GUIDE

Pain Relief Options During Labour

What Are My Choices?

The Ottawa Hospital | L'Hôpital d'Ottawa

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&
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TOH

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Introduction

Welcome to The Ottawa Hospital's Obstetrical Anesthesia Service!

This booklet will answer some of the questions that expectant parents may have.

The better prepared and more you know, the more you will understand the birth process. You should consider taking prenatal classes that will teach you about good foods, preparation for labour and the care of your baby. Prenatal classes will also give you examples of ways to manage your pain during labour, including some useful relaxation and distraction methods. Information about prenatal classes is available from your doctor or midwife.

Each woman's experience with labour is different. A person's feeling of pain may differ even when the cause of pain is the same. There are many methods of pain relief available to help you cope with the pain of labour. These include both non-medicated and medicated methods.

If you don't want any medication, none will be given to you.

This booklet contains general information that should not be taken as advice for a specific situation or person. All statements made in this book should be explained to you by your personal doctor/midwife who knows about your health conditions.

Non-medicated Pain Relief Methods

Relaxation methods can help control the pain of labour. They include:

- listening to music
- frequent position changes
- light massage
- backrubs
- warm showers or whirlpool tub
- birthing balls
- breathing methods

You can get more information about these techniques from prenatal classes, books, and/or your doctor/midwife. Your labour and birth nurse will also provide you with important information and support.

Transcutaneous Electrical Nerve Stimulation (TENS) is a small electrical current that is passed through electrodes that are taped onto the lower back, to reduce pain. It is not considered to be very helpful for labour pain and is not commonly used. If you wish to learn more about this method before your labour, information is available through the antenatal clinic or your doctor/midwife.

Acupuncture and hypnosis are two methods some people find helpful. The Ottawa Hospital does not provide this service, but women can arrange to bring in

a therapist. All alternative or complementary therapists must apply to the hospital for permission to provide care.

Some doctors, midwives and nurses practice **sterile water injections**. This is an injection of a small amount of water into four areas in the lower back. It is used for short-term (45-90 minute) relief of severe back pain in labour. Results may be different for each person and not all doctors/midwives/nurses use this method.

Medicated Pain Relief Methods

Narcotics (Painkillers)

If labour becomes too painful, your doctor/midwife may order a narcotic. These medications act to "dull" the pain so that it is easier to cope with. They may make you feel sleepy or possibly sick to your stomach (nauseated). If given within several hours of the birth of your baby, the baby may be sleepy and may need medicine to help him breathe better.

Patient Controlled Intravenous Analgesia (PCA)

Patient controlled analgesia (PCA) is a way for you to control your level of pain.

A nurse will start an intravenous (IV) and attach a computer pump to it. You are given a push-button control and can give yourself narcotics (painkillers) for

your contractions. The computer will limit the amount of medication to a safe amount. Your pain relief would be less than with an epidural, and the medication used may make the baby sleepy. The baby may require some medication after birth to help wake him up, as with other painkillers (see above).

We recommend PCA for those patients who wish to have relief from their labour pain but for whom an epidural may not be safe because of certain medical conditions.

Entonox/Nitronox

Entonox/Nitronox is a mixture of oxygen and nitrous oxide (laughing gas) which you breathe during your contractions. It is most useful for women who are almost fully dilated and ready to push, especially for those women who have had babies before. You can also ask for it if there is a delay in receiving an epidural.

Epidural Analgesia/Anesthesia

A commonly used method of pain relief in labour and birth is epidural anesthesia. It works well and is safe. You remain awake, and experience childbirth with little pain.

The Department of Anesthesiology at The Ottawa Hospital provides an epidural service 24 hours a day,

every day. More than 90% of the time, the epidural will be done within 30 minutes of the request being made.

