

Epidural anesthesia

Epidural anesthesia has become the choice of most obstetric patients for pain relief during labor and delivery. The safety of epidural anesthesia for mother and infant has been documented nationwide.

At Prisma Health, your care team from the Department of Anesthesiology and Perioperative Medicine will consist of a board-certified anesthesiologist and a certified nurse anesthetist. They are available to you and your obstetrics team for around-the-clock care.

What is an epidural?

An epidural is a form of anesthesia that relieves the pain of labor and delivery. An interview is needed just before the procedure takes place. This discussion is important for the anesthesiologist to determine the safest and best technique to use for you.

What type of epidural will I receive?

You will receive PCEA (patient-controlled epidural anesthesia). After the catheter is placed, a combination of narcotic and local anesthesia is administered continuously through the catheter. The major advantage is that this allows you, the patient, to control the administration of additional medication through the epidural catheter. You will be given a button to push if you need more medication. Your anesthesia care team will explain the PCEA and always is available for epidural anesthesia support.

When will I receive my epidural?

Your OB provider will decide with you when the epidural may be placed. Usually this procedure is performed when you are in labor and your cervix is dilated sufficiently.

It may not be appropriate to place your epidural when you are first having labor pains. Other pain medications can be used in the early stages of labor.

How is an epidural procedure performed?

You will sit or lie on your side, and your lower back will be cleaned with an antiseptic. The skin is numbed by injecting a local anesthetic into your lower back.

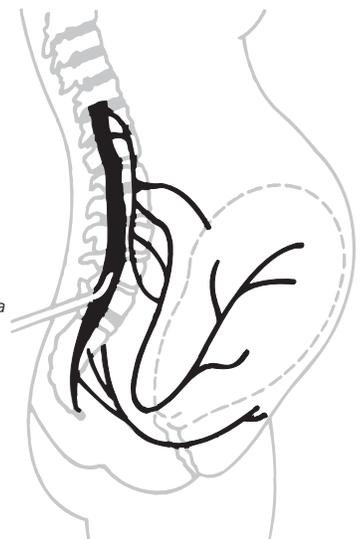
A needle is placed between the bones in the lower part of your back until the epidural space is found. Then, a small tube catheter is inserted through the needle. The needle

is removed, leaving one small end of the plastic tube in the epidural space. This tube is taped securely so that you can move freely in bed. The free end of the catheter is used to inject medications as needed.

Lumbar epidural block:

The darkest area shows the epidural space and affected nerves, while the white tube represents the catheter.

(From Bonica, J.J. 1972. Principles and Practice of Obstetrical Analgesia and Anesthesia, F.A. Davis, Co.)



Where is the epidural space?

The epidural space is an area in the back into which a needle can be carefully inserted and then removed, leaving a small tube in place. Numbing medication can be injected into the epidural space through the tube.

What is my part?

Getting in the right position to put in the catheter is very important. Members of your nursing and anesthesia care team will help you achieve the correct position for epidural placement. Being cooperative with positioning during placement of your epidural can decrease the amount of time it takes to place the catheter.

Does an epidural hurt?

Your back is numbed with a small needle and local anesthesia. As the epidural needle is inserted, you may feel pressure. It is not uncommon for some soreness to occur at the site of the epidural for 24-48 hours after delivery. The soreness is mild and may be treated with a heating pad.

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How long does the epidural last?

With PCEA, a continuous amount of medication is administered through the catheter by an epidural pump. You can receive additional medication by pressing a button. The epidural medication will provide relief through delivery.

How will an epidural make me feel?

The epidural relieves pain. However, you still may feel pressure and touch. You can move your feet and legs, but they may feel heavy and weak until the medicine wears off.

Why do epidurals sometimes not work?

The epidural catheter may not be in the right location or the medicine may not reach some nerves. These problems often can be corrected by replacing the catheter or injecting additional medications through it. Also, the position of your baby can create discomfort that is difficult to address with an epidural. Your nurse and obstetrician may want to examine the baby's position if you are still having pain despite receiving additional medications through your epidural.

When can an epidural not be used?

An epidural may not be an option to relieve pain during labor if you have any of the following:

- Blood thinners in body
- Low platelet counts
- Hemorrhaging or are in shock
- Blood infection
- Epidural space cannot be located by the doctor
- Labor is moving too fast and there is not enough time to administer the drug

If I have back problems, can I still have an epidural?

In most cases, yes. However, some back problems do not permit catheter use.

Will I be paralyzed?

The spinal cord ends about two inches above where the epidural is placed. As a result, paralysis is extremely rare.

If I plan to have an epidural, should I still attend classes?

Yes. The breathing techniques you learn help ease labor pains you may have before epidural placement. These techniques also are useful during the last stage of labor, even when you have an epidural in place.

What if I need a cesarean section?

If you require a C-section for the birth of your baby, the epidural may be used for surgical anesthesia.

How does this anesthesia affect my baby and my labor?

An epidural causes no maternal or neonatal depression, and it lets you stay awake during labor and delivery so that you can actively take part in your child's birth.

Will I be able to push?

You may not feel that you are having a contraction because of your epidural anesthesia. If you cannot feel contractions, pushing may be difficult to control. For this reason, your baby may need additional help coming down the birth canal. It may be necessary to apply pressure on your abdomen at the top of your uterus.

What happens to the catheter after delivery?

If no operation is planned, the catheter is removed. If a procedure such as a tubal ligation is planned, the catheter is left in. It may be used at the time of your surgery the following day.

What are benefits of having epidural anesthesia?

- Allows you to rest if your labor is prolonged.
- Relieves discomfort of childbirth, which helps some women have a more positive birth experience.
- Lets most women remain alert and be an active participant in the birth process.
- For women who deliver by cesarean, an epidural anesthesia helps them stay awake and provides pain relief during recovery.
- When other types of coping mechanisms are no longer helpful, an epidural may be what you need to move through exhaustion, irritability and fatigue—it may allow you to rest, relax, get focused and give you the strength to move forward as an active participant in your birth experience.

Risks and Complications

Epidurals are not totally without potential problems. For example:

- Not all catheters work. Approximately one in 20 does not work effectively.
- Occasionally, low blood pressure results from the epidural medication. Low blood pressure can be harmful to you and your baby, but medication can correct this condition.
- Headaches occur in approximately one of 200 patients who receive epidurals. These headaches may not occur until one to three days after delivery. If headaches happen, they can be treated effectively. The cause of the headache is thought to be leaking spinal fluid.
- In rare cases, seizures have been reported with epidural injections.
- A slight risk of cardiopulmonary arrest exists, which can be life-threatening. Equipment is available at all times in the labor and delivery suite in the event of an emergency.
- Paralysis or nerve damage is extremely rare. The chances of such damage are less than one in 10,000.