



THE UNIVERSITY OF CHICAGO HOSPITALS

A Guide for Patient-Controlled Analgesia (PCA)

You may experience pain during your illness or after surgery. This guide will discuss a pain control option called PCA (patient-controlled analgesia) which can help you control your discomfort.

What is PCA?

Patient-controlled analgesia (PCA) involves a push-button device attached to a machine containing pain medication. When you push the button you'll receive a small dose of pain medicine through your IV. A built-in timer on the machine allows the doctor or nurse to set a limit on the number of medication doses you can give yourself in an hour (called a lockout time), thus limiting the risk of an overdose. The dose as well as the lockout time can be adjusted according to your pain relief needs. The PCA machine is normally set up to deliver medication to you *only when you push the button*, but depending on your response, other PCA options are also available. The best alternative for you will be chosen by the anesthesiologist or acute pain service doctor. Please let your doctor or the anesthesiologist know if you have experienced any problems in the past when taking any pain medications.

What is the advantage of a PCA?

Because you are the best judge of how much pain you are having, it makes sense for you to have control over when you receive pain medication. If you feel discomfort and want relief, push and release the button and pain medicine will be released into your IV. *It is important to remember that visitors, including family members, should not press the PCA button for you. You* are in control of your own pain relief.

Will the PCA take away all my pain?

We may not be able to make you 100% pain free. Our goal is to help you attain a "comfort zone" where you are fairly comfortable, can tolerate a *small amount* of discomfort, but still be functional. *Do not wait until you are very uncomfortable before you take the pain medicine.* Trying to "wait a little longer" only allows the pain to get worse and means it will take longer to control it. Using the PCA, you should be able to comfortably participate in whatever activity your doctor has prescribed for you, such as deep breathing and coughing exercises, turning in bed, sitting in a chair, or walking. These activities may still generate some discomfort, but if you give yourself some medication in the 15-30 minutes *before* these activities (called premedication), your pain intensity will be lessened.

Are there any side effects to the PCA?

The PCA machine delivers a potent pain medication. The medication can produce some minor side effects such as nausea, vomiting, a generalized "itchy" sensation, dry mouth, or difficulty urinating. It may also make you feel a little sleepy. *These side effects can easily be controlled if you experience them.* Always tell your nurse if you experience any of these side effects or other problems which you feel may be related to the pain medication.

Do not be afraid that you will become addicted to the pain medication. Pain experienced after surgery and many other painful conditions is usually less each day of your recovery process, and you will automatically wean yourself from the pain medication as you feel better.

How do I communicate my pain?

The University of Chicago Hospitals has adopted a numeric rating scale to assess pain (0=no pain, 5=medium pain, 10=worse pain in your life) in our adult patients, and a happy-to-sad face scale for our pediatric patients. You are an important part of the health care team and we rely on your assessment of your pain intensity to help us design an effective pain management program for you. On admission, we will ask you to identify your pain location and intensity, using the 1-10 scale (or happy-to-sad face scale for children), as a baseline assessment. Then, we will periodically ask you to identify your pain intensity while using the PCA. Your response will help direct our care for you.

When do I get my PCA?

You will receive a PCA after a doctor has assessed your pain and has written the appropriate medication orders. The PCA will be managed by a doctor and nurse on the Acute Pain Service. They will visit you daily to check how effectively the PCA medication is controlling your pain. If you need better pain control or are experiencing any side effects to the medication, the Acute Pain Service will make adjustments to your PCA. Your nurse will also be monitoring the effects of your PCA medications.

How do I know if I received a dose of medication after I have pushed the button?

If you push the button and hear a “beep”, you have just received a dose of pain medication. It will start to work immediately but it will take 6-10 minutes before you perceive a difference in your pain intensity. Give it a chance to work before you push the button again.

If you push the button and do not hear a “beep”, your PCA machine is in its “lockout” time. This is the time period picked by the doctor to limit potential pain medication overdose. You will not receive any medication during the lockout time. You should try to push the PCA button a few minutes later if you are still experiencing pain.

Is there a limit to the amount of pain medication I can take?

Everyone has different needs—everyone is unique in their response to pain medication. Use what you need to achieve a level of comfort, which only you can decide.

What if I am still uncomfortable, even after I have pushed the button several times?

If your pain medication seems to “not be working” for you, please alert your nurse. The nurse will assess your IV site, as well as your use of the PCA machine. Sometimes your IV site may need to be restarted, your dose or timing of medication may need to be adjusted, or you may simply need a review of the PCA instructions. If a change in your drug dosage or lockout time needs to be made, your nurse will contact the Acute Pain Service.

How long will I be using the PCA machine?

An ongoing assessment of your recovery status helps the doctors choose the best time for this change. However, once your pain is well controlled and you are able to eat and drink without any problems, a change to oral medication is usually made. Oral medications are ordered on an as needed or scheduled basis—your doctor and/or nurse will inform you of your new pain medication plan once the PCA is discontinued.

If you have any other questions about the PCA or your pain management plan, please ask your doctor or nurse. Everyone at The University of Chicago Hospitals is dedicated to your total well-being and comfort. Everyone wants you feeling as well as possible—as quickly as possible. When your pain is controlled, you are able to speed your recovery by participating in your care and focusing on getting well.