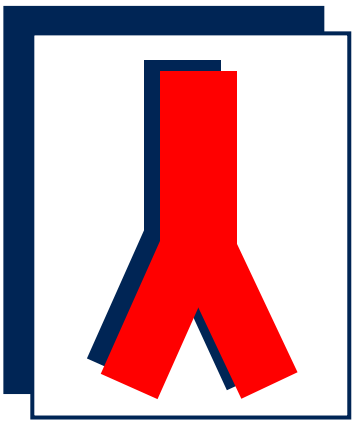
Will Butcher – Vascular Surgery

Patient information

Care of your Fistula



What is a fistula?

An arteriovenous fistula is an artificial connection between an artery and a vein. This operation is usually undertaken to provide access for a renal patient so that dialysis may be undertaken without a catheter. When we connect and artery and vein the vein becomes enlarged and it is much easier to get needles into the fistula, this is important for haemodialysis.

Haemodialysis is the type of dialysis where your blood is circulated through a machine and cleaned before being returned to you. For effective dialysis the machine must be able to draw blood and return it at a higher flow than a normal vein would manage.

The artery and vein are joined using fine sutures, there is not usually any foreign material left inside you, although occasionally a graft may be used. Once the vein is joined to the artery, it will then become enlarged. Pressure from the artery makes the vein thicker and bigger so it can be used for dialysis. A fistula is often the longest lasting access.

What is a graft?

A graft is a piece of man-made blood vessel. It is used to connect an artery and vein together. It can also be accessed for dialysis.

After the surgery.

When will the fistula/graft be ready to use?

When a fistula is created it takes about 6 to 12 weeks for the blood vessel walls to thicken or "mature". It will not be used for dialysis until the fistula is "mature".

A graft can be used sooner, although the exact timing depends on the type of graft used. Your surgeon will advise you when your graft is ready for use.

When you go home with a new fistula or graft, it is safe to use your arm for normal daily activities, but protect from any skin damage such as cuts or scratches.

Exercise

Exercising your fistula is an important step in the development of a strong, reliable, mature fistula for long term haemodialysis.

You can start exercising your arm after a couple of days by squeezing a soft ball or a sock, gently at first, then more firmly for 5 minutes, several times a day (every 2 or 3 hours, if possible) until the fistula has matured matured.

Exercising before the operation can't hurt.

Caring for the wound

After the fistula is created there will be one of two small wounds. These need to be kept covered (and clean and dry) until the wound has healed. This should take about 10 days. At first it will be painful but this will settle. You can take mild pain medication. At first you should avoid using the arm for heavy things but after two weeks or so the arm can be used as normal.

What about the dialysis catheter?

If you are already on dialysis, you may have a catheter in your neck through which you are dialysing. Once the nurses have successfully accessed your fistula a few times this catheter can be removed.

Later on:

Checking your fistula or graft

It is important for you to check your fistula or graft three times each day:

in the morning
at midday
before bed

To check if your fistula is going or functioning:

Use the palm of your hand to feel over the operation site for a buzz or thrill.
If you have a graft, feel around it for a pulsation.

If you cannot feel a buzz or a thrill: Keep the arm warm. Ensure you are not dehydrated. Contact the rooms as soon as possible on (07)55980288. We

are open Monday to Friday from 8am to 4pm. Alternatively contact the dialysis unit where you dialyse or will receive dialysis, they will know how to contact me. If you can not get anyone, present to the Emergency Department of the nearest hospital.

The problem of infection

Infection of your fistula/graft can occur if:

- you do not keep the operation site clean and dry for the first couple of weeks
- you do not wash your hands and access arm immediately prior to going on dialysis
- you sustain an injury to your access arm (e.g. cuts, abrasions, bruises)
- you remove your needle puncture site dressing too soon – leave it on for at least 12 hours.

Please immediately report any redness, tenderness, heat or bruising on your arm fistular (or leg). Also report if you have a temperature as an infected access can clot your fistula/graft or cause an infection in your blood.

Low blood pressure

a) Low blood pressure can reduce the blood flow into your fistula and cause it to fail or clot. If you have low blood pressure check your fistula more frequently

b) Low blood pressure can be caused by removing too much fluid during dialysis, vomiting and/or diarrhoea, sweating in hot weather.

c) If your blood pressure is low after dialysis, tell the nurses; you may need to be given some fluid or have your ideal weight changed.

d) If you are dizzy or light-headed at home, rest and tell the Renal Unit staff next time you see them.

Reminders for good fistula care

Never wear tight sleeves, watches, jewelry, or the like over or around your fistula or graft

Never carry heavy shopping bags or handbags on your access arm – they can stop the blood flow through the arm and cause the fistula/graft to clot.

Never wear a hospital identification band on your fistula/graft arm.

Never allow anyone to collect blood, insert a cannula for a drip or take a blood pressure measurement on your fistula/graft arm unless authorised by your renal specialist (nephrologist).

Always keep your fistula/graft arm warm in cooler weather to keep the blood circulating.

Always make sure your fistula/graft arm is washed and cleaned before each dialysis session.

Treat your fistula/graft like a very good friend.

Take care of it and it will take care of you.

A word of advice

Your fistula or graft is your lifeline for haemodialysis and should be cared for properly. Failure to do so may result in the loss of your fistula or graft. If this occurs, you will require a hospital admission and an operation/procedure in order to get vascular access for haemodialysis.