01865 226109.

**If you are taking Warfarin or Clopidogrel tablets, please inform the surgeon during your outpatient appointment.**

## **Complications**

As with all surgery, there can be complications, although they do not happen often. These can include bleeding, which may occasionally require a blood transfusion, infection, complications of anaesthetics, sedatives and other drugs, and excessive swelling and bruising around the operation site. Most of these complications will resolve without much intervention, but some require specific treatment. Very rarely, the fistula has to be reversed because the blood supply to parts of the arm increases too much. You should discuss any concerns with the surgeon or anaesthetist before giving consent.

## **How is a fistula used?**

After your surgery, your fistula will usually need 4 to 8 weeks to “mature”. Sometimes a lamp may be used to help this development. At around 6 or 8 weeks the vascular access nurse or haemodialysis nurses will assess your arm and decide if it is ready to use.

At each dialysis session, two needles will be inserted into your fistula, one takes the blood to the dialyser to be “cleaned” and then the cleaned blood is returned to you via the other needle. The amount of blood outside your body at any time is actually very small. At the end of each dialysis session the needles are removed and plasters cover the sites. These can be removed the next day.

## **How do I care for my fistula?**

After a fistula has been created, you will usually be able to feel a buzzing sensation around the area. This is known as the “thrill” or “bruit”. You are advised to check the thrill is there twice daily, morning and evening. If no buzz can be felt or it feels weaker you must get in touch with your Renal Department immediately. If they are closed please contact Victoria Ward on the number listed at the end of the leaflet.

## **You should be aware of the following when you have a fistula:**

- Keep your arm clean at all times. If any part of your fistula arm becomes painful, red or inflamed, contact your renal team as soon as possible. If they are closed call Victoria Ward (numbers are at the end of this leaflet).
- You should not drive for 2-4 days after surgery.
- Never let anybody put a blood pressure cuff on your fistula arm.
- Do not wear watches or tight cuffs on your fistula arm.
- The fistula should only be used for haemodialysis. Never let anybody take blood from or put drips into your fistula.
- Do not lift heavy loads (e.g. shopping bags) with your fistula arm.
- Be careful not to bump, puncture or cut your access.
- You may be given a small squeeze ball to exercise and help your fistula develop.
- You will be given a dialysis awareness card and a red alert wristband to wear on your fistula arm.

## What if I have any questions?

If you have any questions or concerns; or if you require hospital transport, please contact the nurses in the area relevant to you.

Vascular Access	0118 322 8526
Benyon Dialysis Unit:	0118 322 8360
Bracknell Dialysis Unit:	01344 662961
CAPD Unit:	0118 322 7322
Enborne Dialysis Unit	01635 273640
Home haemodialysis:	0118 322 7918 / 07917 791411
Huntley & Palmer Unit:	0118 322 8519:
Kidney Care Nurses:	0118 322 7899
Transplant Nurses:	0118 322 5111 pager 40593
Victoria Ward	0118 322 7476
Windsor Dialysis Unit:	01753 866008

## Further information

Further information can be found at the following websites:

[www.britishkidney-pa.co.uk/patient-info](http://www.britishkidney-pa.co.uk/patient-info)

[www.beaumont.ie/kidneycentre-forpatients-aguidetodialysis-accessfo](http://www.beaumont.ie/kidneycentre-forpatients-aguidetodialysis-accessfo)

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

[www.nhs.uk/conditions/Kidney-disease-chronic](http://www.nhs.uk/conditions/Kidney-disease-chronic)

To find out more about our Trust visit [www.royalberkshire.nhs.uk](http://www.royalberkshire.nhs.uk)

<b>Please ask if you need this information in another language or format.</b>
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