



## Pain Relief for Children: Patient Controlled Analgesia & Nurse Controlled Analgesia (PCA/NCA)

When children have good pain control, they recover faster. This leaflet explains two safe ways to give strong pain medicine through a small tube in a vein (IV): **Patient Controlled Analgesia (PCA)** and **Nurse Controlled Analgesia (NCA)**.

### What is PCA/NCA?

It's a special machine that gives pain medicine (like morphine) and is connected to your child's IV line.

- **PCA (Patient Controlled Analgesia):** For children who can understand. They can press a button to give a small, safe dose of medicine when they feel pain. This helps them feel better.
- **NCA (Nurse Controlled Analgesia):** For babies or children who can't use the button safely. The nurse will press the button for them when needed.



### Why should I have PCA/NCA?

It is used when the operation is expected to be quite painful and requires stronger pain relief.



## How does it work?

A doctor will set up the machine specifically for your child's weight and pain control needs.

- **Bolus Dose:** When the button is pressed, a single dose weight-based medicine goes into the IV. For best effect, **press the button 5-15 minutes before** a potentially painful activity (e.g. change of wound dressing, physiotherapy etc).
- **Background Dose (For NCA; optional in PCA):** The machine gives a small amount of medicine all the time and can have extra doses when needed.
- **Safety Lock-Out:** After a button press, the machine "locks" for a short time (PCA: 5-15 minutes; NCA 20-30 minutes). This allows the medicine to function and prevents too much medicine from being given. Pressing the button during this time does nothing.

## Who can press the button? This is a key safety rule!

- **PCA: Only your child** should press the button. They know their pain best. If someone else presses it, your child could get too much medicine and become very sleepy or sick.
- **NCA: Only the nurse** can press the button after assessing your child.



## Is it safe?

**Yes.** The system has many safety features:

- The machine is very accurate and has safety alarms.
- The **"lock-out" period** prevents overdose.
- Nurses will check your child's **pain level, breathing, heart rate, and sleepiness regularly.**





Parents know their child best. Please tell the nurse if you are worried about their pain or how they are feeling.

## What are the side effects?

The medicine can sometimes cause:

- **Feeling sick (nausea) or vomiting** - We can give other medicine to help with this.
- **Itching** - This can also be managed with medicine. e.g. moisturizing cream or anti-itch medication.
- **Sleepiness** - It's good if your child can sleep, but if they are too drowsy to be awakened easily, tell the nurse immediately.
- **Constipation** - Please let us know in advance if your child is prone to constipation. Increase fiber intake and encourage water drinking can help.
- **Slow breathing** - This is rare and your child will be closely monitored for this.



These side effects can usually be treated, or the type of pain medicine can be adjusted.

## Will my child get addicted?

**No.** Using strong pain medicine after surgery or illness does not cause addiction in children. The medicine is usually only needed for a few days. If taken for a longer time, the dose will be lowered slowly to allow the body to adjust .





## How long will it be used?

This depends on your child's pain and operation. As the condition improves, the need for strong medicine reduces. We will also give other pain relievers (like Paracetamol or Ibuprofen). The PCA/NCA will be stopped when your child can be managed with oral pain medication. You will be advised on any medicines needed at home.



## What if I'm worried?

Please talk to your healthcare team. Your input is valued.

