

Patient Controlled Analgesia (PCA) and Nurse Controlled Analgesia (NCA) for young people and parents/carers

What is Patient Controlled Analgesia (PCA) and Nurse Controlled Analgesia (NCA)?

- They are methods of delivering pain-relieving medicine quickly and safely via a pump when it is needed
- The pump has a syringe of pain-relieving medicine attached to a handset with a button which can be pressed; when pressed and released, a small amount of this pain medicine will be administered
- The pain medicine can be given through a Hickman line, Port-a-Cath, PICC line, subcutaneously (just under the skin) or by cannula
- Nurses will set up the pump and show you and your family how it works.

Why would a PCA or NCA be needed?

- If you have pain and cannot take pain medicines by mouth
- If your pain is not being controlled rapidly to improve your comfort
- To take pain away quickly
- PCA and NCA can both be used with other pain medicines if needed, such as paracetamol.

How to use a PCA or NCA

- The PCA and NCA pumps have a handset with a button that can be pressed to give a safe dose (called a bolus) of pain medicine anytime you have pain
- If you have a **PCA**, **you** can press and release the button yourself
- If you/your child has a **NCA**, you/your parents/carers can ask the **nurse** caring for you to press the button
- **It is important that only the patient (for PCA) or a nurse (for NCA) presses the button**
- The button is pressed and when released, a small amount of pain medicine is pushed from the syringe, through the infusion line and into the bloodstream to help take the pain away
- The pain medicine starts working quickly and it usually takes about 5 minutes to feel an improvement
- If your pain comes back, the button can be pressed again
- It can be helpful if you press the button 5-10 minutes before moving, getting out of bed or doing your mouth care



- If the pain does not go away when the button is pressed and released, please speak to the nursing and/or medical team - they may need to make changes to the pain medicine
- Occasionally, you may also have an infusion. This is a small amount of pain medicine (called a background) which runs all the time.

Can PCA and NCA give too much pain medicine?

- No, only a safe amount of pain-relieving medicine can be given
- The button will not be pressed if you are asleep
- Only press the button when you are sore or in pain
- The pumps are locked with a key so changes can only be made by a nurse or doctor
- The pumps are programmed with time locks and the maximum amount of pain-relieving medicine to avoid too much medicine being given.

What medicines are used in a PCA or NCA?

- Medicines such as morphine or morphine-like medicines, such as oxycodone and fentanyl
- If pain becomes more complex, the pain medicine may be changed and/or ketamine may be added to the syringe.

What side effects do pain medicines have?

- Sometimes you may feel sick, itchy, sleepy or dizzy when you first start using a PCA or NCA, but these side effects usually go away
- When given for pain relief, morphine and morphine-like medicines do not cause addiction, however if high doses are given for more than a week you may find that your body becomes used to its effect so we will reduce the amount slowly
- When you are using a PCA or NCA, nurses will regularly ask you/your parents about the pain you have, check and record your pulse and monitor your oxygen levels and ask about any side effects mentioned above
- If needed, the pain medicine can be changed to reduce and stop these side effects.

How long will a PCA or NCA be used for?

- Most children and young people use the PCA or NCA pump for a few days, although it can be continued for as long as needed
- Every day the nurses and doctors will ask about your pain and talk to you/your parents/carers about whether the time is right to stop the PCA or NCA
- When pain medicine is no longer required, it is reduced over a few days
- When you are feeling better, the PCA or NCA will be switched off and you may be given pain medicines to take by mouth or through a feeding tube if still needed

Please ask to speak to the nurse/s caring for you if you have any questions.

