



Planning for your arteriovenous fistula

Information for patients from the Kent Kidney Care Dialysis Access Team

This leaflet will explain the following.

- What an arteriovenous fistula is.
- How it is created and used.
- What the benefits and risks are to having this type of fistula.
- What will happen before and after the operation.
- When the fistula will be ready to use.
- How long it will last for.

We hope this leaflet answers some of the questions you may have. If you have any further questions or concerns, please speak to a member of your healthcare team.

What is an arteriovenous fistula?

An artery and a vein are joined together under the skin by surgery, to create a stronger vein.

An arteriovenous fistula can also be known as an AV fistula, a fistula, or AVF.

Why have I been referred for this procedure?

You are having a fistula created to make your vein stronger. This allows us adequate access to your blood for haemodialysis.

What are the benefits to having an arteriovenous fistula?

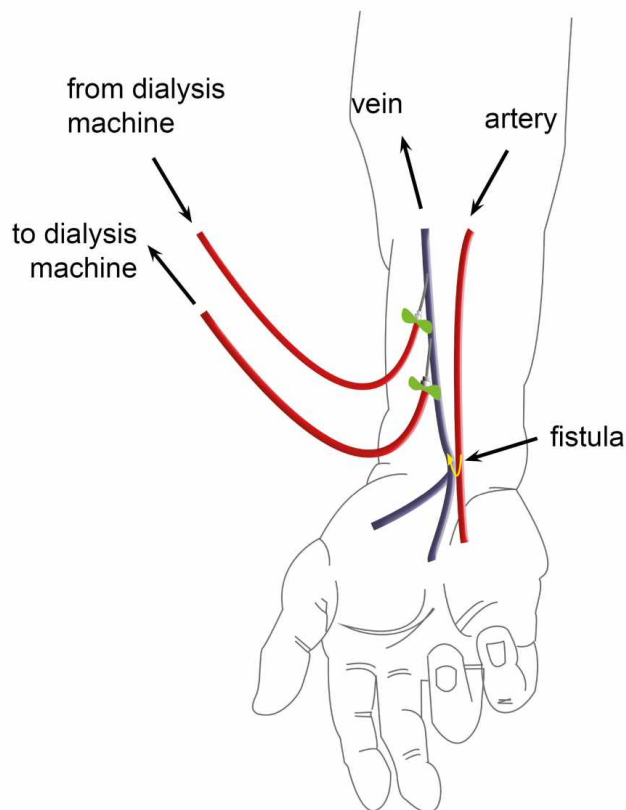
A fistula is the best access for long-term haemodialysis. A successful AVF is less likely to form clots or become infected than other types of access.

Also, fistulae tend to last years longer than any other kind of access.

Compared to central venous catheters (lines), fistulas have reduced risks of infection and complications.

How is a fistula used for dialysis?

The fistula is used for haemodialysis by placing two needles at different places along the fistula. The needles have special tubing attachments. The blood will flow through the first needle out of the body. It then passes through the dialysis machine to clean your blood, and back through the second needle into your body.



How the fistula is used for dialysis

How will I be assessed to plan a fistula?

- You will be sent a clinic appointment to see a vascular surgeon and an access nurse. This appointment will be at one of the following hospitals.
 - Renal Outpatients at Kent and Canterbury Hospital.
 - Outpatients at Queen Elizabeth the Queen Mother (QEQM) Hospital.
 - Renal Unit at Maidstone Hospital.
 - Renal Unit at the William Harvey Hospital.
- Usually the surgeon will perform an ultrasound of your arms during this clinic appointment.
- The surgeon will identify which arm is best to have the fistula. Do not have any of the following procedures on that arm.
 - **Do not use your _____ arm for injections, infusions, and blood tests. Use this arm for dialysis only.**

- A date for your surgery will be agreed with you at a later date.

Will the operation hurt?

