Information About Your Child’s Procedure

Tunneled Central Line Placement and Removal (apheresis, BROVIAC® and dialysis catheters)

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

What is a tunneled central line?
A tunneled central line is a catheter (a thin tube) that is placed in a vein for long-term use. It is most commonly placed in the neck (internal jugular) but may also be placed in the groin (femoral), liver (transhepatic), chest (subclavian) or back (translumbar). The catheter is tunneled under the skin. It has a cuff attached to it that allows tissue and skin to grow around it, giving the line more stability.

What is a tunneled central line used for?
Tunneled central lines are used when we need access to a vein over a long period of time (anywhere from two weeks to several months). Some medications can’t be given through regular IV lines and require frequent, painful needle insertions. A tunneled central line is a more comfortable way for the patient to receive medications such as chemotherapy or nutrition and fluids, and also allows the medical team to obtain blood samples without placing a new IV.
How is a tunneled central line inserted?
Using ultrasound and live X-ray (fluoroscopy) for guidance, the doctor will insert the catheter into a vein, usually in the neck, and thread it into the large vein that carries blood into the heart. The other end of the catheter is tunneled under the skin and exits from the side of the chest.

Your child will be protected by an X-ray shield during the procedure.

Will my child be awake during the procedure?
No. The procedure will be performed with IV sedation or general anesthesia.

Will my child feel any pain?
After the procedure, some children may feel mild discomfort around the site for several days.

How long does the procedure take?
One hour.

What risks are associated with this procedure?
This procedure is considered low-risk. However, potential complications include:
- bleeding
- infection
- puncture of adjacent structures (such as other veins or arteries)
- air embolism (air in the veins)
- collapse of the lung (pneumothorax)
- bleeding into the chest (hemothorax)
- catheter breakage (when it is being removed)
- allergic reaction to X-ray dye (contrast reaction)
When can I remove the bandages?

Your child will have two bandages, one over the insertion site (usually at the neck), and one over the catheter at the exit site (usually on the side of the chest). After 48 hours you may remove part of the bandage at the insertion site. Take off the gauze and the clear bandage. The Steri-Strips® (white strips) shouldn't be removed. They will fall off on their own in one or two weeks.

The bandage over the catheter must remain clean and dry at all times. It should be changed once a week. The bandage may be changed at appointments or family members may change it at home if they have been trained to do so. Do not remove the bandage if you have not been trained.

When can my child bathe after the catheter is placed?

Your child shouldn't take a shower or bath for 48 hours, until you have removed the bandage at the insertion site.

After that, your child may shower or bathe with the catheter-site bandage in place. If showering, your child should face away from the spray so water does not hit the catheter directly. If taking a bath, keep the bandage above the water. The clear tape is water-resistant, but not waterproof.

Are there any activity restrictions?

After the tunneled central line is inserted, your child will be able to resume most activities, including day care or school. Your child should be discouraged from activities, such as contact sports and rough playing, which may result in a pull to the line and lead to damage or loss of the catheter. If you have questions about which activities are OK, please ask your child's doctor.
How is a tunneled central line removed?
The procedure is performed with IV sedation or general anesthesia. Local numbing medicine will be injected into the skin around the catheter exit site (usually on the chest). The tissue will be loosened and the catheter removed.

When can I remove the bandage after the catheter is removed?
The bandage must stay in place for 48 hours. Then you may remove the gauze and clear bandage. The Steri-Strips (white strips) should not be removed. It is safe for the incision to be open to air while the Steri-Strips are falling off. If the Steri-Strips haven’t fallen off after seven days, you may remove them.

Once the incision has healed and the Steri-Strips have fallen off, there is no need to place any type of dressing or covering over the site.

When can my child bathe after the tunneled central line is removed?
Your child shouldn’t take a shower or bath for 48 hours, until you have removed the gauze and clear tape. After that baths and showers are OK. If showering, your child should face away from the spray so water does not hit the site directly. If taking a bath, your child should keep the site above the water. Once the Steri-Strips have fallen off your child may shower or bathe as usual.

Tunneled central lines are used when we need access to a vein over a long period of time (anywhere from two weeks to several months).
CONTACT US IMMEDIATELY IF YOUR CHILD EXPERIENCES ANY OF THE FOLLOWING:

- bleeding or drainage (such as pus) from the incision sites
- redness at the incision sites
- fever higher than 101°F Fahrenheit
- catheter becomes dislodged or damaged

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!