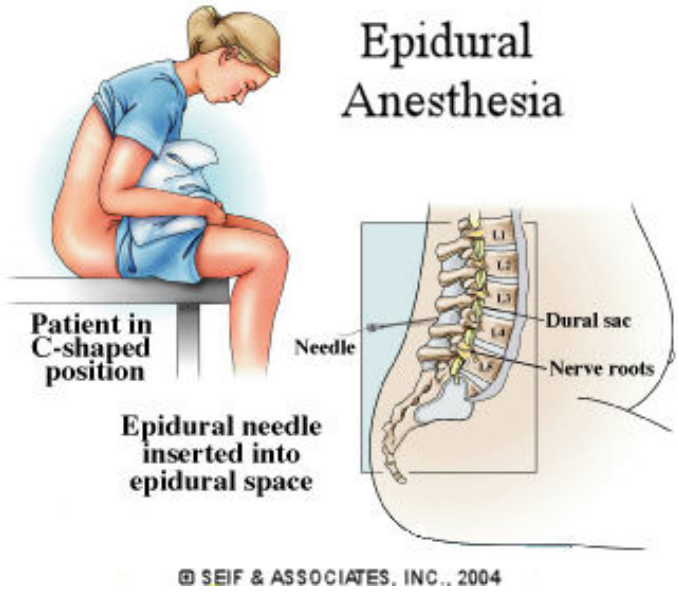
Epidural Risks and Benefits

The continuous putting in (*infusion*) of local anesthetics through a long, narrow, hollow plastic tube (*catheter*)/needle into the lower (*lumbar*) area of your spine is commonly called an epidural. This means outside the covering of the spinal cord. The epidural catheter is placed in the space on the outside of the membrane that covers the spinal cord. The anesthetic medicine numbs the nerves of the spinal cord in the epidural space.



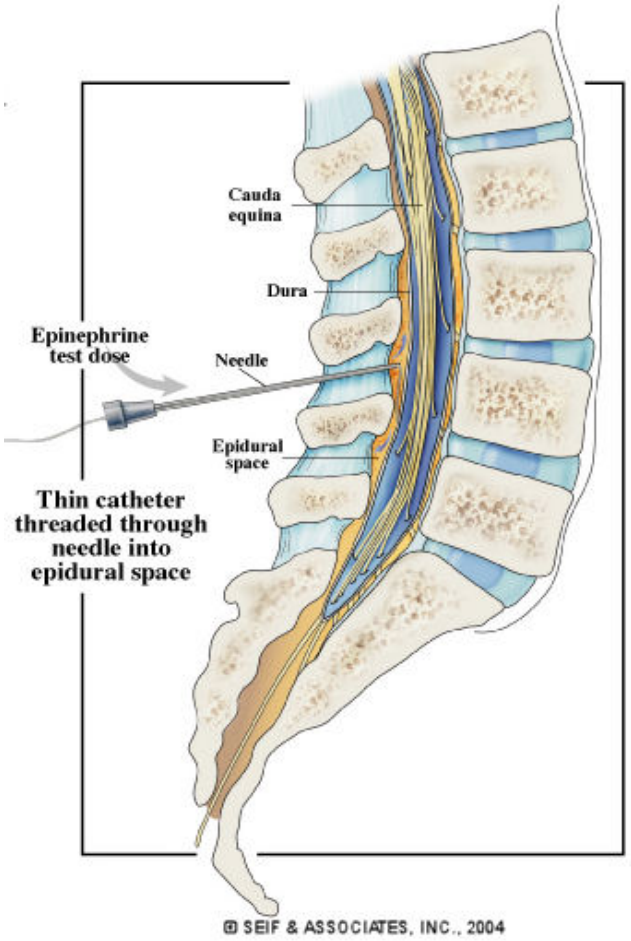
There is also a spinal/epidural anesthetic using two needles and a catheter. The medication is first placed in the spinal canal. Then that needle is removed and a catheter is placed in the epidural space through the second needle for continuous anesthesia. This seems to be the most popular type of regional anesthesia used now. This is sometimes given for pain management to women who are giving birth. Spinal and epidural anesthesia are called regional anesthesia because they numb a certain region of the body. While it is an effective pain management tool, some reasons not to use this include:

- **Restricted mobility:** The tubes and monitors connected to you do not allow for much moving around.
- **Increased likelihood of bladder catheterization, oxytocin administration, and internal monitoring.** This means a tube (*catheter*) may have to be put into the bladder to drain the urine. Uterine contractions can become weaker and less frequent. They also may have a higher use of oxytocin than mothers not having regional anesthesia.
- **Increased likelihood of operative delivery:** This includes the use of or need for forceps, vacuum extractor, episiotomy, or cesarean delivery. When the dose is too large, or when it sinks down into the "tailbone" (*sacral*) region of the body, the perineum and the birth canal (*vagina*) are anesthetized. Anesthetic is injected into this area late in labor to deaden all sensation. When it "accidentally" happens earlier in labor, the muscles of the pelvic floor are relaxed too early. This interferes with the normal flexion and rotation of the baby's head as it passes through the birth canal. This interference can lead to abnormal presentations that are more dangerous for the baby.
- **Must use an automatic blood pressure cuff throughout labor.** This is a cuff that automatically takes your blood pressure at regular intervals.

