ANAESTHETICGROUPBALLARAT

Pain Relief During Labour

Most women in labour develop significant pain with their contractions. There are many ways in which women can be helped to manage this pain.

These include:

~ Natural or prepared childbirth—physical and psychological exercises, supportive environment and partner, positioning, breathing exercises,etc
~ Hypnosis
~ Acupuncture
~ TENS machines
~ 'Gas'—Nitrous Oxide and Oxygen
~ Pethidine or Morphine

However, if these are not enough to help you cope with the pain, an epidural is the most effective form of pain relief currently available.

Your obstetrician may also request an epidural in certain circumstances where it may benefit your baby, for example twins, blood pressure, prematurity, breech presentation.

What is an epidural?

The epidural space is a layer between the bones of your spine and the spinal nerves as they leave your spine and travel out to the rest of your body. A local anaesthetic and/or opioid—"morphine-like—drug can be injected into this space. The local anaesthetic can 'block' the passage of pain sensations back along these nerves to the brain and the opiate—usually a drug called fentanyl—alters the way the spinal cord interprets the pain signals.

Because labour may go on after the drugs have worn off, a small plastic tube—catheter—is inserted into the epidural space to allow continuous infusion of pain relieving drugs into the epidural space. This prevents the drugs from wearing off.

What happens when I have an epidural?

Your Anaesthetist will introduce himself and ask some basic questions about your general health, pregnancy and labour thus far. He will then tell you about what is involved, what to expect and any possible risks. If you have any questions or concerns please ask, but we will understand if you are too distracted to pay much attention to all of this.

The next step is to insert an intravenous drip; a needle that goes into a vein in your arm. This will be used to give you some fluids—usually saline—to prevent the drop in blood pressure that can occur when the epidural causes your blood vessels to relax and dilate.

The midwife will then help you to get in to the appropriate position for the epidural insertion. This can be either sitting up with your legs over the edge of the bed or lying on your side, curled up in to a ball. This position opens up the spine and makes it easier to insert the needle into the correct position. The needle is inserted into the lower lumbar region, the lower back.

The prevention of infection is very important, so the procedure is treated a little bit like an operation in that your Anaesthetist will put on a sterile gown and gloves. All of the equipment will be sterile and the actual epidural needles, catheters and syringes are all disposable items only used for one patient.

Your back will be 'painted' with an antiseptic solution and then a fine needle will be used to inject a small amount of local anaesthetic in to the skin. This deadens the area to make the insertion of the bigger epidural needle a bit more comfortable. Once this needle is in place, the 'catheter' is inserted through the needle, the needle is removed and the catheter is stuck down to your back with special dressings or tape. The catheter is made of very flexible plastic so that it doesn't injure the nerves and allows the mother to lie in any position that is comfortable to her. The pain relief medication is then injected through the catheter into the epidural space.

For patients with normal anatomy, insertion usually only takes 10-15 minutes, but if the patient has an abnormality of the spine or is significantly overweight, the procedure can become technically difficult and may take longer to complete.

What will I feel?

The initial injection of local anaesthetic into the skin may give a burning or stinging sensation for a few seconds, but most people do not experience significant discomfort during the insertion of the epidural needle itself. Rarely you may feel some pain down the legs if the needle touches one of the nerves.

When the local anaesthetic solution is injected through the catheter you may experience a cold sensation in the back.

The effect of the local anaesthetic IS NOT IMMEDIATE; it will take about five minutes before any effect is noticed, and about 15–20 minutes for the full effect.

How much pain relief you get is variable. Usually, nearly all your pain will go within 20 minutes but this depends on a number of factors. Sometimes you will be given a weaker strength of local anaesthetic to try and maintain muscle strength; this is often done if an epidural is required in early labour or if your obstetrician wants you to be able to push if delivery is soon. Some types of pain are difficult to treat, for example back pain, although using opiates has improved this over the last few years. Sometimes the numbness may work better on one side than the other; in this case we may try placing you in different positions to improve things.

In our practice, over 95% of women describe their pain relief as adequate and are very satisfied with the procedure.

