Peripheral Nerve Catheter (PNC) and Pump for Pain Control

The doctor or health care provider has placed a flexible tube (catheter) under your child’s skin to help control pain. The tube is called a peripheral nerve catheter (PNC). One end of the tube is under the skin around the nerves and the other end is attached to a pump (Picture 1). The catheter is placed during your child’s surgery while they’re asleep or under sedation in the operating room.

The pump is filled with numbing medicine. The medicine goes through the tube and numbs the nerves that send pain signals from the area of surgery to the brain. This blocks the feeling of pain. The medicine from the pump may be enough to manage the pain. Your child may need to take other pain medicine ordered if needed.

Common Side Effects

The medicine may make the arm or leg weak, heavy, or tingly and numb. The feeling will go away after the numbing medicine wears off. Your child may not be able to move the area for 1 to 2 days after surgery.

Protect the arm or leg from injury during this time. Have your child test their arm or leg before using it or putting weight on it.

When the numbness wears off, there may be more pain.
How the Pump Works

• The catheter is connected by tubing to a pump. The pump gives your child a constant infusion of pain medicine.

• The doctor or health care provider will set the pump at a time and rate that is right for your child. **Do not change the pump in any way!** This could change the ordered rate and dose that keeps your child from getting too much medicine. Your child could overdose if anyone other than a doctor or health care provider changes the pump.

• Your child will be given a small pouch to wear to hold the pump.

• The pump will give medicine for up to 7 days.

• If you are at the hospital with a PNC, the nurse may change the bag if more medicine is needed. If you are home with a PNC, remove the tube and throw away the pump and the tube.

Warning

• The infusion tubing can get wrapped around a child’s neck. This can lead to choking (strangulation) or death.

• DO NOT leave the infusion tubing where infants or children can get tangled up in it.

• Talk to your child's health care provider or doctor:
  — If your child has been tangled in their tubing before.
  — To learn the steps to take to help make sure the tubing does not get wrapped around your child’s neck, such as keeping the tubing away from the child as much as possible.
  — Any other concerns you may have about the risk of strangulation from infusion tubing.

• **If your child is injured by the infusion tubing, please report the event to the FDA.** Your report can provide information that helps improve patient safety. The website to make a report is:
  https://www.accessdata.fda.gov/scripts/medwatch/index.cfm?action=reporting.home
Skin Care

- A clear bandage will be placed on the tube to keep it clean and in place. Keep the bandage in place as long as your child has a PNC. Keep it clean and dry.

- **If the tube comes out, it cannot be put back in.**

- Your child must only take sponge baths while they have the PNC. Gently pat the clear dressing dry if it gets wet.

- Your child may lie on the arm or leg in which the catheter is placed. Do not pull on the catheter so that it does not come out.

Care of the Pump

- Keep the pump dry.

- Be sure the white clamp on the tube near the pump is open.

- The bag will need to be taken everywhere with the patient.

Removing the Tube

Removing the tube will be different depending on if you are at the hospital (inpatient) or at home (outpatient).

**For an inpatient PNC:**

1. The Pain Team nurse or doctor will remove your child’s catheter. They will remove the clear bandage. Then, holding the tube close to the skin, they will gently pull it out.

2. A Band-Aid® or other covering will be placed over the site where the tube was removed.

3. Wash your hands and remove the Band-Aid® the next day. Look at the area for any redness, swelling, or drainage.

**For an outpatient PNC:**

1. Wash your hands with warm water and soap for at least 15 seconds. Rinse with water and towel dry.

2. Remove the clear bandage by peeling back 1 edge. Loosen it around the site where the tube goes into the skin.
3. Hold the tube close to the skin, and gently pull. The tube should come out easily. The end of the tube has a black tip, so you know it is out all the way. Do not cut the tube for any reason.

4. Place a Band-Aid® or other covering over the site where the tube was removed.

5. Throw the tube, pump, and dressing away in a trash bag.

6. Wash your hands again with warm water and soap. Rinse and towel dry.

7. Remove the Band-Aid® the next day and look at the area for any redness, swelling, or drainage.

**When to Call the Doctor**

It is common to have a small amount of fluid leak from the tube site. Call the doctor or health care provider if:

- The tube comes out of the skin
- The fluid leaking from the site is cloudy or has color
- The bandage where the tube goes into the skin is so wet or starts to come off
- There is redness, pain, or warmth at the site where the tube goes into the skin
- Your child has:
  - Numbness around the lips
  - Ringing in the ears
  - Metal taste in the mouth
  - Blurred vision or dizziness
  - Fever higher than 102° Fahrenheit (F) or 38.9° Celsius (C) by mouth

If you have questions about the tube or pump, please call (614) 690-1715. After you hear the tone, enter your phone number by pressing the number keys. The pain nurse or doctor will call you back at the number you entered.