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# PCA (Patient-Controlled Analgesia)

## What is PCA?

The letters PCA mean patient-controlled analgesia. The PCA pump is a machine that quickly delivers a pre-set amount of pain medicine into your child's IV line by a push of a button. When your child feels uncomfortable and needs more pain medicine they can push the PCA button. In this way the patient controls how much pain medicine they receive.

## How is the pump used?

When your child pushes the button, they receive a dose of pain medicine the medical provider determined based on your child's weight and medical history. The medical team can change the dose to an amount that works well for your child.

## What pain medicine will my child receive?

Medicines given by PCA are opiates (pain medicine). They can be natural or synthetic drugs. Morphine is often the medicine used, but other medicines are sometimes used. This depends on your child's medical history and condition.

## How does this medicine work?

Opiates work by binding to receptor cells in the nervous system to block the pain message to the brain. Your child can press the button to give a small dose of pain medicine when they begin to hurt. Your child may also be given a small constant amount of pain medicine continuously by the pump. It is important that **only** your child presses the button; otherwise, too much medicine could be given. Your child's body will be the guide.

## How long will my child use the PCA?

It depends on your child's condition. After a surgery it is common to be on PCA until they are able to take pain medicine by mouth. As your child's condition improves, their pain will decrease. You may find that your child may need to press the PCA button less often when they feel better. The dose of pain medicine is gradually decreased until the pump is no longer needed and/or your child is able to take pain medicine by mouth.

## Are there side effects?

Side effects can occur with any medicine. Pain medicine can cause:

- Itching

### To Learn More

- Pain Medicine Services  
206-987-2704
- Ask your child's nurse or doctor
- [www.seattlechildrens.org](http://www.seattlechildrens.org)

### Free Interpreter Services

- In the hospital, ask your child's nurse.
- From outside the hospital, call the toll-free Family Interpreting Line 1-866-583-1527. Tell the interpreter the name or extension you need.
- For Deaf and hard of hearing callers  
206-987-2280 (TTY)

- Nausea and vomiting
- Inability to urinate
- Drowsiness and slowed breathing
- Slowing of the bowel and constipation

The nurses will check your child often for any side effects. They will also check your child's breathing and heart rate. Medicines are ordered to help with side effects if they occur.

### What is my role?

Let the nurses and doctors know if:

- Your child is hurting
- Your child itches or feels like vomiting
- Your child is too sleepy

### How will my child know when to push the PCA button?

Your child will be told how to use the PCA pump. It is important that your child knows to push the PCA button when they first begin to feel some discomfort and then to wait a few minutes to see if the dose of medicine helped to relieve the pain. If the pain is not relieved, your child should press the PCA button again. If your child is not able to maintain a level of comfort that is acceptable, especially with deep breathing and walking, let the nurse know. The nurse may give a prescribed breakthrough (extra) dose of pain medicine or increase the dose on the pump.

### Can my child give too much medicine?

The PCA pump is programmed with a safe hourly limit and safe time between doses. Your child cannot overdose by pressing the button too often. But it is **very important** that no one else (not even you!) pushes the button for your child. Let your child be the guide.

### Questions?

All members of the team are here to help your child be comfortable. When a child has a PCA pump, someone from the Pain Medicine Service or the general surgeon visits daily to make sure that the amount of pain medicine is just right to keep your child comfortable. If you have questions, or would like to speak with a Pain Medicine Service team member, ask your child's nurse.