- Most fistula procedures are done using **local anaesthetic**. If you have local anaesthetic you will be awake for the procedure but the area will be numbed. You may feel some discomfort for a few days afterwards; we will advise you about pain relief.
- Your surgeon will advise and explain if you need **general anaesthetic** for the surgery. If you have general anaesthetic you will be asleep for the procedure.

How long will I stay in hospital?

- Please refer to your appointment letter for the date and time of your surgery.
- Most fistulas are completed as a day case, so you can go home after your procedure.
- Allow 4 to 5 hours for the whole visit. The procedure normally takes about 1 hour.
- If you are well enough and had a **local anaesthetic**, you will be able to go home several hours after your surgery.
- If you had a **general anaesthetic or block anaesthetic** you may have to stay in hospital overnight. A block anaesthetic is where your whole arm is made numb for several hours.

What will happen when I arrive at hospital?

- This surgery is carried out at the Kent and Canterbury Hospital. You will be told to go to either Marlowe Ward, the Surgical Admissions Lounge, or Day Surgery.
- You will be seen by the access nurse and surgeon. They will explain the procedure and ask you to sign a consent form. Use this time to ask any final questions.
- You will be asked to put on a theatre gown for this procedure. You may want to bring a dressing gown with you to hospital.
- Your appointment letter will explain the following.
 - If you can eat and drink before your operation.
 - If any medication changes are needed, including what to do if you take warfarin tablets.
 - If you need to bring an overnight bag, in case of an overnight stay.
- You may want to bring something to read and a snack for after your surgery.

Why do I need to sign a consent form?

All patients must give permission before they receive any type of:

- medical treatment

- test; or
- examination.

Consent is usually given when you sign the consent form before your treatment. We may ask you to give your consent verbally (spoken rather than written consent).

- You must give your consent voluntarily.
- The hospital must give you all the information you need to make a decision about your treatment. This is so you can give us informed consent. Please speak to staff if:
 - staff have not given you this information; or
 - they have but you still have questions.
- You must be capable of giving consent. This means you understand the information given to you, and can make an informed decision.

When we ask you to give consent, please use this time to ask any questions you may still have. For more information, please go to the **NHS Consent for Treatment** web page.

(<https://www.nhs.uk/conditions/consent-to-treatment/>) Remember, you can withdraw your consent for treatment at any time.

How is a fistula created?

- A fistula is created during a surgical procedure. The surgery is performed by a vascular surgeon in an operating theatre.
- By joining a vein and an artery together, the new connection (fistula) will become a strong vein with a larger flow of blood.
- The pressure of blood is greater inside an artery than inside a vein. So, when the surgeon creates the fistula between the artery and vein, some of the arterial pressure is transferred into the vein.

This increased flow of blood through the vein causes it to enlarge. Once enlarged haemodialysis needles can be inserted.

What will happen after my operation?

- Before you go home the access nurse or renal nurse will see you. You will be advised and given a leaflet on how to care for your fistula and shown how to check it is working.
- A follow-up appointment will be given to you. Please ask if you have any questions.
- Do not drive for at least 3 days after your surgery. You will be told if this time should be increased.

What are the possible complications?

- **Infection** is not common in a fistula. Please tell a nurse or doctor, if you develop:

- pain
- redness; or
- the skin around your fistula becomes hot.

If you have an infection, you may need antibiotics.

- **Thrombosis** (a blood clot) is a common reason for fistulas to fail. If this happens, it is not serious and your doctor or nurse will advise you further.
- **Arterial steal syndrome** is caused by the fistula diverting too much blood into the vein, meaning the hand does not get enough blood supply. The sign of steal syndrome is coldness in the hand / fingers. In mild cases this will be monitored. In more severe cases, your fistula may need to be refashioned surgically.
- **Bleeding** from a fistula is not common. We will advise you what to do if your fistula bleeds after your surgery.

If you have any concerns, please call:

- your Dialysis Unit if you are on dialysis; or
- contact the renal access nurses.