How long will it work for?

The first injection given when the epidural is inserted will last from 2-4 hours but then a further dose can be administered down the catheter (a 'top-up'). More commonly, we will start an ‘infusion’; this is an electronic pump that trickles the local anaesthetic solution in through the catheter at a constant slow rate so that it doesn't wear off. When you are ready to deliver your baby, the epidural is sometimes turned off to allow you to have more strength to help push.

What are the advantages of having an Epidural?

Compared to other pain relief methods, epidural analgesia has:

~ Better pain relief effect
~ Lower incidence of nausea and vomiting
~ Less risk of drowsiness or disorientation
~ Less risk of the baby becoming drowsy as significantly less drug is transmitted across to the baby compared with a pethidine injection.
~ Flexibility. It can be used for pain relief for any other procedures that may be necessary, for example forceps delivery, removal of retained placenta, caesarian section.

What are the risks of having an epidural?

Epidural anaesthesia is safe and effective in nearly all women, but does have some risks.

Will the epidural affect my baby?

The drugs used for control of labour pain do not enter the foetus in significant amounts. Thus, the epidural does not have any inherent harmful effects on the foetus. In fact, as the pain relief from the epidural relaxes the mother, her breathing and circulation return to normal which improves blood flow to the uterus. In most cases, this improves the health of the baby.

The epidural may cause the blood pressure to fall, which can affect the baby, but this is closely monitored and usually prevented by the IV fluids. Very rarely the baby may become distressed because of this or other reasons, possibly leading to intervention by your obstetrician such as forceps or Caesarian delivery.

Common side effects for the mother

~ Legs may feel numb and lack strength, restricting movement
~ A decrease in blood pressure; this may be treated with medication and intravenous fluids if necessary
~ Difficulty passing urine. This may require a bladder catheter, which carries a small risk of urinary infection
~ Shivering
~ Itching can result from the opioid drug used. If troublesome, it can be treated
~ Backache is common after pregnancy and labour, an epidural doesn't make this any more likely
~ About 1–5% of women who have an epidural may have some pain at delivery. A 'top-up' dose can be given if this occurs but there is often a fine balance between controlling the pain and being able to push and participate in the delivery

Possible complications for the mother

~ About one in every 100 women who have an epidural develop a headache due to the "dura"— one of the layers around your spinal nerves—being punctured by the needle and cerebrospinal fluid leaking into the epidural space. This headache can be treated.
~ Temporary nerve damage outside the spinal cord may occur in about one in 3,000 women. Virtually all of these heal within a few months. The temporary nerve damage may be caused by the labour rather than by the epidural.

Serious but very rare complications

~ Significant nerve damage or infection—meningitis—is rare though possible. The epidural is inserted under very strict conditions to reduce this risk. Treatment may require antibiotics or even surgery.
~ The local anaesthetic may be inadvertently injected in to the bloodstream causing temporary dizziness, tingling or even (in severe cases) convulsions and heart problems. Your Anaesthetist is trained to manage these reactions which pass in a few minutes.
~ Allergic reaction to the drugs is extremely rare.
~ Permanent paralysis and even death have been reported in the world literature but this is so rare in modern anaesthetic practice that the exact risk is not known.

Will my labour be longer?

An epidural will usually not effect the duration of first stage labour, however second stage may be slightly longer although there is no evidence that this will harm the mother or baby.

Will my epidural cause backache?

Backache is common after pregnancy and labour, whether or not an epidural is given.

Will it increase my chances of needing a Caesarian Section?

An epidural will not cause you to need a Caesarian section. However, if you are at higher than normal risk for needing a Caesarian, your obstetrician may request an epidural. Similarly, an epidural will not cause you to need a forceps delivery.

Can anyone not have an epidural?

An epidural is not advised if there is infection present over the lower back, where there is a history of a bleeding disorder, or where there is a significant spinal abnormality, which may make insertion difficult.

How much will it cost?

You will receive an account for professional services. This will be partly covered by Medicare and your health fund.

You should contact us before your labour or discuss this with the Anaesthetist if you are concerned or want more exact details.