Patient Controlled Analgesia (PCA)

What is Patient Controlled Analgesia (PCA)?
PCA is a way to give pain medicine to your child. It is often used to treat pain after surgery. It may also be used for pain caused by other medical conditions.

Our goal at Children’s Hospital of Wisconsin is to keep your child safe and as comfortable as possible. Please talk to your child’s nurse about your child’s level of comfort.

The goal of PCA is comfort. PCA may not take away all of your child’s pain. Some pain is normal with some activities such as moving or coughing.

How does it work?
A PCA pump is a special machine that lets patients safely give themselves pain medicine. There are different kinds of PCA pumps, but they all work in the same way:

- When your child has pain, your child can push a button to get a small amount of medicine (dose) through the IV (intravenous) line.
- A timer lets pain medicine be given only after a specific amount of time has passed. Most often it is about 6 to 10 minutes. This keeps your child from getting too much medicine.
- A PCA pump can also be set to give a steady amount of pain medicine. This is called a background infusion or basal rate. Your nurse and doctor will use the term, basal rate.

Your child’s doctor will decide how much pain medicine your child needs. The amount given through the PCA will be changed as needed. It is based on your child’s weight, level of pain, the amount of pain relief the PCA is giving, and how much sedation your child has. It may be increased to make your child more comfortable. As your child improves and has less pain, the amount will be slowly decreased.

Why use PCA?
Pain can be very different for everyone, even with the same illness or after the same surgery. The amount of pain can also change from one time of day to another. PCA lets a child control the amount of medicine by pushing the button as needed.

PCA can:

- Give your child more control over pain. It can treat pain faster than other ways of giving pain medicine.
- Provide safe and steady control of pain by giving smaller doses, more often.
- Decrease some of the side effects that pain medicine can cause, such as an upset stomach and drowsiness.
- Help your child be more active.
Is PCA safe?

When used as directed, PCA is very safe. The pump will only give the amount of medicine your child’s doctor has prescribed and only as often as prescribed. If the button is pushed more often than the timer allows, the dose of medicine will not be given again. If your child pushes the button again after the right amount of time has gone by, your child will get a dose of medicine. The nurse will monitor your child often to make sure your child is safe and comfortable.

Only your child should push the button, unless you or your child’s nurse has been instructed to do so by your child’s doctor. Siblings and other children should never play with or push the PCA button.

Parent or Nurse Controlled PCA (PNCA)

The goal of PNCA is comfort. PNCA may not take away all of your child’s pain. Some pain is normal with some activities such as moving or coughing.

If your child cannot push the PCA button, your doctor may let you push the button for your child. If your child’s doctor has talked with you, these are the rules you need to follow:

- It is very important that you never push the PCA button when your child is asleep. Giving your child more medicine while sleeping is very dangerous. It may cause your child to need oxygen, have problems breathing, or even stop breathing.
- You may safely push the button only when your child is awake and uncomfortable. Only use the button if your child is in pain.
- Before pushing the PCA button for your child, check to be sure your child is in pain and is not asleep. If you need help, ask your nurse.
- Only one parent at a time should be responsible for pushing the PCA button.
- Never let anyone play with or push the PCA button for your child.
- If your child’s doctor or nurse has not told you how to use the PCA, you may not push your child’s PCA button.

**ALERT:** Call your child’s doctor or nurse if you have any questions or concerns or if your child:

- Is not getting enough pain relief.
- Has any side effects from the medicine. Side effects include sleeping too much, itching, nausea or vomiting.
- Is having trouble using the PCA pump.
- Has special health care needs that were not covered by this information.

This teaching sheet is meant to help you care for your child. It does not take the place of medical care. Talk with your healthcare provider for diagnosis, treatment, and follow-up.