

TREATMENT CENTRE

ARTERIOVENOUS FISTULA SURGERY

WHAT IS AN ARTERIOVENOUS FISTULA?

A fistula is formed by connecting an artery to a vein in your arm. This is usually done under a local anaesthetic. A fistula helps the vein to increase in size over a number of weeks and provides permanent access to the bloodstream for haemodialysis treatment.

ALTERNATIVE OPTIONS FOR TREATMENT

These should have been discussed with you by your surgeon, when you were seen in the outpatient department at your initial consultation. If this was not the case, please do not hesitate to ask for further information.

PREPARATION REQUIRED BEFORE SURGERY

On the day of your operation it would be helpful if you could have a bath or shower. You need to remove all rings from the hand to be operated on (including wedding ring).

WHAT WILL HAPPEN WHEN YOU ARRIVE ON THE UNIT?

The surgeon will ask you to sign a consent form for the operation and will mark the wrist to be operated on.

You will have a **local anaesthetic**; the surgeon will put an injection into the wrist area so that you do not feel any pain during the surgery.

You will need to lie flat on your back, for 1.5 - 2 hours during the operation.

FOLLOWING SURGERY

You will need to stay on the ward for a minimum of four to six hours after your operation. The nursing staff will make frequent checks of your pulse, blood pressure and new fistula site. The local anaesthetic injection that every patient is given should keep you comfortable for a few hours; however, if you experience any pain or discomfort, please inform the nurse who will be able to give you painkillers.

You will be offered a drink and something to eat once the nursing staff feel it is safe to do so.

GOING HOME

You will not be able to drive and must be taken home in a car or taxi. You must be accompanied home by a responsible adult (18 years or over) who will stay with you all the time for 24 hours following surgery.

Information for patients



KGH is a non-smoking environment. If you would like to give up phone 0845 601 3116 for help

If you wish to make any comments or require a copy of this information in another format or language, phone 01536 492510

It is anticipated that your length of stay will be approximately half a day. Please ensure that your lift/carer is able to collect you promptly when you are ready as you need to rest and your recovery will be more comfortable at home.

Please give the 'Carer's leaflet' with the map on, to your lift/carer.

WHAT ARE THE RISKS?

There is a 10% - 20% risk of failure of the operation; this is usually due to small or abnormal vessels, or low blood pressure. There is a risk of bleeding and wound infection.

You may notice some discomfort in your hand; it may become painful, cold, swollen and you may get pins and needles. This is called "Steal Syndrome" as blood is stolen from the hand as a result of the fistula. You may need surgery to correct this but must be aware that this condition can cause the fistula to fail.

WHAT ARE THE BENEFITS?

A dialysis machine replaces your kidney function. The fistula is used for haemodialysis (removing waste products from the blood). A fistula allows access to the blood vessels for your haemodialysis treatment.

POST SURGERY INSTRUCTIONS

- Keep dressings clean, dry and intact until your outpatient appointment. If dressings fall off or become loose before then, you should see your nurse at your GP surgery.
- If the dressing is very blood stained or soiled, please make an appointment to see the practice nurse at the GP surgery the next day for the nurse to change the dressing.
- You must keep your operation site warm using the dressing supplied for the first few days following surgery. Wearing warm but not restrictive clothing helps to heal the fistula.
- You may have dissolvable stitches. If the stitches are non-dissolvable, they will be removed in 13 days time at the outpatient appointment. Please keep all dressings clean and dry until the appointment.
- If you experience severe pain or swelling after discharge home you must contact the hospital immediately.
- **If the site bleeds excessively you should apply firm pressure using the dressings supplied and raise your arm. You must make your way immediately to the nearest accident and emergency department and inform them about your operation.**

Author: Angie Perkins, theatre sister, DCU, Sue Chambers, senior staff nurse, DCU and Sean Pamplin, staff nurse, DCU pre-op assessment 2004	
Reference: Murphy S J, White S A, Nicholson ML (2000) Vascular access for haemodialysis. British Journal of Surgery. Vol 87(10), 1300-1315	
Approved by: Mr V Bahal, consultant vascular surgeon	
Reviewed by: Karen Judge, ward sister, DCU, May & June 2005, Jan 2006 & Jul 2008	
PIC Approved: May 2006 & July 2007	
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Next review: Jun 2010	
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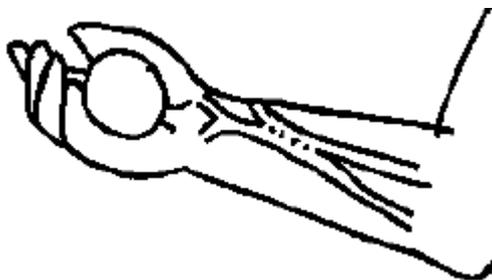
- You will experience some pain or discomfort once the effect of the local anaesthetic wears off. It is advisable to take the painkillers regularly as instructed. Do not exceed the recommended dose as written on the packet.
- When you are resting at home it is a good idea to keep your hand raised on a pillow to help prevent swelling.
- Depending on the type of work you do, you should have at least two weeks off. The consultant should advise you about return to work at your outpatient appointment.
- You must not drive until you have been seen at the outpatient appointment.
- You must always protect your fistula site and follow the list of **MUST DO AND MUST AVOID**.

MUST DO:

FISTULA EXERCISES TO STRENGTHEN THE NEWLY FORMED FISTULA

Please start these exercises pre-operatively, as advised by the pre-assessment nurse.

- Keep your forearm and hand lower than your chest.
- Hold a fistula exercise ball, for example a tennis ball, firm sponge or similar object, in the hand of the same arm as your fistula.
- Squeeze and release the ball 20 times using a steady rhythm, then relax.
- Repeat this sequence for about 10-15 minutes.
- Exercise like this 10 times a day.



You should continue with these exercises for about 3 months following your operation.

- Check your fistula for a bruit, thrill or buzzing sensation at least four times a day. This is normal and indicates that your fistula is working.
- Keep your arm raised if your hand becomes swollen. This will help to reduce the swelling and protect the new fistula.
- Keep your fistula arm clean and wear gloves for gardening and / or any dirty work. This will prevent bacteria entering the fistula through the skin.

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- Keep your fistula arm warm, especially when new. This will help the circulation to your new fistula and the arm in general.

MUST AVOID the following, as they could damage your new fistula:

DO NOT:

- Wear tight/restrictive clothing, watches or bracelets on your fistula arm. This can interfere with the circulation to your new fistula.
- Use your fistula arm for lifting heavy loads or carry bags/heavy objects across the fistula site.
- Sleep on your fistula arm.
- Allow your blood pressure to be taken on your fistula arm.
- Allow anyone to take blood from your fistula arm or insert a needle for any type of infusion.
- Participate in contact sports without seeking advice first.

WATCH OUT FOR:

- Swelling, redness, pain, fever or pus drainage. These can be signs of infection.
- Coldness, numbness, aching or weakness of your hand. These can be signs that the blood supply not adequate.

You should contact your GP immediately if you see either of these signs or if you have any other concerns regarding you new fistula.

If you have any worries or queries please do not hesitate to contact:

The Day Case Unit Monday to Friday 8am – 5pm ☎ 01536 493680

**Mary Breslin (vascular nurse specialist) Monday to Friday 9am – 5pm
☎ 01536 493392 or 01536 492000 ask for bleep 630**

Outside of these hours please phone Nenedoc ☎ 01536 522955 or A&E

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