

# **Medications for Pain Relief During Labor and Delivery**

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#### What are the types of pain-relieving medications that can be used during labor and delivery?

In general, there are two types of pain-relieving drugs: 1) **analgesics** and 2) **anesthetics**. Analgesics relieve pain without total loss of feeling or muscle movement. They are used to lessen pain but usually do not stop pain completely. Anesthetics block all feeling, including pain.

## What are systemic analgesics?

**Systemic analgesics** act on the whole nervous system, rather than a specific area, to lessen pain. They will not cause you to lose consciousness. These medications often are used during early labor to allow you to rest.

Systemic analgesics usually are given as a shot. Depending on the type of medication, the shot is given into either a muscle or a vein. In patient-controlled analgesia, you can control the amount of medication you receive through an intravenous (IV) line. This is a small tube that is placed into a vein through which medications or fluids are given.

## What are the risks of systemic analgesia?

Systemic pain medicine can have side effects, such as nausea, feeling drowsy, or having trouble concentrating. Sometimes another drug is given along with a systemic analgesic to relieve nausea. Systemic analgesics can affect the baby's heart rate temporarily. It can be more difficult to detect fetal heart rate problems when these drugs are used. High doses of these

drugs can cause you to have breathing problems and also can slow down the baby's respiratory system, especially right after delivery.

#### What is local anesthesia?

**Local anesthesia** is the use of drugs that affect only a small area of the body. Local anesthetics provide relief from pain in that area. Local anesthetics are injected into the area around the nerves that carry feeling to the **vagina**, **vulva**, and **perineum**. The drugs are given just before delivery. They also are used when an **episiotomy** needs to be done or when any vaginal tears that happened during birth are repaired.

## What are regional analgesia and regional anesthesia?

**Regional analgesia** and **regional anesthesia** act on a specific region of the body. Depending on the types of drugs that are used, they can lessen or block pain below the waist. They include the **epidural block**, **spinal block**, and **combined spinal-epidural (CSE) block**.

## What is an epidural block?

An epidural block (sometimes referred to as "an epidural") is the most common type of pain relief used during labor and delivery in the United States. In an epidural block, medication is given through a tube placed into the lower back.

An epidural block can be used during labor and for a vaginal delivery or *cesarean delivery*. For labor and vaginal delivery, a combination of analgesics and anesthetics may be used. This combination of drugs causes some loss of feeling in the lower areas of your body, but you remain awake and alert. You should be able to bear down and push your baby through the birth canal. For a cesarean delivery, the dose of anesthetic may be increased. This causes loss of sensation in the lower half of your body. An epidural also can be used for *postpartum sterilization*.

## How long does an epidural take to work?

Because the medication needs to be absorbed into several nerves, it may take a short time for it to take effect. Pain relief should begin within 10–20 minutes after the medication has been injected.

## Will I be able to move or feel anything after receiving an epidural?

You can move with an epidural, but you may not be able to walk around. Although an epidural block will make you more comfortable, you still may be aware of your contractions. You also may feel your health care provider's exams as labor progresses.

## What are the risks of an epidural?

Although it is rare, an epidural block can cause the following side effects:

- Decrease in blood pressure—An epidural can cause your blood pressure to decrease. This, in turn, may slow the baby's heartbeat.
- Fever—Some women develop a low-grade fever as a normal reaction to an epidural.
- Headache—If the covering of the spinal cord is pierced while the tube is being placed and spinal fluid leaks out, you can get a bad headache. This happens rarely.
- Soreness—After delivery, your back may be sore for a few days.

Serious complications with epidurals are very rare:

- There is a small risk that the anesthetic medication could be injected into one of the veins in the epidural space. This can cause dizziness, rapid heartbeat, a funny taste, or numbness around the mouth when the epidural is placed.
- If anesthetic enters your spinal fluid, it can affect your breathing muscles and make it hard to breathe.

#### What is a spinal block?

A spinal block—like an epidural block—is a form of regional pain relief. A small amount of medication is injected into the spinal fluid. Depending on the drugs used, it can be used for regional analgesia or anesthesia. It starts to relieve pain quickly, but it lasts for only an hour or two.

## Will I be able to move or feel anything after receiving a spinal block?

You may be numb after receiving a spinal block and will need assistance moving.

## What are the risks of a spinal block?

A spinal block can cause the same side effects as an epidural block.

#### What is a combined spinal-epidural (CSE) block?

A CSE block is another form of regional pain relief. It has the benefits of both a spinal block and an epidural block. The spinal part acts quickly to relieve pain. The epidural part provides continuous pain relief. Lower doses of medication can be used with a CSE block than with an epidural block for the same level of pain relief.

## Will I be able to move after receiving a CSE block?

The CSE block sometimes is called a "walking epidural." Depending on your hospital's policy, you may be able to walk for a short distance after the block is in place. For example, you may be able to walk a few feet to the bathroom with assistance. However, some hospitals and birthing centers require women who receive any type of pain relief to remain in bed.

## What are the risks of a CSE block?

A CSE has the same risks as an epidural block.

## What is general anesthesia?

**General anesthesia** causes you to lose consciousness so that you do not feel pain. It usually is used only for emergency situations during childbirth.

## How is general anesthesia given?

It is given through an IV line or through a mask. After you are asleep, your anesthesiologist will place a breathing tube into your mouth and windpipe.

## What are the risks of general anesthesia?

A rare but major risk is aspiration of food or liquids from a woman's stomach into the lungs. Labor usually causes undigested food to stay in the stomach longer than usual. While you are unconscious, the contents of your stomach can come back into the mouth and go into the lungs. This can cause a lung infection (pneumonia) that can be serious. General anesthesia usually requires the placement of a breathing tube into the lungs to help you breathe while you are unconscious. Difficulty placing this tube is another risk. General anesthesia can cause the newborn baby's breathing rate to decrease. It also can make the baby less alert. In rare cases, the baby may need help breathing after birth.

## Glossary

Analgesics: Drugs that relieve pain without loss of muscle function.

Anesthetics: Drugs that relieve pain by loss of sensation.

Cesarean Delivery: Delivery of a baby through surgical incisions made in the mother's abdomen and uterus.

**Combined Spinal–Epidural (CSE) Block:** A form of regional anesthesia or analgesia in which pain medications are administered into the spinal fluid (spinal block) as well as through a thin tube into the epidural space (epidural block).

**Epidural Block:** A type of regional anesthesia or analgesia in which pain medications are given through a tube placed in the space at the base of the spine.

**Episiotomy:** A surgical incision made into the perineum (the region between the vagina and the anus) to widen the vaginal opening for delivery.

General Anesthesia: The use of drugs that produce a sleep-like state to prevent pain during surgery.

Local Anesthesia: The use of drugs that prevent pain in a part of the body.

**Perineum:** The area between the vagina and the anus.

**Postpartum Sterilization:** A permanent procedure that prevents a woman from becoming pregnant, performed soon after the birth of a child.

Regional Analgesia: The use of drugs to relieve pain in a region of the body.

Regional Anesthesia: The use of drugs to block sensation in a region of the body.

Spinal Block: A type of regional anesthesia or analgesia in which pain medications are administered into the spinal fluid.

Systemic Analgesics: Drugs that provide pain relief over the entire body without causing loss of consciousness.

Vagina: A tube-like structure surrounded by muscles leading from the uterus to the outside of the body.

Vulva: The external female genital area.

## If you have further questions, contact your obstetrician-gynecologist.

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