

Pain Relief During Labor and Delivery



Each woman's labor is unique. The amount of pain a woman feels during labor may differ from that felt by another woman. Pain depends on many factors, such as the size and position of the baby and the strength of contractions.

Some women take classes to learn breathing and relaxation techniques to help cope with pain during childbirth. Others may find it helpful to use these techniques along with pain medications. This pamphlet explains:

- Types of pain medications for labor and delivery
- How they are given
- How pain relief methods work

Types of Pain Relief

There are 2 types of pain-relieving drugs—*analgesics* and *anesthetics*. Analgesia is the relief of pain without total loss of feeling or muscle movement. Analgesics do not always stop pain completely, but they do lessen it.

Anesthesia is blockage of all feeling, including pain. Some forms of anesthesia, such as general anesthesia, cause you to lose consciousness. Other forms, such as regional anesthesia, remove all feeling of pain from parts of the body while you stay conscious. In most cases, analgesia is offered to women in labor or after surgery or delivery, whereas anesthesia is used during a surgical procedure such as *cesarean delivery*.

Not all hospitals are able to offer all types of pain relief medications. However, at most hospitals, an *anesthesiologist* will work with your health care team to pick the best method for you.

Easing Discomforts

Following are some ways to ease discomfort you may feel during labor:

- Do relaxation and breathing techniques taught in childbirth class.
- Have your partner massage or firmly press on your lower back.
- Change positions often.
- Take a shower or bath, if permitted.
- Place an ice pack on your back.
- Use tennis balls for massage.
- When contractions are closer together and stronger, rest in between and take slow, deep breaths.
- If you become warm or perspire, soothe yourself with cool, moist cloths

Systemic Analgesics

Systemic analgesics are often given as injections into a muscle or vein. They lessen pain but will not cause you to lose consciousness. They act on the whole nervous system rather than a specific area. Sometimes other drugs are given with analgesics to relieve the tension or nausea that may be caused by these types of pain relief.

Like other types of drugs, this pain medicine can have side effects. Most are minor, such as nausea, feeling drowsy, or having trouble concentrating. Systemic analgesics are not given right before delivery because they may slow the baby's reflexes and breathing at birth.

Local Anesthesia

Local anesthesia provides numbness or loss of sensation in a small area. It does not, however, lessen the pain of contractions.

A procedure called an *episiotomy* may be done by your doctor before delivery. Local anesthesia is helpful when an episiotomy needs to be done or when any vaginal tears that happened during birth are repaired.

Local anesthesia rarely affects the baby. There usually are no side effects after the local anesthetic has worn off.

Regional Analgesia

Regional analgesia tends to be the most effective method of pain relief during labor and causes few side effects. Epidural analgesia, spinal blocks, and combined spinal–epidural blocks are all types of regional analgesia that are used to decrease labor pain.



Epidural Analgesia. Epidural analgesia, sometimes called an *epidural block*, causes some loss of feeling in the lower areas of your body, yet you remain awake and alert. An epidural block may be given soon after your contractions start, or later as your labor progresses. An epidural block with more or stronger medications (anesthetics, not analgesics) can be used for a cesarean delivery or if vaginal birth requires the help of *forceps* or *vacuum extraction*. Your doctors will work with you to determine the proper time to give the epidural.

An epidural block is given in the lower back into a small area (the epidural space) below the spinal cord. You will be asked to sit or lie on your side with your back curved outward and to stay this way until the procedure is completed. You can move when it's done, but you may not be allowed to walk around.

Before the block is performed, your skin will be cleaned and local anesthesia will be used to numb an area of your lower back. After the epidural needle is placed, a small tube (catheter) is usually inserted through it, and the needle is withdrawn. Small doses of the medication can then be given through the tube to reduce the discomfort of labor. The medication also can be given continuously without another injection. Low doses are used because they are less likely to cause side effects for you and the baby. In some cases, the catheter may touch a nerve. This may cause a brief tingling sensation down one leg.

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

Although an epidural block will make you more comfortable, you still may be aware of your contractions. You also may feel your doctor's exams as labor progresses. Your anesthesiologist will adjust the degree of numbness for your comfort and to assist labor and delivery. You might notice a bit of temporary numbness, heaviness, or weakness in your legs.

Although rare, complications or side effects, such as decreased blood pressure or headaches, can occur. To help prevent a decrease in blood pressure, fluids will be given through a vein by a tube in the arm. This may increase the risk of shivering. However, a woman may shiver during labor and delivery even if an epidural is not given. Keeping a woman warm often helps to stop the shivering.

Some women (less than 1 out of 100) may get a headache after the procedure. A woman can help decrease the risk of a headache by holding as still as possible while the needle is placed. If a headache does occur, it often subsides within a few days. If the headache does not stop or if it becomes severe, a simple treatment may be needed to help the headache go away.

The veins located in the epidural space become swollen during pregnancy. Because of this, there is a risk that the anesthetic medication could be injected into 1 of them. If this occurs, you may notice dizziness, rapid heartbeat, a funny taste, or numbness around the mouth when the epidural is placed. If this happens, let your doctor know right away.

Side Effects and Risks

Although most women have epidurals with no problems, there may be some drawbacks to using this pain relief method:

- An epidural can cause your blood pressure to decrease. This, in turn, may slow your baby's heartbeat. To decrease this risk, you'll be given fluids through an intravenous line before the drug is injected. You also may need to lie on your side to improve blood flow.
- After delivery, your back may be sore from the injection for a few days. However, an epidural should not cause long-term back pain.
- If the covering of the spinal cord is pierced, you can get a bad headache. If it's not treated, this headache may last for days. This is rare.
- When an epidural is given late in labor or a lot of anesthetic is used, it may be hard to bear down and push your baby through the birth canal. If you cannot feel enough when it is time to push, your anesthesiologist can adjust the dosage.