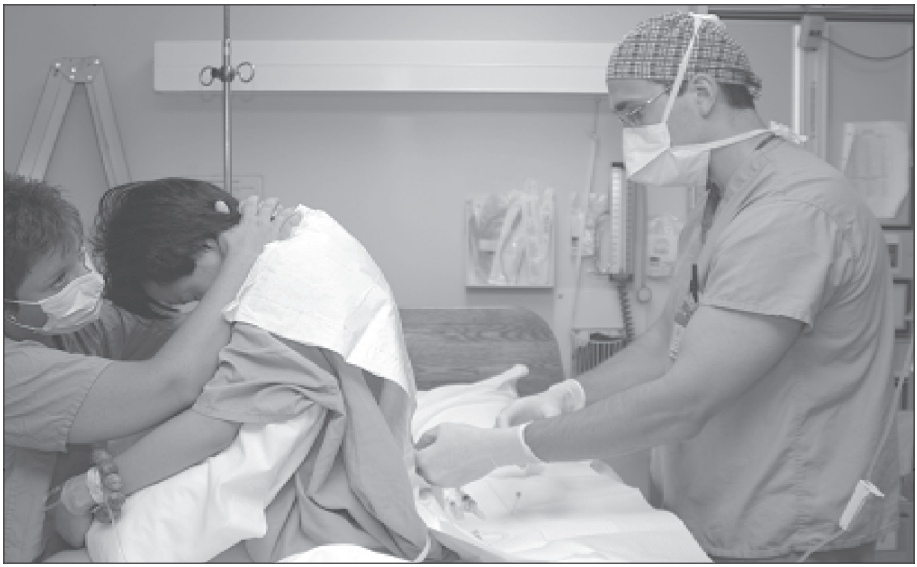
Anesthesiologists are also responsible for many other activities in the hospital. It is important that you know that there are times when an anesthesiologist may be delayed due to emergencies elsewhere in the hospital. There are rare times when you may wait more than 30 minutes for the anesthesiologist to do your epidural. It takes about 15 minutes to put in the epidural catheter (tube) and the medication takes 15 to 20 minutes to reach full strength.

What is an epidural?

An epidural involves placing a needle into the epidural space (a small space before the spinal column) of your lower back. The anesthesiologist inserts a small plastic tube or catheter through the needle into the epidural space. The anesthesiologist then removes the needle, leaving the catheter (tube) in your back to allow medication to be given during your labour. The medications for pain relief are given continuously through the tube to keep you comfortable. You can also receive extra doses (boluses) of pain medication if you need them.

Is the epidural injection painful?

Not usually. There is a feeling of stinging when the skin is injected with local anesthetic to freeze it. There is quite a bit of pressure when the catheter (tube) is put in your back, but it should not be painful.



Are there any patients who cannot have an epidural?

Yes. Patients with certain medical conditions such as bleeding problems or back infections should not have epidural analgesia for labour and birth. Pregnant women who have back or nerve problems can discuss their condition with an anesthesiologist from The Ottawa Hospital.

How does the epidural work?

The medications used in epidurals are usually a mixture of dilute local anesthetic (freezing) and narcotic (painkiller). These medications have been shown to work very well together in the epidural space.

They provide good pain relief and still allow you to move your legs. The medications used have been proven to be safe for you and your baby.

You will most likely receive Bupivacaine or Ropivacaine as your local anesthetic (freezing), and fentanyl as the narcotic (painkiller). You can usually move your legs well, although they may feel numb or weak. The first dose of medication begins to decrease the pain in about five to ten minutes.

You will receive the medication continuously, through the epidural catheter to keep you comfortable. If the pump is not controlling your pain, your nurse or anesthesiologist can give you stronger medications through the epidural catheter (tube). Often the stronger medication (local anesthetics, usually Lidocaine) will make your legs feel quite numb and heavy.

“Walking Epidurals”

There are some newer methods of epidural analgesia available that allow the labouring woman to move about more, and in some cases actually walk around the labour floor. The anesthesiologist can give this mobile epidural in one of two ways: with a combined spinal-epidural technique and/or patient-controlled epidural analgesia.

Combined Spinal Epidurals (CSE)

This type of an epidural involves sliding a very small needle through the epidural needle after it has been placed in the epidural space in your back. A small amount of medication is then given through the smaller needle directly into the fluid in your spinal canal. This medication works very quickly, within one

to two minutes, giving you very good pain relief with little effect on your leg strength. The small needle is removed and the epidural catheter is then placed as usual.

