Dialysis Fistula and Graft Assessment/Intervention

WHY IS THIS TEST DONE:
There are two types of permanent vascular access for dialysis: arteriovenous (AV) fistula and arteriovenous (AV) graft. A surgeon creates an AV fistula by connecting an artery directly to a vein, most commonly in the forearm. Alternatively, a surgeon creates an AV graft by connecting an artery to a vein using a synthetic tube or graft. Sometimes the blood flow from an AV fistula or AV graft becomes too low due to a narrowing, a blood clot, or the formation of a collateral (accessory) blood vessel that is diverting blood flow. An interventional radiologist can correct these problems with fistula intervention or graft intervention.

WHAT TO EXPECT:
The patient will arrive at the hospital and enter at the main entrance. The patient will report in to register and review insurance. The patient should have a copy of the orders as a precaution. The patient will be brought back to the department where we will confirm the patient’s identity, explain the procedure, and review their history.

Using live X-ray (fluoroscopy) for guidance, the doctor will insert a catheter (a tiny tube) into a vein or artery, usually in the arm or leg, and guide it to the fistula or graft.

Then one of three things will happen:

• For a narrowing, the doctor will thread a small, deflated balloon through the catheter into the narrowing and then slowly inflate the balloon to widen the narrowing. Sometimes more than one balloon is used.

• For a blood clot, the catheter will be connected to a small machine that sprays a saline solution onto the clot to break it up, and then suctions out the pieces of the clot. The procedure may need to be repeated.
• For a collateral blood vessel, the doctor will thread a tiny metal coil through the catheter and place it in the vessel. This will block blood from flowing into the collateral blood vessel, restoring the full flow of blood into the graft or fistula. Sometimes more than one coil is placed.

HOW LONG WILL IT TAKE?
The exam itself can take from one to three hours. You will need to arrive one hour before the scheduled time for any pre-testing if necessary. You may be required to stay for 30 minutes to one hour after the exam for observation.

PREPARATION:
If the patient was given an order (prescription) for the exam, they must have that with them at the time of the exam. Patients should expect to receive instructions from radiology nurse 1 or 2 days prior to procedure. Please follow instructions exactly.

PRECAUTIONS:
The precautions of the actual procedure will be discussed with the Pediatric Radiologist. Contact us immediately if your child experiences any of the following:

• Weakness, numbness or swelling of the treated arm or leg
• Fever higher than 101° Fahrenheit
• Bleeding or drainage, such as pus, from the site

Monday through Friday, call EPCH radiology department at (915) 242-8510. After hours, you may call EPCH emergency department at (915) 298-5443.

CONTRAINDICATIONS:
Please notify your physician and the Imaging staff if you have any allergies, especially to local anesthetics such as lidocaine.

MEDICATION ISSUES:
Patient should avoid taking anti-inflammatory medication 24-48 hours prior to procedure (ex: Advil, Motrin, ibuprofen, Aleve, naproxyn, etc.), aspirin, plavix, coumadin, or any other blood thinners should be stopped prior to exam. Please be sure to discuss discontinuation or prescribed medications with your physician, they will tell you how many days prior to the procedure to discontinue you medications. Do not discontinue medications without consulting with your physician first.