

Pain-free delivery with epidural  
anaesthesia.

Anaesthetics department

Patient information



**Please read this patient information brochure carefully.**

Version 2.0

Dear patient,

In this brochure you'll find information concerning epidural anaesthesia, which can be used during labour, vaginal birth and C-section.

It's always possible to contact the anaesthetics department before onset of labour and delivery. If you wish to do so, you can contact 016/20 92 09, to make an appointment. During this appointment you'll be able to get the answers to all of your questions regarding the anaesthesia. However, the anaesthesiologist you'll meet, is possibly not the one taking care of your epidural during delivery.

For general information about anaesthesia, we would like to refer to our website [www.hhleuven.be/nl/anesthesie](http://www.hhleuven.be/nl/anesthesie).

### **Anaesthetics department**

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## Table of contents

<b>1. Introduction .....</b>	<b>4</b>
<b>2. What is an epidural anaesthesia? .....</b>	<b>5</b>
<b>3. The process of epidural anaesthesia, how does it work? .....</b>	<b>6</b>
3.1. Advantages of epidural anaesthesia .....	7
3.2. Possible disadvantages of epidural anaesthesia .....	<b>Fout!</b>
<b>Bladwijzer niet gedefinieerd.</b>	<b>7</b>
3.3. Is epidural anaesthesia harmful for my baby? .....	9
3.4. How does an infusion pump work ? .....	9
<b>4. Anaesthesia during Caesarean section.....</b>	<b>Fout! Bladwijzer niet gedefinieerd.</b>
4.1. What is the process of a C-section with epidural? .....	10
4.2. Possible disadvantages of anaesthesia during a C-section .....	11
<b>5. What to mention to your anaesthesiologist? .....</b>	<b>12</b>
5.1. Questions? .....	12
<b>6. Notes.....</b>	<b>13</b>

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## 1. Introduction

Contractions during labour are often painful. As labour and dilation progress, contractions will intensify and their frequency will increase.

There are all kinds of techniques to cope with these contractions, like breathing exercises, relaxation, a warm shower or bath, a stability ball, massage, support from your partner etc.

Your midwife will of course support and assist you during labour and help you to cope with contractions. Still, your pain can become so severe, that your ability to cope with the pain of the contraction will decrease. If your labour takes some time, you may get exhausted. When labour needs to be induced, contractions are often more painful.

