

**Patient
Information**

Forming an Arterio-Venous (AV) fistula

Date of operation: _____

Where: _____

Follow-up appointment: _____

Introduction

This leaflet gives you information about how we create an Arterio-Venous (AV) fistula. We want you to have the information you need before you agree to have the procedure carried out.

This information does not replace any discussions between you and your doctor. Please ask your doctor any questions you may have, so that you fully understand what is involved. If you take warfarin, clopidogrel or any other blood thinning medications you must let your surgeon and the Pre-assessment Clinic staff know.

What is a fistula?

An AV fistula is created by connecting an artery to a vein just under the skin, usually in the wrist or sometimes in the forearm or elbow instead. Connecting the artery to the vein causes more blood to flow in the vein, which makes the vein grow larger and stronger. This will allow the dialysis needles to be put into the bigger vein easily and allow blood to be taken to the machine for dialysis treatment then back to your body. Having a fistula means that there is less of an infection risk than having a central venous catheter. A central venous catheter is used when dialysis is needed as an emergency.

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Department

Renal

Review due

June 2028

Patient Information

Why do I need a fistula?

You and your doctor have decided that haemodialysis treatment will be needed when your kidneys are no longer able to filter your blood as well as they should.

For a dialysis machine to work there must be a way of taking blood from you to a kidney machine; using a fistula is one way that this can be done.

Vascular Surgery Clinic

Prior to the appointment an ultrasound scan of your veins and arteries of both arms may be carried out in the vascular laboratory at Gloucestershire Royal Hospital or Cheltenham General Hospital.

During your appointment with one of the surgical team, the procedure will be discussed in full. This is when you will be shown where the fistula will be created.

Pre-assessment Clinic

Preparing for your appointment - local anaesthetic

During the Pre-assessment Clinic appointment, the vascular nurse may take routine bloods and swabs.

To reduce the risk of infection you will be screened for Methicillin Resistant Staphylococcus Aureus (MRSA).

Please let your GP and hospital reception staff know if you change your name, address or telephone number. Bring your letter with you when you come for your appointment along with **a list of medications you are currently taking.**

Preparing for your appointment - general anaesthetic

A face-to-face appointment may take around 1 hour. This is to assess your past medical history, take routine bloods and swabs and an ECG (Electrocardiography) tracing of your heart if required.

Please bring with you, your glasses, any questions or concerns you may have, you may find it helpful to write them down before your appointment. We will also need the details of your next of kin, a list of current medications with their strengths and how often you take them.

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Allow enough traveling time to arrive early for your appointment. If you are 15 minutes late for your face-to-face appointment it may be cancelled and we will have to book another date for you. We try to accommodate a late arrival but this cannot always be guaranteed.

A telephone appointment may last for about 30 minutes. This is to assess your past medical history. We may contact you 15 minutes before or after your appointment time. Please make sure you have your accurate height and weight measurements at hand as this is essential and can affect your surgery if not accurate.

What will happen during the procedure?

You will be admitted to a ward at Gloucestershire Royal Hospital or Cheltenham General Hospital. Your procedure will be carried out by a surgeon in an operating theatre.

You will be asked to lie down in a comfortable position on a theatre couch.

The surgeon will either use local anaesthetic to numb the skin, or in some cases a general anaesthetic may be needed so that you are asleep when the AVF is created. The surgeon will then make a small cut to find the artery and vein that has been discussed with you, and will join them together with stitches.

The cut in your skin will be sewn together usually with stitches that dissolve but sometimes with stitches that need to be removed 7 to 10 days after the procedure.

Will the procedure hurt?

The local anaesthetic injection will sting a little to begin with, but this quickly wears off, and the area will soon feel numb. You may feel some pressure as the surgeon performs the procedure, but it will not hurt. Once any numbness wears off after the procedure, the area may feel bruised. Any discomfort from this will be helped by taking pain relief medicine such as paracetamol.

**Patient
Information****How long will the procedure take?**

The whole procedure usually takes up to 60 minutes, but you should expect to be with us for the whole morning or the afternoon.

What will happen after the procedure?

You will go back to the ward and the nurses will carry out regular checks of your fistula. You should be able to go home after lunch or supper.

Before you leave the ward, you will be given written and spoken advice about caring for your fistula. You will also be asked to attend Ward 7b, at Gloucestershire Royal Hospital, for your fistula to be checked. This will be about 4 to 5 days after the procedure.

Are there any complications?

The procedure is usually carried out without any problems. Some minor swelling around the wound is normal. As with any procedure, there is always the risk of an infection in the wound. This can be treated with antibiotics.

You may have some minor bleeding which can usually be stopped by applying gentle pressure on the area. This does not happen very often.

Very rarely, too much blood may go into the vein, in which case the artery and vein will need to be disconnected.

If your fistula is created at the elbow there is a rare complication of steal syndrome following the procedure. Your surgeon will explain this to you at your clinic appointment and before the procedure. The risk of steal syndrome is very rare with wrist fistula.

Not all procedures to make a fistula are successful the first time. If your fistula does not work, the surgeon and your doctor will talk to you about what to do next.

**Patient
Information****Contact information**

We hope that you have found this information leaflet helpful. You should feel that you have received enough information about the procedure before you sign the consent form. If you have any further questions or queries, please do not hesitate to contact the doctors, surgeon or nurses on the numbers below.

Ward 7b

Gloucestershire Royal Hospital
Tel: 0300 422 6768
24 hours

Renal Access Specialist Nurse

Gloucestershire Royal Hospital
Tel: 0300 422 6270
Monday to Friday, 9:00am to 3:00pm

Consultant Vascular Surgeons

Your surgeon can be contacted via their secretary on the numbers below. Please note, you may be asked to leave a message on the answering service; the secretary will aim to return your call within 3 days.

Mr. David Cooper's secretary

Tel: 0300 422 3345
Monday to Friday, 8:00am to 4:00pm

Mr. Sachin Kulkarni's secretary

Consultant Vascular Surgeon
Tel: 0300 422 3355
Monday to Friday, 8:00am to 4:00pm

Ms. Joanna Manson secretary

Consultant Vascular Surgeon
Tel: 0300 422 3330
Monday to Friday, 8:00am to 4:00pm

Patient Information

Further information

Kidney Care UK

3 The Windmills
St. Mary's Close
Alton
GU34 1EF

Tel: 01420 541 424

E-mail: info@kidneycareuk.org

Website: www.kidneycareuk.org

Kidney Patient Guide

E-mail: kpg@pobox.com

Website: www.kidneypatientguide.org.uk

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Making a choice

Shared Decision Making

If you are asked to make a choice, you may have lots of questions that you want to ask. You may also want to talk over your options with your family or friends. It can help to write a list of the questions you want answered and take it to your appointment.



Ask 3 Questions

To begin with, try to make sure you get the answers to three key questions if you are asked to make a choice about your healthcare.

1. What are my options?
2. What are the pros and cons of each option for me?
3. How do I get support to help me make a decision that is right for me?

These resources have been adapted with kind permission from the MAGIC Programme, supported by the Health Foundation.

* Ask 3 Questions is based on Shepherd HL, et al. Three questions that patients can ask to improve the quality of information physicians give about treatment options: A cross-over trial. Patient Education and Counselling, 2011;84: 379-85

AQuA
Advancing Quality Alliance



<https://aqua.nhs.uk/resources/shared-decision-making-case-studies/>