



Giving birth with anaesthetic

Brochure

Anesthesie

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02 Welcome

During labour, you may opt for an epidural to relieve painful contractions.

This brochure gives you general information on this anaesthetic technique. If you still have questions after reading the brochure, you can always come to our pre-operation anaesthesia department or to the pre-operation consultation.

Department of anaesthesia

03

What is an epidural?

Via an epidural, we can administer epidural anaesthesia and/or spinal anaesthesia. We will explain the difference below.

The anaesthetist can insert a thin tube (catheter) in the lower back at the level of the spinal canal. Through this tube you will then receive anaesthetic medication. This medication temporarily shuts down the nerves near the spinal cord. This is called **an epidural anaesthesia** and causes a numb feeling in the lower part of the body from the abdominal region to the legs. You may also notice a temporary loss of strength in the muscles of the lower half of the body.

An anaesthetist performs the lumbar puncture under strict sterile conditions. The skin is first anaesthetised locally and you may also feel a pressing sensation in your lower back when the anaesthetic is administered. It is important that you remain as still as possible. The anaesthetist will explain the procedure to you step by step. If you experience any problems, you can tell the anaesthetist at any time during the procedure.

The epidural catheter is removed after giving birth. This is not painful. If, under certain circumstances, it should prove necessary to perform a Caesarean section, this epidural catheter can be used to carry out this procedure painlessly.

Under normal circumstances, you can breastfeed immediately after an epidural.

Caesarean section anaesthesia is performed by means of an epidural. There is a modification of the technique whereby a single dose of local anaesthetic is injected into the spinal fluid. This is called **spinal anaesthesia** or brachial plexus block anaesthesia. This technique gives a quick and powerful anaesthesia with numbness to pain from the nipple line to the feet, as well as muscle weakness in the lower half of the body. The gynaecologist can quickly start the caesarean section. If an epidural catheter has already been inserted during labour, it will be used to administer the anaesthetic. Under normal circumstances, you can breast-feed immediately after a spinal anaesthetic.

For a Caesarean section, we try to avoid general anaesthesia or anaesthesia because it is associated with higher pre-operative complication risks compared to an epidural. You can read more about the risks of general anaesthesia in the brochure 'anaesthesia pre-operative information'.

However, in very urgent cases, when there is no time for an epidural, it may be necessary to carry out the operation under general anaesthesia. Sometimes there are medical reasons why we cannot perform an epidural, e.g. blood clotting problems.

Very rarely, if there are complications during the procedure, the spinal anaesthesia is insufficient or the procedure lasts longer than expected; a general anaesthetic may be necessary on top of the previous spinal anaesthetic.

It takes on average 1 to 4 hours for the numb feeling to subside, after you receive the spinal anaesthesia.

05 Risks of an epidural

Performing an epidural is a safe procedure, but like any medical procedure, it can lead to side effects or complications. They may occur during the insertion, during epidural infusion or while removing the epidural catheter.

Before carrying out the procedure, you must inform the anaesthetist of any potential hazards such as allergies, use of blood thinners, pre-existing back and/or nerve problems, etc. You will be given a questionnaire/medication list to complete prior to the procedure.

The kind of complications between an epidural and spinal anaesthesia are similar, but epidural anaesthesia is more likely to present them.

The complications can be divided into 2 groups: frequent side effects with mild consequences and rare complications with serious consequences. A non-exhaustive frequency rate scale can be found below:

Very frequent:	1 out of 10 procedures
Frequent:	1 out of 100 procedures
Unusual:	1 out of 1.000 procedures
Rare:	1 out of 10.000 procedures
Very rare:	1 out of 100.000 procedures

- a) Very frequent and common complications:
- Low blood pressure
 - Itching, sickness, shivering
 - Insufficient pain relief: one-sided anaesthesia on one half of the body, need for additional medication, ...
 - Difficulty urinating (urinary retention): it is needed to place a temporary bladder catheter
 - Pain: if you feel pain at a location other than where the needle is being inserted, you should tell the anaesthetist immediately. Typically, this can be felt in one or both legs because the needle may touch a nerve.
 - Headaches: there are several reasons for headaches after surgery or childbirth. It could be due to the anaesthetic, dehydration, an empty stomach, exhaustion, fear. Usually the headache passes spontaneously after a few hours. You may experience a severe headache that gets worse when standing up and gets better when lying down (post puncture headache, possibly subdural bleeding). If you experience this, you should notify the nurse or the anaesthetist.
- b) Rare to very rare complications:
- Nerve damage:
 - Temporary nerve damage: e.g. loss of sensation and/or muscle weakness in the legs. In this case, recovery of sensation and/or strength in the legs may take days or months.
 - Permanent or long-term nerve damage: causes permanent paralysis in one or both legs or muscles of the legs (paralysis or paraplegia), numbness or loss of sphincters control resulting in leaking urine (urine incontinence) and stool leakage (fecal incontinence). This can occur for several reasons: direct nerve damage, abscess or infection, bleeding in the spinal canal, inadequate blood supply at the spinal cord level, among other causes. Permanent damage can occur in 1 out of 23,500 to 50,500 spinal or epidural anaesthesia procedures. Paraplegia may occur in 1 out of 54,500 to 141,500 spinal or epidural anaesthesia procedures. Gynaecological procedures or childbirth itself can also cause nerve damage.

- Meningitis, subdural haematoma (cerebral haemorrhage), brain damage.
- Accidental injection of large amounts of local anaesthetics into the bloodstream or spinal cord during epidural anaesthesia, which may cause cardiac and respiratory arrest.
- Severe allergic reaction.
- Increase in pre-existing or unknown previous medical conditions.
- Death due to severe complication may occur in 1 out of 54,500 to 141,500 spinal or epidural anaesthesia procedures.

06

What to do after spinal or epidural anaesthesia?

After a one-time puncture under spinal anaesthesia or after removal of the epidural catheter, the anaesthesia will stop and normal sensation and muscle strength will return. If you experience a change in sensation or muscle strength afterwards, you must inform the nurse or anaesthetist.

It is important to know that a change in feeling can also be a consequence of the operation itself. Therefore not a consequence of the epidural.

If you experience any of the following symptoms as a new problem after the epidural anaesthesia wears off, you must notify the nurse or anaesthetist:

- redness, pus, severe pain at the puncture site;
- high fever, severe headache and stiff neck, general unwellness without obvious cause;
- weakness, changed sensation in the legs;
- difficulty in urinating or inability to urinate (to pee) or have a bowel movement, inability to excrete faeces (to poop).

07 Cost

The fees for anaesthesia and their reimbursement are regulated through an agreement with the RIZIV (national institute for health and disability insurance in English).

You will find more information on out-of-pocket costs (or fee and supplements) in the welcome brochure.

Most hospitalisation insurances reimburse the out-of-pocket costs. However, some medications are not reimbursed and you will be responsible for paying.

Sources

Leaflet 'Your spinal anaesthetic' Fourth edition 2014, The Royal College of Anaesthetists

Leaflet 'Regional anaesthetic for Caesarean section – information card' – labourpains.com – Obstetric Anaesthetists' Association

Risks associated with your anaesthetic , Section 12: Nerve damage associated with a spinal or epidural injection. Fifth edition 2017, Royal College of Anaesthetists

3rd National Audit Project of the Royal College of Anaesthetists. Major complications of central neuraxial block in the UK. Appendix 2.

Anesthesie en de normale zwangerschap. Xandra Schyns –van den Berg & Marc Van de Velde (Red.), Uitgeverij Acco, eerste uitgave 2017

Questions?

If you have any further questions, please contact:

pre-operation consultation

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