The contact details are at the end of this leaflet.

When is a fistula ready to use?

- How quickly a fistula develops varies. It depends on how good your blood vessels were before your surgery and your general health.
- We will give you a soft ball to squeeze, which will help improve the blood flow through your fistula.
- A fistula is ready (or mature) when the vein has grown large and strong enough to support the dialysis needles. This usually takes around 6 to 8 weeks, but can vary between patients. Your dialysis nurse will check your fistula and tell you when it is mature.

How long will my fistula last?

There is no definite answer to this question.

- Most fistulae work immediately following surgery.
- Fistulae tend to last years longer than any other kind of access.
- A small number of fistulae never work, and you may return from theatre with a failed fistula. Fistulae can fail at any stage, even after years of use. This can happen if you:
 - become ill
 - suffer an episode of low blood pressure

- have direct trauma (a hit or knock) to your fistula
- develop an infection; or
- if something changes how your blood clots.

Contact details

Please feel free to ring us at any time for further information.

- Renal Dialysis Access Nurses, Kent and Canterbury Hospital, Canterbury
Telephone: 01227 864305 (Monday to Friday, 8:30am to 4:30pm)
- Marlowe Ward, Kent and Canterbury Hospital, Canterbury
Telephone: 01227 783100
- Thomas Becket Haemodialysis Unit, Kent and Canterbury Hospital, Canterbury
Telephone: 01227 783047
- Haemodialysis Unit, William Harvey Hospital, Ashford
Telephone: 01233 651872
- Haemodialysis Unit, Queen Elizabeth the Queen Mother (QEQM) Hospital, Margate
Telephone: 01843 225544
- Haemodialysis Unit, Medway Maritime Hospital, Medway
Telephone: 01634 825105
- Haemodialysis Unit, Buckland Hospital, Dover
Telephone: 01304 222695
- Haemodialysis Unit, Maidstone Hospital, Maidstone
Telephone: 01622 225901

Ask 3 Questions

There may be choices to make about your healthcare. Before making any decisions, make sure you get the answers to these three questions:

- What are my choices?
- What is good and bad about each choice?
- How do I get support to help me make a decision that is right for me?

Your healthcare team needs you to tell them what is important to you. It's all about shared decision making.

What do you think of this leaflet?

We welcome feedback, whether positive or negative, as it helps us to improve our care and services.

If you would like to give us feedback about this leaflet, please fill in our short online survey. Either scan the QR code below, or use the web link. We do not record your personal information, unless you provide contact details and would like to talk to us some more.

Giving feedback about this leaflet



<https://www.smartsurvey.co.uk/s/MDOBU4/>

If you would rather talk to someone instead of filling in a survey, please call the Patient Voice Team.

- **Patient Voice Team**

Telephone: 01227 868605

Email (ekhuft.patientvoice@nhs.net)

This leaflet has been produced with and for patients.

Please let us know:

- If you have any accessibility needs; this includes needing a hearing loop or wanting someone to come with you to your appointment.
- If you need an interpreter.
- If you need this information in another format (such as Braille, audio, large print or Easy Read).

You can let us know this by:

- Visiting the Trust web site (<https://www.ekhuft.nhs.uk/ais>).
- Calling the number at the top of your appointment letter.
- Adding this information to the Patient Portal (<https://pp.ekhuft.nhs.uk/login>).
- Telling a member of staff at your next appointment.

Any complaints, comments, concerns or compliments, please speak to a member of your healthcare team. Or contact the Patient Advice and Liaison Service on 01227 783145 or email (ekh-tr.pals@nhs.net).

Patients should not bring large sums of money or valuables into hospital. Please note that East Kent Hospitals accepts no responsibility for the loss or damage to personal property, unless the property has been handed into Trust staff for safe-keeping.

Further patient information leaflets are available via the East Kent Hospitals' web site (<https://www.ekhuft.nhs.uk/patient-information>).

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