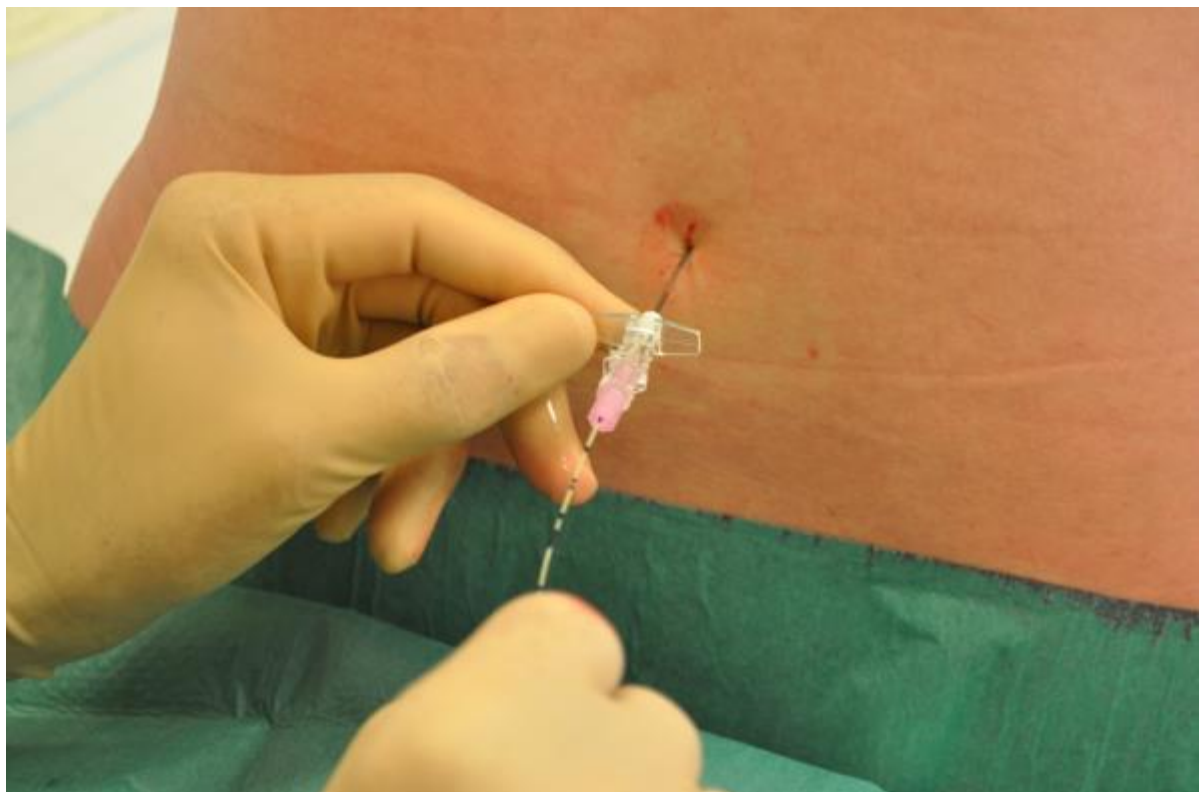
An epidural anaesthesia can offer you a solution at that time. When birth will happen through C-section, it will almost always be with an epidural anaesthesia.



## 2. What is an epidural anaesthesia?

An epidural anaesthesia will be placed by a little puncture in between two vertebrae in your lower back.

This will be placed by an anaesthesiologist. This is a medical doctor, specialized in anaesthetics. Narcotics will be injected through a specific needle right outside the spinal cord, in the epidural space. If required, a second very thin needle can be used to get the narcotics inside the spinal fluid. This would be a spinal anaesthesia and works faster and stronger than an epidural anaesthesia. All our anaesthesiologists have a lot of experience in these techniques, so the chances of complications are very small. The injection of local anaesthesia will block the electrical activity of nerve cells, which send pain signals to your brain, and thus eliminate or decrease the pain you are experiencing.



### 3. The process of epidural anaesthesia, how does it work?

**Before we actually start the epidural**, an IV catheter will be placed in your arm. We give you some extra fluids to avoid your blood pressure to drop after placing the epidural anaesthesia.

**It is important to get into the correct body posture** to be able to place the epidural fluently. This posture creates space between your vertebrae. We will ask you to sit straight up, bend the head a bit forwards, relax the shoulders, bend the lower back outwards and to sit very still. This isn't always an easy thing to do, especially when you are having contractions. If you were planning to have a pain-free delivery, it's better not to wait until the pain gets unbearable.

**The anaesthesiologist will disinfect you back with an alcoholic solution.** This will be cold. Then there will be some pushing on your back to find the correct spot for the puncture. Afterwards you will get some local anaesthesia, to numb the skin, so you will barely feel the actual puncture.

**After injecting the narcotics, the needle will be removed and a very thin catheter will remain in place, in the epidural space.** After a few minutes you will feel the pain fading away. Through the epidural catheter, which stays in your back until after the delivery, extra narcotics can be injected so your anaesthesia will not wear off.

**Then, we will attach the catheter firmly with an adhesive bandage on your back.** If necessary, an infusion pump will be connected. You can control the amount of narcotics yourself, by pushing a button. The infusion pump will give you a new dose of narcotics through the catheter in your back. This way, the anaesthesia will be adjusted to your individual needs.

**After the epidural is placed, you will need to stay in bed for safety precautions**, because the muscle strength in your legs can be weakened, due to the epidural anaesthesia. There's a risk you can't stand firmly on your legs.

