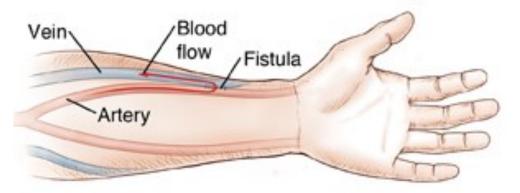
# Arteriovenous Fistula





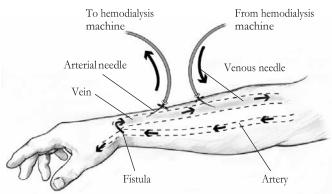




#### What is an Arteriovenous Fistula?

An Arteriovenous (AV) fistula is a connection of an artery to a vein. Arteries carry blood from the heart to the body, while veins carry blood from the body back to the heart. A Vascular surgeons performs the AV fistula, they specialize in blood vessel surgery. The surgeon usually places an AV fistula in the forearm or upper arm.

An AV fistula causes extra pressure and extra blood to flow into the vein, making it grow large and strong. The larger vein provides easy, reliable access to blood vessels. Without this kind of access, regular hemodialysis sessions would not be possible. Untreated veins cannot withstand repeated needle insertions. They would collapse the way a straw collapses under strong suction.



Why an Arteriovenous Fistula?

Health care providers recommend an AV fistula over the other types of access because it provides good blood flow for dialysis lasts longer than other types of access is less likely to get infected or cause blood clots than other types of access.

#### **Before the operation**

Before AV fistula surgery, the surgeon may perform a vessel mapping test. Vessel mapping uses Doppler ultrasound to evaluate blood vessels that the surgeon may use to make the AV fistula. Ultrasound uses a device, called a transducer, that bounces safe, painless sound waves off organs to create an image of their structure. A specially trained technician performs the procedure in the outpatient department. A radiologist—a doctor who specializes in medical imaging— interprets the images. The patient does not need anesthesia. A Doppler ultrasound shows how much and how quickly blood flows through arteries and veins so the surgeon can select the best blood vessels to use.

### The procedure

A surgeon performs AV fistula surgery in the inpatient department. The vascular access procedure may require an overnight stay in the hospital; however, many patients may go home the next day. A health care provider uses local, locoregional or general anesthesia to numb the area where the surgeon creates the AV fistula.

An AV fistula frequently requires 2 to 3 months to develop, or mature, before the patient can use it for hemodialysis.

### After the procedure

- Check for fistula function at least twice a day. This is done by placing 2 fingers over the operation site and feeling for a "buzz" sensation.
- Keep skin clean. Check for signs of infection swelling, redness, and soreness.
- Exercise fistula arm to help improve the blood flow squeeze a squash ball 10 times an hour at least 48hrs after the operation.
- Elevate the arm if swelling is present after the operation.
- Do not restrict the blood flow to your fistula. Avoid wearing watches, jewelry and tight sleeves on arm.
- Do not sleep or put pressure on your fistula arm.
- Do not lift heavy (more than 1kg) objects for 6 weeks.
- Do not allow blood pressure, blood sampling and IV cannula insertion on the fistula arm.

## **Contact information**

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