

Epidural Analgesia

Patient Information

Epidural analgesia (pain control) is often used to treat pain during childbirth. It can also be used to treat pain after some operations and accidents.

What is epidural analgesia?

Epidural analgesia controls pain by blocking the nerve responses to pain in the spinal cord. The epidural space is a small space filled with fatty tissue located outside the spinal cord

Before your surgery, an anesthesiologist (a specialist doctor) will insert a needle into the epidural space in your back (see Figure 1). The doctor will thread a thin plastic tube through the needle into the epidural space and tape it in place (see Figure 2). The needle is removed, leaving only the plastic tube in your back. The needle and catheter do not go into the spinal cord.

After the tube is inserted and taped in place (Figure 2), an automatic epidural pump is attached to the tube and delivers a steady amount of pain medication. This medication usually contains a local anesthetic that has a numbing effect and an opioid (morphine like medication). These medications “bathe” the nerves that pass through the epidural space. Since these are the nerves that give you feeling, the drugs “block” the feeling of pain. Other feelings such as heat, cold and pressure may also be partially blocked. By using low doses of the local anesthetics, we block the nerves that give you feeling and pain but not the nerves that control movement.

Figure 1

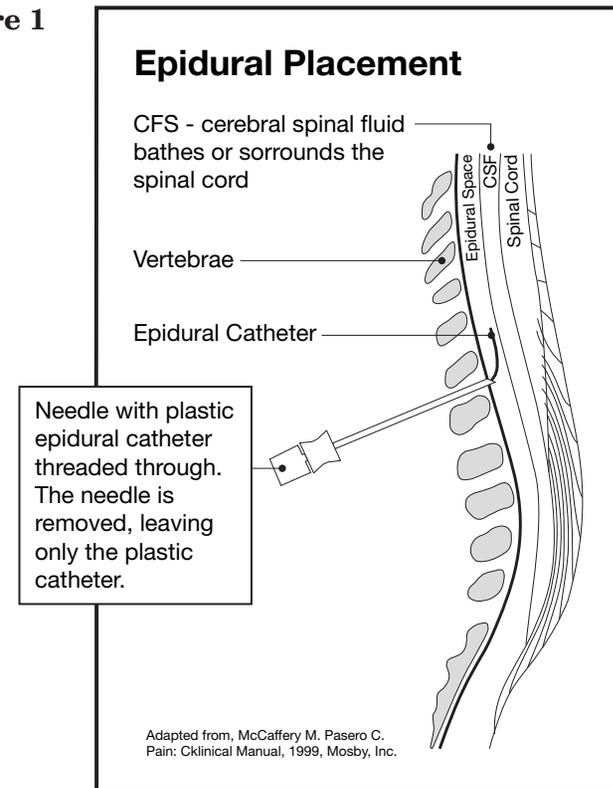
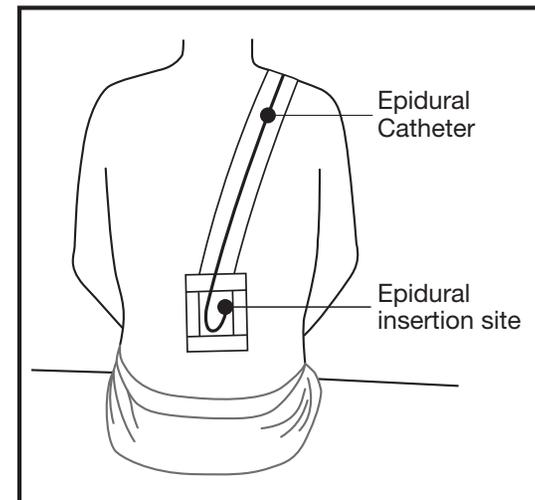


Figure 2



What are the advantages of epidural analgesia?

- Most pain-relieving medications work by acting on the brain and spinal cord. The medications usually travel in the blood stream. With epidural analgesia, the pain drugs are placed much closer to the area where they are needed - near the spinal **nerves**. Thus, one advantage of epidural pain management is that it can control severe pain using lower doses of medication. This reduces the side effects from the medications.
- We think that epidural analgesia may be best for patients who are elderly, have major medical problems, or are having major surgery. In these patients very good pain control may reduce the risk of complications after surgery.

What are the risks of epidural analgesia?

Complications occur **very** occasionally. Most of these are minor and easily treated. Complications that are more serious may occur but these are extremely rare.

