

# PAIN RELIEF DURING LABOUR

A Guide for Patients  
and Families



This brochure provides information about pain relief during labour. It has been designed in response to questions most frequently asked by patients and their families.



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## **PAIN RELIEF DURING LABOUR AND CHILDBIRTH**

The purpose of this brochure is to explain pain relieving methods used during labour and delivery.

### **Epidural analgesia**

Epidural is the most effective method available for pain control during labour and delivery. It is achieved by using local anaesthetic (the same medication used by dentists to freeze the jaw) in the epidural analgesia. Nerves connecting the uterus and birth canal are frozen by an injection in the lower back. Epidural analgesia does not make you or your body sleepy and can be used without slowing down labour. In fact labour may become more efficient once pain relief has been achieved. All patients in labour, including those who receive epidural analgesia, require an intravenous line in the arm or hand before the procedure. It is removed after delivery when the effects of the epidural analgesia have worn off.

The epidural space is located by using a special needle, which is passed between the bones of the spine, 1-3" (2.5 to 7.5 cm) deep, about 6 inches (15 cm) above the tail bone. The nurse helps patients get into the best position, either lying on the side or sitting, for the time it takes to locate the epidural space. After washing the lower back with antiseptic and freezing the skin, the needle is introduced into the epidural space. A thin, flexible tube (the epidural catheter) is passed through the needle, which is removed. Local anaesthetic (freezing) is injected through the tube to relieve labour pain. The epidural catheter is then secured with tape. At this time nothing hard or sharp remains in the back.





It takes between 5-30 minutes for the epidural analgesia to work. During this early stage patients can feel warmth, and tingling in the legs, followed by pain relief. Although, as little medication as possible is used to relieve the pain, some women feel their legs become heavy after the initial dose. To prevent the pain from returning, medication is given continuously through the catheter, using a controlled syringe. If the pain returns in spite of continuous medication, additional doses can be given. When it is time to push with contractions, the dose of medication may be reduced to allow return of some sensation.

### **Side Effects and Complications**

In skilled hands, epidural analgesia is very safe for both mother and baby, but there is a minor risk of complications, even when the best technique is followed.

#### **Low blood pressure**

Every patient getting an epidural analgesia receives intravenous fluids to prevent a fall in blood pressure, which is carefully monitored before, during and after starting an epidural analgesia.

#### **Shivering**

This is not a serious side effect but occurs quite commonly in the first hour. It is usually associated with prolonged or advanced labour. An extra blanket usually helps to relieve this symptom.

#### **Inadequate pain relief**

Sometimes there is inadequate pain relief in spite of adequate epidural analgesia. If this happens, the epidural catheter may have to be adjusted.

#### **Back pain**

Back pain is usually related to labour and delivery process and not with epidural analgesia. In case of difficult epidural insertion pain occurs at the injection site, which lasts only for few days.

#### **Headache**

Epidural analgesia may lead to headache if the needle goes deeper. The risk of headache is approximately one in 200. If this headache is severe it requires treatment.

### **Persistent numbness or weakness**

Nerve damage may cause prolonged numbness or partial weakness in one leg, it occurs only in one out of 2,500 births and is usually caused by baby's head causing pressure on nerves passing through the pelvis and not due to epidural analgesia. If the leg does not recover completely before discharge the patient must inform the nurse.

### **Life threatening complications**

Severe, permanent nerve damage or life threatening complications are rare. Severe drug reactions such as convulsions may occur in one in 10,000 administrations. Severe brain damage, coma, paralysis and death are even less common: about one case in 100,000. Risk of severe injury or death due to epidural analgesia is minimal.

### **Frequently Asked Questions**

#### **Q: Is it necessary to have an epidural analgesia?**

**A:** No. Epidural analgesia is one of several pain relieving methods available during labour. It is usually done on patients' request. In the unusual instance that an epidural is needed for medical reasons, it would be done on the request of the doctor or midwife, but only after the patient's consent.

#### **Q: Is it painful to receive epidural analgesia?**

**A:** Local anaesthetic (freezing) is injected under the skin before the epidural procedure. This stings for about five seconds. Some women experience a feeling of pressure in the back during the insertion of the epidural catheter. Most women say they find the pain of contractions worse than having an epidural inserted.

#### **Q: Does the epidural procedure slow down labour?**

**A:** Not necessarily. The dose and timing of epidural medication are tailored to suit respective labour conditions. In fact, epidural analgesia can improve the descent of the baby by relieving pain and relaxing the pelvic muscles during established labour (determined by the doctor or midwife) and provided there are regular, painful contractions. If it is induced labour, one may have epidural for the induction. Even late in labour, it may be appropriate to receive an epidural.

**Q: What other methods of pain relief are available?**

**A. Entonox**

It is 50 per cent nitrous oxide with oxygen which is breathed through a mask. It does not relieve the pain completely but helps to reduce its intensity. It is simple and acts quickly and sometimes makes patients feel light-headed for a short while.

It can be used any time during labour and the amount of gas can be controlled, but for best effect, timing is important. Patients can start breathing the gas as soon as they feel a contraction coming to gain maximum effect when the pain is at its worst. It should not be used between contractions or for long periods as this can cause dizziness.



**B. Narcotic drugs**

Narcotic drugs such as meperidine, nalbuphine and morphine are available, although pain relief may be less effective than epidural analgesia. It is usually administered into a muscle, but can be used intravenously or, in special circumstances by a patient controlled device.

**C. Local injections in the birth canal**

Obstetricians can administer injections of local anaesthetic in the birth canal at the time of delivery.

**Q: Are there any patients who cannot have epidural analgesia?**

**A:** Patient with medical conditions such as bleeding disorders and infection at the site of epidural insertion may be advised not to have an epidural. Any women with a history of back problems or disease of the nervous system should discuss their problem with the anaesthesiologist.

**Q: What is a spinal anaesthetic and when is it used?**

**A:** A spinal anaesthetic involves an injection in the lower part of the back using a very thin needle which is inserted just a few millimeters deeper than an epidural analgesia, into the fluid space around the nerves. It has the same effect as an epidural, but takes less than 10 minutes to work and is useful for achieving rapid freezing of the abdomen and lower body. It is mainly used for later stages of delivery in patients who require pain relief and have not received epidural analgesia or for caesarean section and its effects last two to three hours.

For further information:

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