Serious complications are very rare:

- If the drug enters a vein, you could get dizzy or, rarely, have a seizure.
- If anesthetic enters your spinal fluid, it can affect your chest muscles and make it hard for you to breathe.

As long as your analgesia or anesthesia is given by a trained

and experienced anesthesiologist, there's little chance you'll run into trouble. If you are thinking regional block may be the choice for you, bring up any concerns or questions you have with your doctor.

Spinal Block

A **spinal block**—like an epidural block—is an injection in the lower back. While you sit or lie on your side in bed, a small amount of medication is injected into the spinal fluid to numb the lower half of the body. It brings good relief from pain and starts working fast, but it lasts only an hour or two.

A spinal block can be given using a much thinner needle in the same place on the back where an epidural block is placed. The spinal block uses a much smaller dose of the drug, and it is injected into the sac of spinal fluid below the level of the spinal cord. Once this drug is injected, pain relief occurs right away.

A spinal block usually is given only once during labor, so it is best suited for pain relief during delivery. A spinal block with a much stronger medication (anesthetic, not analgesic) is often used for a cesarean delivery. It also can be used in a vaginal birth if the baby needs to be helped out of the birth canal with forceps or by vacuum extraction. Spinal block can cause the same side effects as epidural block, and these side effects are treated in the same way.

Combined Spinal–Epidural Block

A combined spinal–epidural block has the benefits of both types of pain relief. The spinal part helps provide pain relief right away. Drugs given through the epidural provide pain relief throughout labor. This type of pain relief is injected into the spinal fluid and into the space below the spinal cord. Some women may be able to walk around after the block is in place. For this reason this method sometimes is called the "walking epidural." In some cases, other methods, such as an epidural or a spinal block, also can be used to allow a woman to walk during labor.



General Anesthesia

General anesthetics are medications that put you to sleep (make you lose consciousness). If you have general anesthesia, you are not awake and you feel no pain. General anesthesia often is used when a regional block anesthetic is not possible or is not the best choice for medical or other reasons. It can be started quickly and causes a rapid loss of consciousness. Therefore, it is often used when an urgent cesarean delivery is needed.

A major risk during general anesthesia is caused by food or liquids in the woman's stomach. Labor usually causes undigested food to stay in the stomach. During unconsciousness, this food could come back into the mouth and go into the lungs where it can cause damage. To avoid this, you may be told not to eat or drink once labor has started. If you need general anesthesia, your anesthesiologist will place a breathing tube into your mouth and windpipe after you are asleep. If you are having a cesarean delivery, you also will be given an antacid to reduce stomach acid. In some cases, ice chips or small sips of water are allowed during labor. Talk to your doctor about what is best for you.

Anesthesia for Cesarean Births

Whether you have general, spinal, or epidural anesthesia for a cesarean birth will depend on your health and that of your baby. It also depends on why the cesarean delivery is being done. In emergencies or when bleeding occurs, general anesthesia may be needed.

If you already have an epidural catheter in place and then need a cesarean delivery, most of the time your anesthesiologist will be able to inject a much stronger drug through the same catheter to increase your pain relief. This will numb the entire abdomen for the surgery. Although there is no pain, there may be a feeling of pressure.

Finally...

Many women worry that receiving pain relief during labor will somehow make the experience less "natural." The fact is, no two labors are the same, and no two women have the same amount of pain. Some women need little or no pain relief, and others find that pain relief gives them better control over their labor and delivery. Talk with your doctor about your options. In some cases, he or she may arrange for you to meet with an anesthesiologist before your labor and delivery. Be prepared to be flexible. Don't be afraid to ask for pain relief if you need it.

Glossary

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

Anesthetics: Drugs that relieve pain by loss of sensation.

Anesthesiologist: A doctor who is an expert in pain relief.

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

Epidural Block: A form of anesthesia where medication is administered through a catheter that lessens labor pain (analgesic) or provides pain relief for a cesarean delivery (anesthetic).

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

Forceps: Special instruments placed around the baby's head to help guide it out of the birth canal during delivery.

Spinal Block: A form of anesthesia where medication is administered into the spinal fluid to lessen labor pain or provide anesthesia for a cesarean delivery.

Vacuum Extraction: The use of a special instrument applied to the baby's head to help guide it out of the birth canal during delivery.

This Patient Education Pamphlet was developed by the American College of Obstetricians and Gynecologists. Designed as an aid to patients, it sets forth current information and opinions on subjects related to women's health. The average readability level of the series, based on the Fry formula, is grade 6–8. The Suitability Assessment of Materials (SAM) instrument rates the pamphlets as "superior." To ensure the information is current and accurate, the pamphlets are reviewed every 18 months. The information in this pamphlet does not dictate an exclusive course of treatment or procedure to be followed and should not be construed as excluding other acceptable methods of practice. Variations, taking into account the needs of the individual patient, resources, and limitations unique to the institution or type of practice, may be appropriate.

Copyright July 2004 by the American College of Obstetricians and Gynecologists. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, posted on the Internet, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without prior written permission from the publisher.

ISSN 1074–8601

Requests for authorization to make photocopies should be directed to the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

To reorder Patient Education Pamphlets in packs of 50, please call 800–762–2264, ext 830, or order online at sales.acog.org.

The American College of Obstetricians and Gynecologists
409 12th Street, SW
PO Box 96920
Washington, DC 20090–6920

12345/87654