Some of the possible complications are:

- The epidural does not work or work properly. If this happens, the anesthesiologist will reassess and if needed replace the epidural OR utilize another pain control method.
- There is a very slight possibility of infection at the site where the epidural catheter goes through your skin. This area may be a little red and sore for a few days but usually clears without treatment.
- Your blood pressure may decrease. However, after surgery this usually happens when you are also a little dehydrated and it may be a sign that you need more fluid.

- You may get a headache. Sometimes this can happen if the needle that is used to place the epidural catheter goes past the epidural space. Most often, however, any headache that you get after your surgery is likely to be due to another cause. If the headache worries you let your nurse know and they can contact the Perioperative Pain Service.
- Nerve damage can occur rarely and in most cases, this heals within a few weeks or months.
- Very rarely a blood clot or abscess can develop in the epidural space. It is difficult to get an exact number for the risk but it may be about 1 in every 10,000 to 150,000 patients. If the abscess or blood clot is big enough to press on the spinal nerves or cord then permanent nerve damage could occur. Early recognition is important.

At Vancouver General and St Paul's Hospitals the Perioperative Pain Service and the nurses on the unit/ward are well aware of the risk, even though it is very rare. The regular monitoring that we use is intended to pick up complications at an early stage. We also have strict protocols for looking after patients with epidural analgesia that we believe lower the risk of these complications.

What pain control drugs are used with epidural analgesia?

Most often, a combination of local anesthetic and opiate (a morphine-like pain medicine) or local anesthetic by itself is used.

How long will I have the epidural tube in place?

The epidural catheter is usually in place for 3-5 days or as long as needed until you can take pain medicines by another route.

Who will look after the epidural?

At Vancouver General the Perioperative Pain Service Anesthesiologist will evaluate you daily or more often if needed. At St Paul's Hospital the Clinical Nurse Specialist for Pain Management and/or Acute Pain Anesthesiologist will evaluate your pain management daily. If needed, your pain management will be changed. If you have any questions about your epidural, you can ask your nurse.

Can I move around or walk when I have epidural analgesia?

Yes. It is important to move around after surgery. When your surgeon says you can get out of bed or walk, it is very important that you do this. This can help reduce the risk of chest infections or blood clots in your legs. You can walk with an epidural catheter in your back. However, you should ask your nurse before starting to mobilise. At first, you will walk with 2 nurses/physiotherapist, just to make sure that you don't faint or lose your balance. When you get out of bed, do it very slowly, just in case you become dizzy.

What if the epidural analgesia does not work?

If you are uncomfortable, tell your nurse. The nurse may increase the amount of pain medication that you are getting or give you an extra dose of medication. If appropriate, the anesthesiologist may be called to come and see you - and may even change your orders for pain control.

Will my legs feel numb, weak or heavy?

If you are having an operation, the epidural will often be part of the anesthetic as well as for pain control afterwards. A strong local anesthetic may be given during the operation. This means that your legs may feel numb and heavy immediately after the operation. This will wear off in a few hours. The local anesthetics that we use for **epidural analgesia after** the operation will not be as strong, so your legs should feel nearly normal. When you are back in your unit/ward, your nurse will regularly ask you if you have any numbness anywhere, or if your legs feel weak. They will also assess the strength of your legs.

If you notice any numbness or weakness, let your nurse or doctor know immediately.

The aim is to keep you comfortable, but still able to move around in bed, sit out of bed and even walk, when your doctors allow it.

If, after you go home, your limb becomes numb to feeling and movement or you have a new onset of severe back pain:

Immediately telephone:

- If your surgery was performed at the Vancouver General Hospital (VGH) call 604-875-4111 and ask to speak to the Anesthesiologist on duty for the Perioperative Pain Service. This is a 24hr/day 7 day/week service.
- If your surgery was performed at UBC Hospital, call the UBC **Anesthesia Department** during the day at 604-875-4304. After 5 PM, call the VGH number.
- If your surgery was performed at St Paul's Hospital or Mount St Joseph Hospital contact the surgeon who performed the surgery or your family physician.

We hope this pamphlet has helped you understand more about your anesthetic and pain control after surgery. If you have any questions, ask your anesthesiologist or nurse.

Acknowledgements

Vancouver Acute acknowledges the contribution of Calgary Health Region Canada and the Royal Adelaide Hospital Australia in the development of this patient pamphlet.

Reviewed by Clinical Nurse Specialist - Perioperative Pain - VGH 2011

Reviewed by PHC Pain Management Initiative Committee 2011

For more copies, go online at <http://vch.eduhealth.ca> or email pchem@vch.ca and quote Catalogue No. **FM.820.P2731**
© Vancouver Coastal Health, January 2015

The information in this document is intended solely for the person to whom it was given by the health care team.
www.vch.ca