Please talk to your child's nurse or doctor about any concerns you have. Ask questions. Tell us about your child's usual behaviour when in pain. At this hospital we believe parents are partners in caring for a child. We want to share what we know with you and have you share what you know and see with us. The Family Resource Library at BC Children's Hospital has more information about pain. The library is on the 2nd floor of the Ambulatory Care Building. It has an interactive computer program as well as books and pamphlets about pain. You can also access the Family Resource Library online at <u>www.bcchildrens.ca/frl</u>

Continuous Morphine Infusion (CMI)

Developed by the health care professionals of the Acute Pain Service with assistance from the Department of Learning & Development

BCCH1089 © December 2007 BC Children's Hospital



An agency of the Provincial Health Services Authority

4480 Oak Street, Vancouver BC, V6H 3V4 604-875-2345 1-888-300-3088 www.bcchildrens.ca

#### What is Continuous Morphine Infusion?

Continuous morphine infusion or CMI is a way of giving pain medicine (morphine) that keeps a constant amount of medicine in the bloodstream at all times. If your child is allergic to morphine, we may use hydromorphone or fentanyl instead.

## How does it work?

The pain medicine goes into a vein through an intravenous (IV) tube. The IV tube is connected to a computerized pump by the nurse caring for your child. The pump delivers pain medicine constantly. If your child experiences pain, the doctor will order extra medicine that is given by the nurse.

## Is it safe?

CMI is a safe method of giving pain medicine. The doctor caring for your child decides on the correct pain medicine dose and the nurse sets the computerized pump. Nursing staff will watch your child and the equipment carefully to make sure that there are no problems.

## Will it control the pain?

Experience shows that when a child gets an even supply of medicine in the body, their pain is better controlled. Enough pain medicine is given to control the pain but not so much that the child is sleepy.

Your child's comfort is an important part of the care we give. The nurse caring for your child will look for any signs of pain. Tell the nurse or the doctor if you think your child is in pain. The doctor may change the dose given by the computerized pump until the pain is under control.

This method of pain control works well for most children. If, for any reason, pain cannot be controlled in this way, the doctor or nurse will discuss other pain control options with you.

#### How long will pain medicine be given in this way?

Typically, CMI will be used until your child's pain can be controlled by swallowed medicine.

#### Are there side effects?

Any medicine used to control pain can have side effects. The most common side effects are:

- Drowsiness/sleepiness
- Nausea and/or vomiting
- Itching
- Altered mood or unusual dreams
- Difficulty emptying the bladder. Because of this, a catheter (plastic tube into the bladder) is usually put in place in the operating room. This will drain the urine until the CMI medicine is no longer needed.
- Problems breathing

The nurse will watch your child for any signs of these side effects. They can all be treated. Talk with the doctor or nurse if you are concerned about possible side effects.

# Why is CMI a good idea?

- It provides a steady, even amount of pain medicine rather than the intermittent doses the child would get from "as needed" IV injections.
- It doesn't hurt.
- Your child will have better and more consistent pain relief which will make movement, coughing and deep breathing exercises easier. Your child will get up sooner, recover more quickly and heal faster.