National Healthcare Group
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A Guide for Patients and Families

Patient Controlled Analgesia (PCA)

What is Patient Controlled Analgesia (PCA)?

Patient Controlled Analgesia (PCA) is a computerized pain relief system. It gives you empowerment to control over your pain by delivering strong painkillers such as morphine or fentanyl directly into your blood when you need it.

How does the PCA system work?

Your anesthetist will prescribe a PCA pump for you after the surgery if required. The medication will be administered through the pump which is connected to your intravenous drip. Our nurses will show you how to use the PCA handset by the following:

- Press the button to signal the pump to release a small amount of pain medication into your bloodstream.
- Use it when you feel pain, such as trying to move out of bed, taking deep breaths or when coughing. We also encourage you to use it before the start of physiotherapy exercises.
- It is important that only you control the delivery of the pain medication.

How safe is PCA?

The system has many safeguards to prevent overdosing. The anaesthetist will programme the PCA to deliver doses that are appropriate for your age, weight, type of surgery and medical condition.

The PCA pump is set up with a maximum limit so that you will not overdose. Please inform the ward nurse if your pain remains severe and poorly controlled despite pressing the button many times. The Pain Team will assess your condition and adjust the PCA settings accordingly.

What are the benefits of PCA?

- You can control your own pain without having to depend on nurses and doctors, hence delay in getting pain relief is avoided.
- Reduce your risk of developing chest infections as you will be able to cough effectively and breathe deeply if your pain is well controlled.
- Participate actively in physiotherapy.
- Early mobilization after surgery which reduces the risk of developing blood clots in your legs.

What are the side effects of PCA?

- Pruritus/itch, mainly in the nose, neck, arms and upper chest
- Giddiness or drowsiness
- Nausea or vomiting
- Dry mouth
- Constipation
- Difficulty in passing urine

What are the possible complications from using PCA?

- Respiratory depression (slow breathing): Morphine may affect your breathing. You will be given oxygen if you experience respiratory depression.
- Fits, convulsions and breathing difficulty as a result of depressed breathing are rare complications. You will be closely monitored for these side effects.

Who will look after me in the ward?

The pain team (doctor and nurse) will assess your pain level daily in the ward. You will be asked to score your pain level from a scale of 0 (no pain) to 10 (worst pain). The pain team will assess you for any side effects. Do inform the team if the pain is not well controlled, and they will do their best to make you comfortable.

When do I stop PCA?

Patients are usually put on PCA for two to four days, or longer if needed. PCA will be withdrawn altogether once your pain can be managed with oral medication.

When can I NOT have a PCA pain relief system?

Allergy to any of the medication used for PCA limits its use. If you have ever experienced severe side effects with morphine or fentanyl, do inform your healthcare provider.

What if I decide NOT to have PCA?

We advise you to discuss any concerns about PCA with your healthcare provider. If you choose not to have PCA, there are other options available such as oral pain medication, local anaesthetic infiltration or short acting nerve blocks.

Can morphine PCA cause addiction?

Morphine or morphine-like drugs are not addictive when they are prescribed for a short period of time and used for the purpose of pain control.

What am I expected to do while on PCA?

You will be on close monitoring and put on oxygen by face mask or nasal prongs for the first 24 hours. You may feel slightly sleepy while on PCA. Some patients may also feel weak and dizzy. To prevent falls, do inform the healthcare provider if you wish to get out of bed.

NHG-NUR-BRO-2025-00142-EV1

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