**The midwife will measure your blood pressure on a regular base and continuously monitor the foetal heartrate.**

Because you won't feel the need to urinate, due to the epidural, a **urinary catheter** will be placed. This to avoid overfilling your bladder and urinating problems later on.

### 3.1. Advantages of epidural anaesthesia

Because of the pain relief, you will be able to relax more and prepare for the actual delivery.

In case of a slow labour, contraction-stimulating medication can be used without causing more pain. Which will shorten the time until delivery.

If there's a higher risk of delivering by C-section, it is possible that your gynaecologist recommends to take an epidural in early stage of labour. So that in case of an actual C-section, immediate administering of narcotics can be established.

### 3.2. Possible disadvantages of epidural anaesthesia

#### Frequent side effects

- Itch is the most common side effect of an epidural anaesthesia. This is mostly mild and barely needs any treatment. It disappears when the epidural anaesthesia has worn off.
- Light tingling or heavy weight sense in the legs are a normal side effect of the anaesthesia. These will also disappear after the anaesthesia has stopped working.
- The placement of a urinary catheter is probably needed to prevent overstretching the bladder.

#### Less frequent side effects

- Blood pressure drop: Your blood pressure can drop due to the anaesthesia. To avoid this from happening, we will put you on your side and give you extra fluids through the IV or give you blood pressure elevating medication.
- Back pain: Sometimes the place of the puncture can be sensitive. Long lasting back ache is mostly not created by an epidural, but by chronic back problems.
- Headache: In about 1/100 cases you can get a headache after the epidural, which can be quite strong. This arises probably a day after delivering and gets worse by standing up and gets better by lying down. If you think these



items apply to you, please ask to contact the anaesthesiologist. This could be caused by a tiny hole in your dural sac, which causes a leakage of fluid. This could be fixed by another puncture, where the hole will be closed by a patch of your own blood.

- The epidural anaesthesia doesn't have the desired result: In rare cases it's possible that, despite the epidural anaesthesia, you will still feel pain. This can be caused by different variables: or your contractions are very intense or labour is progressing very quickly so that the normal dose of narcotics won't suffice. An additional or stronger dose may be given by the anaesthesiologist. Besides that, there could be some technical problems with the catheter or infusion pump, which can cause insufficient pain relief, but these are rare.
- A body temperature rise within you or your baby is possible in a long and very slow progressing labour.
- A numb spot in your leg with an unpleasant feeling after the delivery: this has mostly nothing to do with the epidural anaesthesia, but with stretching nerves during labour. This will probably disappear on its own.
- Paralysis: A lot of patients have a fear of being paralysed by an epidural anaesthesia. This is an existing risk, but numbers show that this risk is about 1/200.000 epidurals. Often this is caused in combination with other causes like blood-clotting disorders and back problems.

### 3.3. Is epidural anaesthesia harmful for my baby?

An epidural anaesthesia is perfectly safe for your baby. The concentration of narcotics in your blood and that of your baby is very low and not dangerous, because the narcotics are injected in the epidural or spinal space.

Research did not find any difference between children whose mother had an epidural anaesthesia during delivery and whose mother didn't.

It's possible that the heartrate of your baby slows down temporarily, after the placement of an epidural anaesthesia. That's why the foetal heartrate will be closely monitored.

### 3.4. How does an infusion pump work?

After placing your epidural, the anaesthesiologist will leave a catheter in your back which will be connected with an infusion pump. Your first injection will wear off after a certain amount of time (probably after 90 to 120 minutes) and you will feel more pain again. By pushing the button, connected with the pump, you will get a new dose of narcotics when you need it. The settings of this infusion pump are set by the anaesthesiologist. The pump is also secured, so you can never overdose. After an extra dose, your pain should fade away within 10 minutes. If this is not the case, don't hesitate to ask for the anaesthesiologist.