While the first medication is giving you pain relief; you may be allowed to walk around on the labour floor or in your room. You will first be asked to show that your legs are strong enough.

The special medication only lasts for 60-90 minutes, and after that the epidural catheter is used with either a continuous infusion as described before, or with patient-controlled epidural analgesia.

Risks with the CSE are:

- more itchiness is likely
- any changes in your baby's heart rate may occur earlier than with a standard epidural.

Patient Controlled Epidural Analgesia (PCEA)

Another way to move about with a labour epidural is for you to control the amount of drugs you receive through the epidural yourself. This is done using a computer-controlled pump, which is set up to allow you to give yourself small amounts (boluses) of the medication when you feel you need it.

The medications used are again a mixture of dilute local anesthetic (freezing) and narcotic (painkiller). Often the anesthesiologist will order a small amount of

the medication to go through the epidural tube all the time. Then if you happen to have a nap, the epidural will not wear off.

This method is less likely to cause heavy legs, and you are more likely to be able to empty your bladder (urinate) on your own. You will also be able to use different birthing positions e.g. squatting.

The PCEA can be used as soon as the epidural is put in and the anesthesiologist has given you the medication to start the pain relief. PCEA is also given to patients who have received a CSE, so once the first medication begins to wear off, you can start to give yourself small amounts of the medication to keep comfortable.

If you are interested in being able to move around, this is a good method. Your nurse will test your ability to walk about 30 minutes after the epidural is started. You must stay in the birthing unit and always have someone with you when you are walking around.

What are the risks of epidural analgesia/anesthesia?

There are risks with any medication and with any procedure. The labour epidural is no exception. The most common complications of an epidural are small and easily treated.

These are:

- **A drop in blood pressure**
  This also may cause nausea, vomiting and dizziness. Starting an intravenous (IV – a small plastic catheter inserted into a vein) to give you fluids before the epidural reduces this problem.
- **Changes in the baby's heart rate**
  This happens in 10-15% of cases, within the first 30 minutes after the epidural was started (earlier with the CSE, later with a standard epidural). Usually this means a drop in the baby's heart rate, and it usually happens if you are lying down too flat. You will be asked to move onto your side, and your blood pressure will be checked. You might be given oxygen until the baby's heart rate returns to normal.
- **Sleepy baby at birth**
  If you have received a bigger dose of narcotics (pain medicine) through the epidural close to the time of your baby's birth, your baby may need some medication to help him breathe. This does not happen often, less than one birth per month.
- **Difficulty emptying your bladder (urinating)** sometimes occurs. Urinating more often during your labour lessens this problem. Sometimes a small tube will be put into your bladder to empty it.
- **Low forceps or vacuum may be used more often** at the time of birth.

- **A longer length of labour**
  As long as you stay comfortable and your baby is fine, the increased time you are in labour is not a problem.
- **Backache**
  Pregnancy and childbirth may lead to backache whether or not you have an epidural. Backache from the epidural itself lasts only for 2-3 days, and is minor. Up to 10% of women will have new backache one year after delivery.
- **Headache**
  Sometimes (1-2%), the epidural needle will make a small hole in the membrane covering the spinal column, causing fluid to leak out. If this happens, you may get a headache, usually within a day of the epidural. An anesthesiologist will see you and discuss ways to help you.
- **Itchiness**
  This is a side effect of the narcotic (painkiller) in the epidural. You are more likely to get itchy following a CSE. It can be treated, but usually only lasts for about an hour. Very few women have itchiness that lasts for the whole time that the epidural is working.
- **Failure or incomplete pain relief**
  5-10% of labour epidurals do not work well, or stop working. Usually the anesthesiologist will try a different medication to get the epidural to work, but sometimes the epidural needs to be changed. Some patients need stronger medication in the epidural to stay comfortable and it will be given if needed.

