

# Epidural analgesia for pain relief during labour

The purpose of this leaflet is to introduce and encourage the use of epidural analgesia as a method of pain relief during labour.

There are several ways to alleviate labour pain. People feel pain differently and the desire to alleviate it is not something to be ashamed of. In cases of particularly severe pain, epidural analgesia is often used. It is the most widely used and effective method of labour pain relief today. Relieving pain allows a woman to rest and makes the childbirth experience more enjoyable. In the maternity ward of East Tallinn Central Hospital, up to 30% of all women in labour use epidural analgesia.

## **What is epidural analgesia?**

The epidural space is an area in the lumbar spine traversed by nerves that carry pain signals from the uterus and birth canal. A special catheter is inserted into the epidural space through a guide needle (the needle is removed) to inject a medication (a local anaesthetic and a very low dose of opioid) that anaesthetises the nerves. The epidural catheter is inserted by an anaesthesiologist or an anaesthesia resident.

Before inserting the epidural catheter, it is necessary to insert a venous cannula and start a drip so that you can get immediate help if any side effects should occur.

The medication injected into the epidural space will start to work within 15 to 30 minutes. Throughout the labour, additional doses of the medication can be administered. This is done with the help of a special button, by either the midwife or the patient under the supervision of the midwife.

## **Does it hurt to have an epidural catheter inserted?**

While inserting the epidural catheter, you will be asked to either lie on one side or sit with your knees against your abdomen and your chin touching your chest. This position is uncomfortable but necessary for the procedure to succeed.

At the beginning of the procedure, a local anaesthetic is injected into the insertion site, which initially causes tingling but makes the rest of the procedure less painful. Some women feel pressure in the back during the procedure. In most cases, the pain associated with inserting an epidural catheter is less severe than labour pain.

### **When is the right time to start epidural analgesia?**

Epidural analgesia is started after the onset of regular uterine contractions.

### **Is it necessary to stay in bed until delivery after starting epidural analgesia?**

No. You may sit, stand and walk. As epidural analgesia can sometimes cause numbness in the legs, someone must be around to provide support when needed.

### **What are the advantages of epidural analgesia?**

- It is the most effective form of pain relief.
- All in all, fewer medications are needed compared with other forms of analgesia (such as intravenous or intramuscular administration of analgesics).
- The effects on the baby are very mild.
- It does not cause drowsiness.
- If, for example, an emergency caesarean section is required, injecting a higher dose of the medication into the epidural catheter will provide adequate anaesthesia for the surgery.

### **What are the disadvantages of epidural analgesia?**

- It may slow down labour.
- Vacuum extraction may be required at the end of labour.
- Sometimes the use of this method can cause numbness of the legs, making it difficult to move around during labour. In this case, the next dose is administered after leg weakness has passed.
- Sometimes an adequate analgesic effect is not achieved, in which case the position of the existing epidural catheter can be adjusted or a new one inserted.

### **Is epidural analgesia suitable for everyone?**

The placement of an epidural catheter is not recommended for women who have coagulation disorders or who are taking medications that affect blood clotting. Be sure to inform both the midwife and the anaesthesiologist; each case is dealt with on an individual basis.

An epidural catheter cannot be placed if there is a rash or an infection in the area where the catheter needs to be inserted.

If there is any reason to believe that it will not take much longer for the baby to be born, you may be advised to have low-dose spinal anaesthesia instead of epidural analgesia. It provides a faster analgesic effect but has a shorter duration (usually around one hour).

### **What happens if an emergency caesarean section is required?**

If you have an epidural catheter in place and a good analgesic effect has been achieved, a higher dose of local anaesthetic will be injected for a caesarean section, which will provide adequate anaesthesia so that the surgery does not hurt (you may feel tightness or pressure in your abdomen).

You are awake during the surgery and can still participate in your baby's birth.

If epidural analgesia has not worked well during labour, it will be replaced by spinal anaesthesia.

## What are the possible side effects and complications?

Side effect	Frequency	Comment
Itchy skin	1/10	Common but transient.
Loss of bladder control		Bladder filling may not be felt after having an epidural, but this problem can be easily solved with a urinary catheter.
Mild pain or bruising at the site of insertion of the epidural catheter		Common, self-limiting.
Decreased blood pressure	1/50	Common but transient; can be managed with intravenous infusion.
Temporary numbness or weakness of the legs	1/2500	Nerve damage can cause numbness or weakness in one leg, which can last for several weeks. This usually occurs when the baby presses on the nerves in the pelvic floor during labour. This type of damage usually does not result from the placement of an epidural catheter.

<b>Complication</b>		
Headache	1/100 – 1/200	Inform your doctor of this before leaving the hospital; if it does not go away spontaneously, you may need specific treatment.
Persistent (lasting more than 6 months) numbness or weakness of the legs	1/24000	Rare.
Difficulty breathing due to a high level of sedation	Not known	Very rare.
Inflammation at the site of insertion of the epidural catheter	1/100000	Very rare.
Permanent paralysis of the legs		Possible, but so rare that frequency cannot be estimated.

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