

Patient Controlled Analgesia (PCA)

The staff of Nationwide Children's Hospital wants to make your stay as comfortable as possible. If you are having pain, we want to help you relieve it. One way to *lessen* the pain is to use a PCA pump (Picture 1). PCA stands for Patient Controlled Analgesia. Analgesia (an-el-GEEZ-ee-a) means "relief of pain." The PCA pump lets you give yourself pain medicine within the limits set by your doctor. Your pain medicine and the PCA pump are monitored by your doctor and other health professionals who specialize in treating pain.

The PCA Pump

You are the person who knows best how much pain you have. The PCA pump gives you control of the pain medicine to relieve your pain. A PCA pump is a programmable machine that contains a syringe of pain medicine. The tubing from the PCA pump is connected to your IV line. When you feel pain, you press a button and a small amount of medicine goes from the syringe through your IV and into your blood. The medicine should decrease the amount of pain within a few minutes. If your pain is not relieved or if the pain comes back, you can push the button again.



Picture 1 You control your pain with the PCA pump.

How the PCA Pump Works

The PCA Pump has many safety features that keep you from getting too much pain medicine. Some of these safety features are:

- The syringe of medicine and the power button are locked inside the PCA pump.
- The amount of medicine you receive each time you press the button is ordered by the doctor. This amount is programmed into the PCA pump. It can only be changed by the doctors or nurses using a security code.
- The doctor prescribes how much pain medicine you receive in each dose and how often the pump will give you a dose. The total dose you can give yourself is kept within safe limits.
- **Only you (the patient) are allowed to push the button.**

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How the PCA Pump Works, continued

- When the medicine is almost gone, you will hear an alarm beeping on the machine. When the medicine is all gone, the alarm will stay on until a new syringe is placed in the PCA pump.
- If the pump is not working right, it will stop infusing and an alarm will sound.
- The PCA pump automatically records information about how often you wanted the medicine and how much you received. The nurse records this information so that the doctor can make changes if needed.
- A videotape about PCA is available. If you'd like to watch it, please ask your nurse.

When Should You Use PCA?

- Press the button on the PCA pump when you have pain. Enough medicine should be released to relieve the pain, but not enough to make you too drowsy.
- **Whenever** you start to hurt again, **press** the button.
- Since you know when you are hurting, **you are the only one** who should press the button. The nurses and your parents should **NOT** push the button.
- If your medicine doesn't seem to be helping your pain, let your nurse know. Sometimes the amount or type of medicine you receive may need to be changed. Sometimes you may need to have pain medicine given continuously.
- When you are not hurting as much and can take medicine by mouth (pills or liquid), the PCA Pump may be stopped.

Side Effects of Pain Medication

- **Itching**: This can be common with pain medication. Your nurse can give you other medicines to help decrease this.
- **Nausea**: Let your nurse know so that medication can be given.
- **Trouble urinating**: This is not as common. The nurse and doctors will be keeping track of how much you are urinating.
- **Excessive sedation**: The medication may cause you to be very sleepy or sleep too much. If the increased sleepiness interferes with normal daily activities (such as physical therapy, school, child life, etc.) the doctors may want to make changes to your medicines.
- **Respiratory depression**: This may occur along with excessive sedation. It is the most serious concern. The medicine may make your breathing slower or more shallow than normal. Due to this concern, the nurses will be monitoring you often while you are receiving this medicine.