Information About Your Child’s Procedure

Assessment and Intervention of Hemodialysis Fistula and Graft

Read this form so you understand the procedure and its risks. Please ask questions about anything you do not understand.

What is a dialysis fistula intervention or dialysis graft intervention?

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.

How is the procedure performed?

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.

What risks are associated with the procedure?
The procedure is considered low-risk. However, potential complications include:

• bleeding
• infection
• injury to the artery and/or vein
• contrast reaction (allergic reaction to X-ray dye)
• pulmonary embolus (blood clot in the lung)

Will my child be awake for the procedure?
No. Depending on your child’s medical history, we will give either intravenous (IV) sedation or general anesthesia.

What happens after the procedure?
Your child will be taken to a recovery room and in some cases may be admitted to the hospital for observation. Your child might have some mild discomfort; you may give over-the-counter pain medication if permitted by your primary physician.
When can my child bathe?
The bandage must stay dry and in place for 48 hours. You may sponge-bathe your child during this time, as long as the bandage stays dry. After 48 hours you may remove the clear bandage and gauze and your child can take a shower or a bath, as long as the site isn’t immersed in water. Leave the Steri-Strips® (white strips) in place. Do not immerse the site in water until the Steri-Strips fall off. If they haven’t fallen off after seven days, you may remove them.

Are there any activity restrictions?
Your child may return to normal activity as tolerated.

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

Call Interventional Radiology between 8 a.m. and 4:30 p.m., Monday through Friday, at 215-590-7000. At the first prompt push 1, and at the second prompt push 2. At all other times, call 215-590-1000 and ask to speak to the interventional radiologist on call.

The Interventional Radiology team is here to help you and your child. Please ask us if you have any questions or if anything is not clear.

Thank you!
The Children’s Hospital of Philadelphia®
Hope lives here.®

34th Street and Civic Center Boulevard, Philadelphia, PA 19104-4399
1-800 TRY CHOP  www.chop.edu

Founded in 1855, The Children’s Hospital of Philadelphia is the birthplace of pediatric medicine in America. Throughout its history, a passionate spirit of innovation has driven this renowned institution to pursue scientific discovery, establish the highest standards of patient care, train future leaders in pediatrics, and advocate for children’s health. A haven of hope for children and families worldwide, CHOP is a nonprofit charitable organization that relies on the generous support of its donors to continue to set the global standard for pediatric care.

The Children’s Hospital of Philadelphia, Hope lives here and the CHOP logo are registered marks of The Children’s Hospital of Philadelphia.

Keep the connection.

©2014 The Children’s Hospital of Philadelphia, All Rights Reserved.