Preventing infections with your child's hemodialysis catheter



What is a hemodialysis catheter?

A hemodialysis catheter is a special type of I.V. (intravenous) line. It is:

- A long, thin, flexible plastic tube.
- Placed in the chest, neck or leg. The end of the line often lies near the heart in one of the body's large veins. Since it is so close to the heart, it is important for your child's safety to take good care of the catheter.
- Sometimes called by other names, such as a central venous access device (CVAD), central venous catheter, CVL, Permcath or Vascath.
- Used as a way to get your child's blood to the dialysis machine so it can be cleaned and returned to the body.

The catheter can get infected with germs. If this happens, your child may need treatment with medicines called antibiotics.

- Sometimes antibiotics do not work as expected. This can make the infection hard to treat.
- Sometimes the line may need to be removed, replaced or repaired.

How can I help prevent infection?

We invite you to partner with us in your child's care. Let us know if you have questions or concerns. Some things you can do to help prevent infection are listed on pages 1 and 2.

Clean your hands

- Hand hygiene is the most important thing you can do to help prevent infection. You can use soap and water or an alcohol-based gel or foam hand cleaner.
- Remind doctors, nurses and other care team members to clean their hands when entering the room and before touching your child.
- Remind visitors to clean their hands when entering the room and before touching your child.

Protect the line

- Keep your child from playing with the line.
- Keep the line dry.
 - Wait until the doctor tells you it is OK to give your child a bath.
 - Your child should avoid swimming and taking showers.
- Do not change the catheter dressing at home. If needed, reinforce it with dressing items the dialysis team gives to you.
- Have a Children's nurse change the dressing if it:
 - Gets wet.
 - Gets dirty.

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- Is loose (edges are coming up or dressing is not sticking to the skin).
- Falls off.
- Protect the end of the line.
 - Do not let it get dirty.
 - Secure it as high on the body as possible.
 - Keep the line and tubing away from dirty areas like:
 - Water, especially bath water.
 - Diaper areas.
 - Your child's mouth.
 - Never remove caps at the end of the catheter.

Watch for problems

When your child is in the hospital, tell the care team if you think something is wrong with the line. At home, call your child's doctor for any problems. This could include:

- Redness, swelling, tenderness, pain or drainage at the catheter site.
- Blood in the catheter tubing.
- Catheter dressing coming loose or pulling away from the skin.
- Itching under the dressing.
- Any part of the catheter tubing coming loose or apart.
- Any cracks or holes in the catheter.
- Wet clothes or bedding from the catheter leaking.

Also call the doctor if your child:

- Has a fever (temperature of 100.4°F or higher) or chills.
- Feels weak and sick.

What does the care team do to help prevent infection?

To help prevent infection in your child's catheter, you may see the care team doing some things listed below.

When the line is first put in, the care team will:

- Use sterile technique. This means they wear a sterile gown, sterile gloves, a cap and a mask as they put in the line. They may also wear eye protection.
- Clean your child's skin with an antiseptic and then cover it with a sterile drape.

When they provide line care, the care team will:

- Clean their hands before touching the line.
- Change the dressing using sterile technique on a schedule.
- Clean the connections of the I.V. line and tubing with an antiseptic when they:

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.

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- Flush the line.
- Draw blood.
- Give I.V. medicines.
- Hang I.V. fluids.
- Change the tubing.

When should I take my child to the emergency department (ED)?

Take your child to the ED if your child has any of these:

- Fever of 100.4°F or higher
- Feelings of weakness or sickness
- Crack or hole in the catheter
- Drainage or bleeding at the catheter site
- The dressing:
 - Gets wet.
 - Gets dirty.
 - Is loose (edges are coming up or dressing is not sticking to the skin).
 - Falls off.
- The end cap is missing

Call your child's doctor if you have any questions or concerns about your child's catheter or how your child looks or feels.

This teaching sheet contains general information only. Talk with your child's doctor or a member of your child's healthcare team about specific care of your child.

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.