

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 will insert a needle into the epidural space in your back (see Figure 1). The doctor will thread a thin plastic tube (referred to as a catheter) 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. These medications numb the nerves that carry pain signals. 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

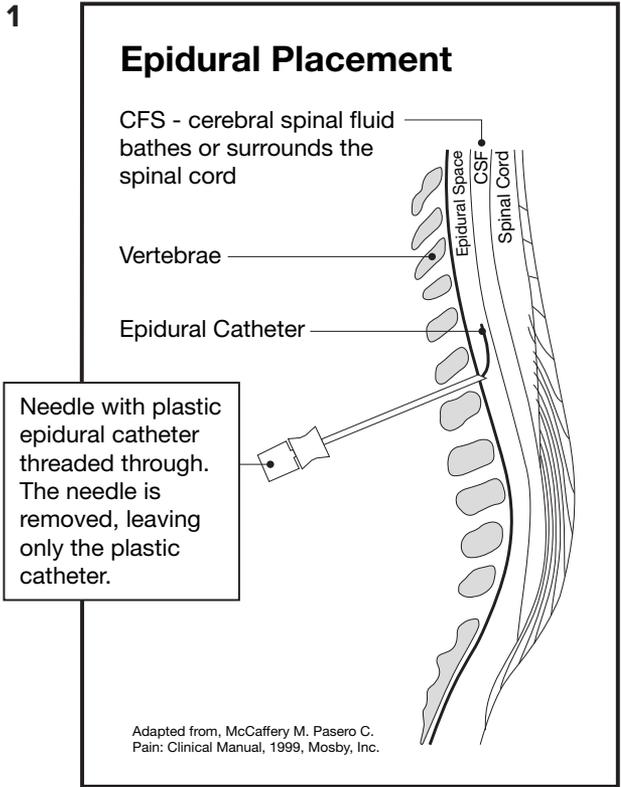
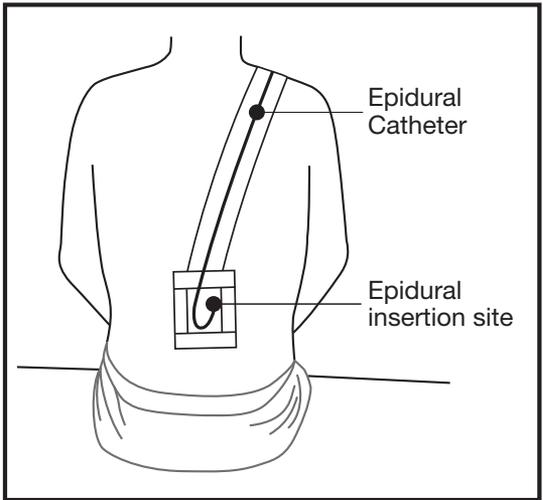


Figure 2



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.
- Epidural analgesia may be best for patients who are elderly, have major medical problems, or are having major surgery. Adequate pain control can help reduce the risk of post-op complications.

What are the risks of epidural analgesia?

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

Some of the possible complications are:

- The epidural does not 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 epidural site. 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. This can happen if the needle used to place the epidural catheter goes past the epidural space.
- Rarely 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.
- The local anesthetic may cause your legs to feel heavy, weak or numb. This will wear off in a few hours. Your nurse will regularly assess you. Let your nurse know if you experience any numbness/weakness in your legs.

At Vancouver General, St. Paul's and Lions Gate hospitals the perioperative pain services and nurses on the 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?

A combination of local anesthetic and/or opiate (a morphine-like pain medicine).

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 (POPS) Anesthesiologist and/or POPS Nurse Clinician 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. At Lions Gate Hospital the 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. This can help reduce the risk of chest infections or blood clots in your legs. However, you should ask your nurse before starting to mobilize. At first, you will walk with a nurse/physiotherapist, just to make sure that you don't get lightheadedness 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.

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 24 hours/day 7 days/week service.
- If your surgery was performed at UBC Hospital, call the UBC **Anesthesia Department** during the day at 604-875-4304 after 5:00 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.
- If your surgery was performed at Lions Gate Hospital please go to the emergency department at Lions Gate Hospital or nearest hospital if you are from out of town.

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

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