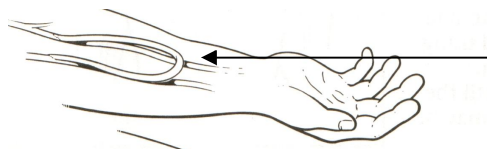


Vascular Access for Hemodialysis

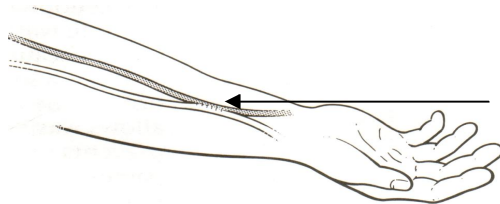


TGH

A guide for you to prepare for vascular access surgery



An AV graft: an artificial vein made out of a synthetic tube inserted under your skin.



An AV fistula: an artery and a vein sewn together

Where does the AV access go on my body?

- Usually, we make the AV fistulas and grafts in your forearm or upper arm. Depending on what is best for you, your surgeon will put the AV graft in as a straight tube or as a "U" shaped loop.
- We use your non-dominant arm whenever possible. This leaves your dominant hand free during your haemodialysis. For example, if you are right handed, we will place your access in your left arm.

Why do I need an AV Access for Hemodialysis Treatment?

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- To have haemodialysis, you need a vein that is easy to find and use. Your AV access becomes the vein that we use for haemodialysis.
- How is Hemodialysis done through my AV Access?
- Before each treatment, your nurse will insert two needles into your fistula or graft. One needle takes the blood from your body to the artificial kidney (dialyzer). This purifies your blood.
- The 2nd needle returns the purified blood back to you.
- Only a small amount of blood (about 4%) is removed from the body at one time during hemodialysis treatment.
- At the end of each treatment, your nurse removes both needles and puts bandages over the place where the needles were put in. You may take the bandages off the day after your treatment.

What do I need to know about my fistula or graft?

1. Your AV fistula will usually take 6 to 8 weeks to mature before it can be used for dialysis.
2. After your staples are removed or about 2 weeks after your surgery, you can strengthen your fistula. To do this, squeeze and release a rubber ball 10 times. Do this 3 - 4 times each day.
Please note: It is not necessary to exercise your AV graft because the graft is already the correct size when it is placed in your arm.
3. We can start using your AV graft for dialysis about 2 weeks after your surgery. We can use it for dialysis as soon as the swelling from your operation has gone.

Helping you get ready for your surgery

Your clinic appointment

- Your surgeon will check your arms and decide what type of vascular access device we will put in. There are 2 types- an AV fistula or an AV graft.
- After you talk to your surgeon about the type of access, you will be asked to sign a consent form. This gives us your permission to do the surgery at a later date.

- Our Vascular Access Co-ordinator will then talk to you about caring for your fistula or graft. We will tell you what to expect before and after surgery and talk to you about the potential complications that can happen.

Your Pre-Admission Visit

On the same day as your clinic appointment, you will also go to the Preadmission clinic. Here you will:

- have blood tests and an ECG to get you ready for your surgery
- talk to one of our nurses
- see an anaesthetist for an anaesthetic consultation
- if you are diabetic, see an endocrinologist

Anaesthetist Consultation

- During your visit with the anaesthetist, you will talk about your health. The anaesthetist will also talk to you about the anaesthetist that is best for you during your surgery. You will either have a **general anaesthetist** where you go to sleep during the procedure. Or you will have a **local anaesthetist** (freezing to the area that you are having surgery) and some sedation (medication to help you relax and be comfortable during your surgery).
- If you talked to your surgeon about this already, please tell the anaesthetist.
- **Please tell the anaesthetist if you are taking any blood thinning medication (Coumadin or aspirin®).** This is really important. The anaesthetist may tell you to stop taking this medication before surgery. This is to prevent bleeding after surgery.

The Night Before Your Surgery

Please do not eat or drink anything after midnight, or your surgery will be cancelled.

You may take your pills in the morning with a sip of water (except blood thinning medication & insulin if you are diabetic).

Day of Surgery

Please come to the Surgical Admission Unit (SAU) at: _____.
Your operation will be done at _____.

The SAU is located on 2 North - Norman Urquhart Building.



You can take the East or West elevators to get here.
You may bring 2 family members with you to this area. They can stay with you until you go into surgery.

We will help you finish getting ready for surgery. The nurses will:

- Help you change into a hospital gown
- Check your blood pressure
- Take some blood to check your potassium count.
- Complete our surgical checklist

Who should I call if I have questions?

Call:

Vascular Access Co-ordinator or Hemodialysis Unit

(416) 340-4800Ext. 3518

(416) 340 - 5707

(416) 340 - 4072

After hours:

Come to the Toronto General Hospital Emergency department if you think you have an infection.