Patient controlled analgesia (PCA)
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This leaflet gives you information about patient controlled analgesia (PCA) and possible side effects. It does not replace the need for personal advice from a qualified healthcare professional. Please ask if you have any questions.
What is patient controlled analgesia (PCA)?

Pain is common after surgery. However, if it is left untreated it may delay your recovery. Being able to cough and move is important to help you get better after surgery.

Each person’s level of pain is different and everyone needs a different amount of pain relief.

Analgesia is the medical term for pain relief medication. It can be given in liquid or tablet form, or by injection.

Your doctor may prescribe PCA for you to use in the first few days after your operation. It lets you control your own pain relief without having to ask the nurses.

How does PCA work?

The PCA pump device will give you a pre-set (fixed) amount of pain relief medication when you press the button.

We normally use morphine with the PCA device. It has been shown to be an effective pain relief medication in the first few days after an operation. If you know you are allergic or sensitive to morphine, please let the doctor know before your operation.

There are other opioids (strong pain killers) that can be used with the PCA device instead of morphine. These opioids are called fentanyl and oxycodone.

A PCA pump
Each PCA pump comes with its own handset. You hold this in your hand and press the button (as shown right), when you need pain relief. When you press the button, the pump delivers the pain relief medication through a small plastic tube (cannula) into a vein in your arm or hand. The tube is put in place before or during your operation (see picture below right).

Only you are allowed to press the button, not the nurses or your relatives and visitors. Immediately after your operation, the recovery room nurses will manage your pain relief until you are awake enough to press the button yourself.

**What are the benefits of PCA?**

- PCA is a successful technique for controlling pain after surgery.
- It works quickly.
- And, it puts you in control of your pain relief.
Is PCA safe?

The pump is programmed to give you a set dose of pain relief medicine only when you push the button. As an extra safety feature, the pump is also programmed to ignore any further pushes of the button for a set time (five minutes) after the previous dose of medicine. This is called a “lock-out” period. Once this period is over, the pump will only give you another dose of medicine if you press the button again. The lock-out period means that you cannot give yourself more medicine than is necessary.

How often can I press the button?

You can press the button as often as you like. However, the pump will only give you a dose of pain relief medicine once every five minutes.

You can also use your PCA to prevent pain before doing any exercise, such as deep breathing or coughing.

Once you have pressed the button, please wait a few minutes for the medicine to work. The level of pain is different in each patient and you may need more or less pain relief than others.

What if I press the button but my pain does not go away?

Please tell the nurse if this is the case. Your nurse will closely watch your progress in the first few days after your operation.

Your pain relief will be constantly reviewed and your nurse can change the dose of pain relief medicine as necessary.

During your hospital stay, the nurses will ask you to score your pain on a scale of zero to ten (0-10) where zero is no pain and
10 being the worst pain you can imagine (see the diagram below). This will help the nurses to see how good your pain relief is and change it if necessary to make you more comfortable. They will also ask you whether you have nausea (feeling sick), itching and if you have opened your bowels.

Are there any side effects?

It is quite normal to feel drowsy while using PCA. Some patients may feel sick. If you do feel sick, please tell the nurse as there are medicines to stop this. A common side effect of pain relief medicine is constipation. As soon as you are able to eat and drink normally after surgery, we will give you laxatives to encourage bowel movements.

Can I get up and walk around?

Each PCA pump is powered by a rechargeable battery and can be carried over your shoulder in the carry pack. This means that you can get up and walk around after your operation. You may need to press the PCA button before you move around to make exercising more comfortable.

Can I overdose and cause myself harm?

No. The PCA pump is programmed to give you a safe amount of pain relief medicine. It will not let you take more than this dose. If the nurse looking after you notices that you are sensitive to the medicine, the doctor can change the dose and
lock-out time specially for your needs and make it as safe for you as possible.

**Is there a risk of addiction?**

No. PCA is only used for a short period of time after your operation, usually 48 hours. When you are able to eat and drink after your surgery, we will also give you pain-killing tablets by mouth while you are using your PCA. Your PCA may not be needed after 48 hours as your regular pain killing tablets alone may give enough pain relief.

**More information**

If you have any questions about the information in this leaflet or would like to know more about PCA, please ask your anaesthetist or contact the pain management team.

**Harefield Hospital pain management team**

Tel: 0330 12 88121 extension 85538 or ask the operator for bleep 6165 or 6144 (Monday to Friday, 9am-5pm)

**Royal Brompton Hospital pain management team**

Tel: 0330 12 88121 extension 82408 or ask the operator for bleep 7037 or 7064 (Monday to Friday, 9am-5pm)

Pain management service: [www.rbht.nhs.uk/pain-management](http://www.rbht.nhs.uk/pain-management)

If you have concerns about any aspect of the service you have received in hospital and feel unable to talk to those people responsible for your care, call PALS on:

- Royal Brompton Hospital – 020 7349 7715
- Harefield Hospital – 01895 826 572

You can also email pals@rbht.nhs.uk. This is a confidential service.