## 4. Anaesthesia during Caesarean section

A C-section can be scheduled beforehand by your gynaecologist. There could be several reasons why your gynaecologist thinks it's safer to do a C-section, for example breech position of the baby. You know in advance which day the C-section will take place.

The anaesthesia for a C-section will almost always be an epidural or spinal one. This is safer for mother and child than a general anaesthesia. Besides, you can witness the birth of your baby while you're still awake. Your partner can also be present during the C-section.

A Caesarean delivery can also occur unexpected, even if you planned a normal vaginal delivery. Do you already have an epidural at that point in labour, the anaesthesiologist then will give you an extra dose of narcotics through the catheter in your back. Because a 'regular' epidural for a pain-free delivery is not enough to take away the pain of surgery. If you don't have an epidural anaesthesia yet, the anaesthesiologist will place an epidural anaesthesia if there is enough time. In very rare cases, the C-section is so urgent that we cannot wait for an epidural anaesthesia to work properly. In that case you will get a general anaesthesia.

With a general anaesthesia, we will ask your partner to wait outside until you've awakened.

### 4.1. What is the process of a C-section with epidural?

However the anaesthesia with a planned C-section is an epidural, it's still important to stay sober. This means that you stop eating 6 hours before the C-section. Drinking clear fluids is allowed till 2 hours before surgery. Fluids or drinks with gas or pulp till 6 hours before surgery.

In advance you will get an IV to give you extra fluids and antibiotics, as infection prevention. You will get a small drink to neutralise your stomach acids, as well as some IV medication.

The placement of the epidural happens more or less in the same way as with a normal epidural anaesthesia. The narcotics will probably be injected directly into your spinal fluid, for a much quicker result.

The anaesthesia is also stronger than with a normal delivery, causing your legs to be very numb and difficult to move. This will stay this way some time after the C-section, until the anaesthesia will wear off and you will regain

full function and feeling in your legs.

We always check the effect of the anaesthesia, before the gynaecologist will start the C-section. Even with the anaesthesia, it's possible to feel the gynaecologist working in your belly. This can be uncomfortable, but should be pain-free.

During the C-section we will monitor your heart rhythm, blood pressure and saturation continuously.

This will be continued once you are back in your room, until the anaesthetics have worn off, there is normal blood loss and your vitals are stable.

#### **4.2. Possible disadvantages of anaesthesia during a C-section**

The possible disadvantages are quite the same as the ones with a 'normal' epidural, however the chances of your blood pressure to drop are higher?, because the anaesthesia is stronger. If your blood pressure drops you can feel nauseous or unwell. Always tell the anaesthesiologist if you feel anything as mentioned above, so he/she can administer medication to normalise your blood pressure.

Because of the anaesthesia in your belly and rib muscles, you can experience a slight shortness of breath (dyspnea). If necessary the anaesthesiologist will administer some extra oxygen. On very rare occasions this dyspnea is so severe, the doctor has to anaesthetize you generally to briefly take over your breathing, until the epidural has worn off.

## 5. What to mention to your anaesthesiologist?

For the safe course of your anaesthesia, it's important that we can assess potential problems. Therefore, please tell us if any of the following items apply to you:

- If you know that you have some back disabilities or when you had back problems early on
- If you have blood clotting problems or if you bleed longer than normal after injuring yourself or after surgery
- Which medication you take
- Allergies to medication, antiseptics or others
- Medical issues during or before pregnancy, like diabetes, epilepsy, heart or lung problems, high or low blood pressure etc.
- If you already have had an epidural in your life, it can be useful to talk about how you've experienced it

If after the delivery you still notice one of the following problems, please ask for the anaesthesiologist:

- Abnormal and strong headaches, neck pain and back pain
- Persistent or new experiences or a numb sensation in (part of) your legs
- Nausea that won't pass

### 5.1. Questions?

If you have the need to ask for more information about anaesthesia and your delivery, after reading this brochure, please do so before we place the epidural catheter. If you wish, you can also discuss this in advance. To make an appointment for the anaesthetics department you can call 016/20 92 09.