Rare risks:

Some of the medication may accidentally enter the spinal space or a vein. This may cause short acting effects such as:

- headache
- ringing in the ears
- blurring of vision
- tingling around the mouth
- *very rarely* seizures

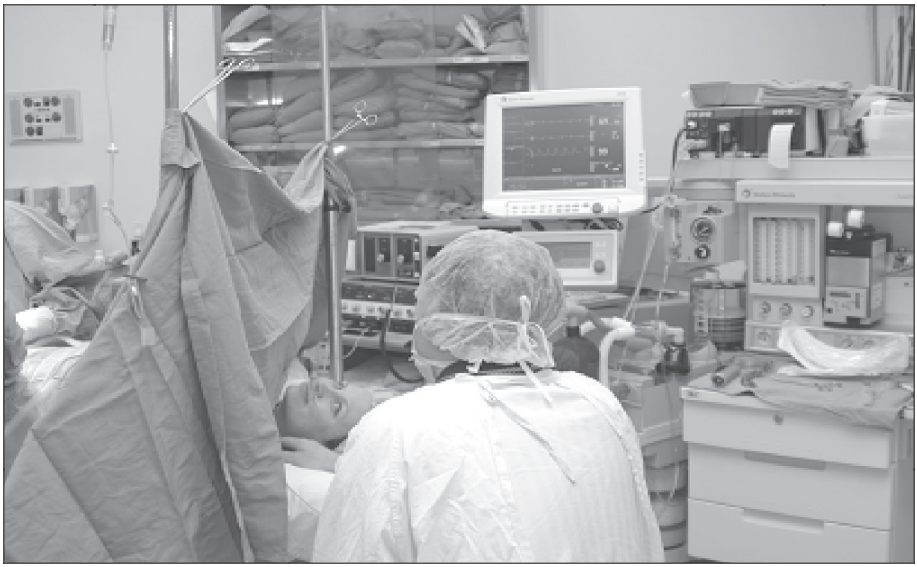
More serious complications such as meningitis, paralysis and death are *extremely rare*.

At The Ottawa Hospital, the anesthesiologists are very experienced with epidural analgesia, performing several thousand epidurals yearly in the birthing units, pain clinics, and in the operating room.

What type of anesthetic should I have if I am going to have a Cesarean Birth?

The choice of anesthetic depends on the reason for the operation, the wishes of the woman, and the concerns of both the anesthesiologist and obstetrician.

At The Ottawa Hospital, Cesarean births are most often done under epidural or spinal anesthesia. This means that you are frozen (numbed) from the chest



down so you feel no pain, but you are awake during the birth. We encourage your partner to be present as well.

Spinal Anesthetic

What is a spinal anesthetic?

A spinal anesthetic is similar to an epidural. The anesthesiologist inserts a much smaller needle into the fluid space around the spinal nerves, which causes rapid numbing of the lower body.

The anesthesiologist uses spinal anesthesia for elective (planned) Cesarean births because only one injection is required. The chance of having a headache after a spinal anesthetic is less than 1%. While, the combined spinal epidural technique for labour pain

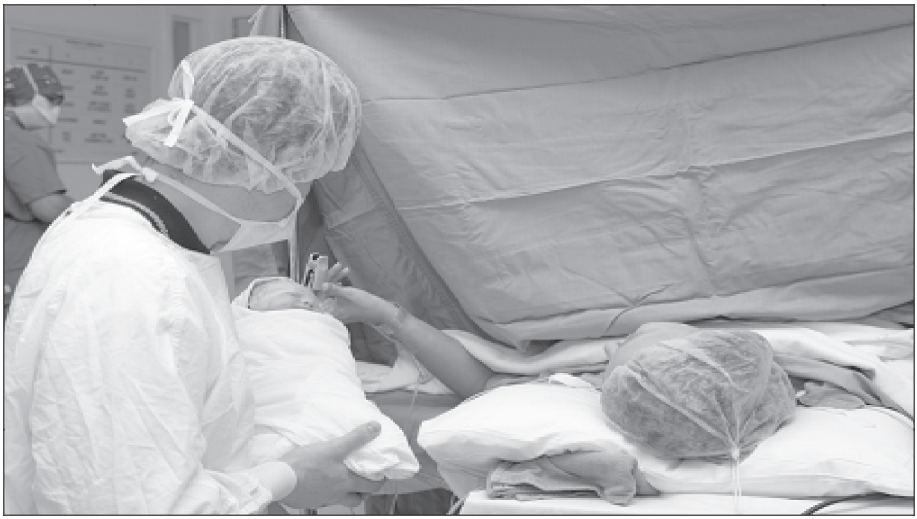
relief also uses a spinal, different medications are used so that you are not as heavily frozen as during a Cesarean birth.