SHORT TERM MATERNAL RISKS

- **Dural puncture** - The dura is one of the membranes surrounding the spinal cord. If the anesthetic medication gets into the spinal canal through a dural puncture, it can result in a spinal anesthetic and spinal headache. Spinal headaches are treated with an epidural blood patch to cover the punctured area.
- **Low blood pressure (*hypotension*)** - Nearly one third of women with an epidural will develop low blood pressure. The ways that patients must lay during the epidural can make this worse. Their position is limited because they will be unable to move their legs easily for the time of the anesthetic. Low blood pressure is also a risk for the baby. If the baby does not get enough oxygen from the mom's blood, it can result in an emergency Cesarean section. This means the baby is delivered by an operation through a cut by the surgeon (*incision*) on the belly of the mother.
- Nausea, vomiting, and prolonged shivering.
- **Prolonged labor** - With large doses of anesthetic medication, the patient loses the desire and the ability to bear down and push. This results in an increased use of forceps and vacuum extractions, compared to women having unmedicated deliveries.

- **Uneven, incomplete or non-existent pain relief.** Sometimes the epidural does not work well and additional medications may be needed for pain relief.
- Difficulty breathing well or paralysis if the level of anesthesia goes too high in the spine.
- **Convulsions** - If the anesthetic agent accidentally is injected into a blood vessel it can cause convulsions and loss of consciousness.
- Toxic drug reactions.
- **Septic meningitis** - An abscess can form at the site where the epidural catheter is placed. If this spreads into the spinal canal it can cause meningitis.
- **Allergic reaction** - This causes blood pressure to become too low and other medications and fluids must be given to bring the blood pressure up. Also rashes and difficulty breathing may develop.
- **Cardiac arrest** - This is rare but real threat to the life of the mother and baby.
- Fever is common.
- Itching that is easily treated.
- Spinal hematoma.



LONG TERM MATERNAL RISKS

- **Neurological complications** - A nerve problem called Horner's syndrome can develop with epidural anesthesia for vaginal delivery. It is impossible to predict which patients will develop a Horner's syndrome. Even the nerves to the face can be blocked, temporarily or permanently. Tremors and shakes can occur.
- Paresthesia ("pins and needles"). This is a feeling that comes from inflammation of a nerve.
- Dizziness and fainting can become a problem after epidurals. This is usually only for a couple of days.

RISKS TO BABY

- Direct drug toxicity.
- Fetal distress, abnormal fetal heart rate (FHR) (can lead to emergency cesarean). This is especially true if the anesthetic gets into the mother's blood stream or too much medication is put into the epidural.

REASONS NOT TO HAVE EPIDURAL ANESTHESIA

- Increased costs.
- The mother has a low blood pressure.
- There are blood clotting problems.
- A brain tumor is present.
- There is an infection in the blood stream.
- A skin infection at the needle site.
- A tattoo at the needle site.

BENEFITS

- Regional anesthesia is the most effective pain relief for labor and delivery.
- It is the best anesthetic for preeclampsia and eclampsia.
- There is better pain control after delivery (vaginal or cesarean).
- When done correctly, no medication gets to the baby.
- Sooner ambulation after delivery.
- It can be left in place during all of labor.

- You can be awake during a Cesarean delivery and see the baby immediately after delivery.

AFTER THE PROCEDURE

- You will be kept in bed for several hours to prevent headaches.
- You will be kept in bed until your legs are no longer numb and it is safe to walk.
- The length of time you spend in the hospital will depend on the type of surgery or procedure you have had.
- The epidural catheter is removed after you no longer need it for pain.

HOME CARE INSTRUCTIONS

- Do not drive or operate any kind of machinery for at least 24 hours. Make sure there is someone to drive you home.
- Do not drink alcohol for at least 24 hours after the anesthesia.
- Do not make important decisions for at least 24 hours after the anesthesia.
- Drink lots of fluids.
- Return to your normal diet.
- Keep all your postoperative appointments as scheduled.

SEEK MEDICAL CARE IMMEDIATELY IF YOU DEVELOP

- A fever or temperature over 98.6° F (37° C).
- Persistent headache.
- Dizziness, fainting or lightheadedness.
- Weakness, numbness or tingling in your arms or legs.
- Skin rash.
- Difficulty breathing
- Stiff neck with or without stiff back.
- Chest pain.

Document Released: 12/18/2006 Document Re-Released: 03/16/2010
ExitCare® Patient Information ©2011 ExitCare, LLC.