Nurse Controlled Analgesia (NCA)

The staff of Nationwide Children's Hospital wants to make your child’s stay as comfortable as possible. If your child is having pain, we want to help you relieve it. One way to lessen the pain is to use an NCA, Nurse Controlled Analgesia Pump (Picture 1). Analgesia (an el GEEZ ee a) means "relief of pain."

The NCA Pump

The NCA pump lets the nurse give your child pain medicine within the limits set by his or her doctor. The pain medicine and the NCA pump are closely watched by the doctor and other health professionals who specialize in treating pain.

An NCA pump is a machine that contains a syringe of pain medicine. It can be programmed to deliver the medicine. The tubing from the NCA pump is attached to your child’s IV line. When your child feels pain, the nurse presses a button and a set amount of medicine goes from the syringe through the IV and into your child’s blood.

How the NCA Pump Works

The NCA pump has many safety features that keep your child from getting too much pain medicine. Some of these safety features are:

- The nurse is the ONLY person who is allowed to push the button. **Parents and visitors must NOT press the button.** Please tell the nurse if you think your child is in pain.

- The amount of medicine your child receives each time the button is pressed is ordered by a pain specialist. This amount is programmed into the NCA pump. It can be changed only by the doctors or nurses using a security code.

- The NCA pump lets the nurse give your child medicine to help decrease the pain. The nurse will first check your child’s breathing and alertness before giving the pain medicine. The doctor prescribes how much pain medicine is given in each dose and how often the pump will give your child a dose. The total dose your child can have is kept within safe limits.

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How the NCA Pump Works, continued

- When the button is pushed on the pump, a small amount of pain medicine goes into your child’s IV. This should make the pain less within a few minutes.
- There will be another solution going into the IV. This is to make sure your child gets all the medicine.
- The syringe of medicine is locked inside the NCA pump.
- The NCA pump automatically keeps track of how often your nurse pushed the button and how much medicine was received. The nurse records this information so that the pain specialist can make changes if needed.
- When your child is not hurting as much and he or she can take medicine by mouth (pills or liquid), the NCA pump may be stopped and your child will be given medicines to take by mouth for pain.
- If the medicine does not seem to be helping the pain, let your nurse know. Sometimes the amount or type of medicine your child receives may need to be changed.
- If the syringe of pain medicine is almost empty, you will hear an alarm on the NCA pump. This alerts the nurses to replace the syringe.

Side Effects of Pain Medicine

- **Itching:** This can be common with pain medicine. Your nurse can give other medicines to help decrease this.
- **Nausea:** Let your nurse know so medicine can be given.
- **Trouble passing urine:** (This is not as common.) The nurse and doctors will be keeping track of how much your child is urinating.
- **Too much sedation:** Feeling too sleepy or sleeping too much. Increased sleepiness that interferes with normal daily activities (physical therapy, child life, school, etc.) may be a concern or cause for a change in the medicine.
- **Respiratory depression:** This may occur along with too much sedation. It is the most serious concern. The medicine may make your child’s breathing slower or more shallow than normal. Due to this concern, the nurses will monitor your child often while he or she is receiving this medicine.