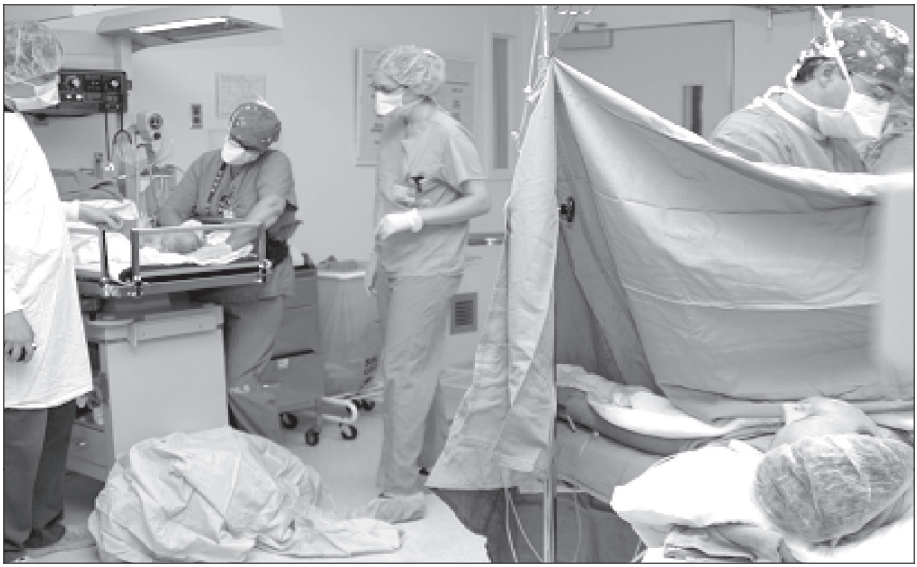
General Anesthesia

A general anesthetic means the mother is asleep during the birth. A general anesthetic is sometimes necessary when we cannot give an epidural or spinal for medical reasons or if we must deliver the baby very quickly.

In a few women, epidural anesthetics do not give enough pain relief during the surgery, and we must use either a spinal or a general anesthetic. If you require a Cesarean birth, we usually recommend an epidural or spinal anesthetic.

If you have an epidural in place and you require a Cesarean birth, we will usually give a stronger local anesthetic through the tube already in your back.





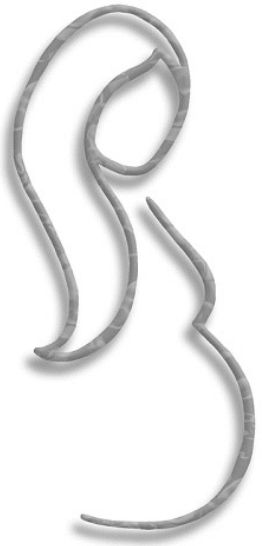
What We Recommend

The Department of Anesthesiology believes that the different methods of epidural analgesia are the safest, most effective methods for medicated pain relief during labour and birth. We recommend its use unless there are medical reasons that don't allow it, or increase the risks.

A doctor, "anesthesiologist" from the Department of Anesthesiology, is always in the hospitals at both the Civic and General campuses, and available to help you and your baby when requested.

The Ottawa Hospital is a teaching hospital that works with the University of Ottawa, Faculty of Medicine. The medical team caring for you could also include residents, fellows, and medical students. Medical students do not perform epidural anesthesia, but they may sometimes watch the procedure.

If you have concerns, questions, or would like more information, please speak to your doctor/ midwife, or contact us directly at the Department of Anesthesiology:



Civic Campus

613-761-4169

General Campus

613-737-8187

We will be happy to help you in any way we can.

Notes