



# Giving birth & epidural, caesarean section & spinal anaesthesia

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## INTRODUCTION

Physiological vaginal delivery is the most natural way to give birth to your child.

You are free to choose throughout the labour how to relieve your pain. This choice is respected as far as possible. The bath, relaxation, walking, breathing, music, the birthing ball, Entonox®, the use of varied positions and the epidural will also be proposed to better manage your pain and actively participate in the birth of your child.

If natural birth is not possible, the mother will give birth by caesarean section. The execution of a caesarean section is subject to a medical consensus.

The caesarean section is a surgical procedure and as such is not free of risks to which mother and child may not be exposed if their state of health does not justify it. Clear and objective information for future parents facilitates good understanding and respect for the law and enables optimal care while respecting the rights of the patient.



## CAESAREAN SECTION

### WHAT IS A CAESAREAN SECTION?

With a caesarean section, your child can be born through an incision in the abdomen and womb if the circumstances in the mother or child are not possible to a natural birth.

### HOW DOES THE OPERATION WORK?

The operation is usually performed under local regional anaesthesia (epidural or spinal anaesthesia). General anaesthesia is sometimes necessary and follows the decisions of the gynaecologist and anaesthetist.

Usually the incision in the skin of the abdomen is horizontal. Sometimes a vertical incision is preferred because of the mother's history or special circumstances. Your child will be entrusted to a team of midwives and pediatricians present in the room. After first care, your child will be put in skin-to-skin contact with you until the end of the procedure.

Otherwise the father or the companion has to hold the newborn child.



## WHAT HAPPENS AFTER A CAESAREAN SECTION?

The consequences and duration of hospitalization of a caesarean section are longer than those of a natural birth. But just like after a birth, the mother can breastfeed and care for her child.

After a caesarean section it is of course possible to consider a next pregnancy.

It is wise to wait a year before starting a new pregnancy. In some cases, a natural birth may qualify for later pregnancies. This point should be discussed with your gynaecologist.

## ARE THERE ANY DISADVANTAGES OR RISKS ASSOCIATED WITH A CAESAREAN SECTION?

A caesarean section is a routine procedure that is simple in most cases.

**During surgery**, exceptional injuries to the organs next to the uterus can occur: bladder, urinary tract, intestines or blood vessels. These rare lesions require specific surgical treatment.

In the exceptional case of uterine bleeding, transfusion of blood or blood products may be necessary.

In this situation, and only if the specific medical and surgical treatments used are ineffective, a hysterectomy (removal of the uterus) may be necessary.

**After surgery**, the first 24 hours may be painful and, as with any surgical procedure, analgesic treatment is required.

Sometimes a wound infection or haematoma can occur for which simple local care is usually sufficient.

A urinary tract infection, usually not serious, can also occur.

An anticoagulation treatment may be started during the period of hospitalisation and is sometimes continued at home. This is to reduce the risk of phlebitis (formation of a clot in a leg vein) or pulmonary embolism.

In exceptional cases, severe bleeding or infection may occur during the immediate post-operative days and may require specific treatment or even new surgery.

Like any surgery, a caesarean section can exceptionally have a life-threatening risk or serious consequences.

*Some risks may be exacerbated by a condition, history or treatment you had before surgery. It is essential to inform the doctor of your history (personal and family) and of all the treatments and medicines you are taking, as well as any allergies you may have.*

## THE EPIDURAL

### WHAT IS AN EPIDURAL?

An epidural is an action that reduces or even eliminates pain during childbirth by blocking nerve conduction from the uterus. This procedure is performed by an anaesthetist.

### WHEN DO WE PLACE AN EPIDURAL?

The medical and paramedical team together determine the right time, usually when the labour has started well, when the contractions are regular and efficient and the cervical dilation has reached a minimum of 3 cm.

### HOW DO WE PLACE AN EPIDURAL?

We monitor your blood pressure, heart rhythm, pulse and saturation level.

The position for placing the epidural is either sitting on the bed or lying on your side. During the whole procedure it is advisable to sit still (about 10-15 min.).

After disinfection of the back, the skin is anaesthetized before placing the catheter (very thin tube) with a needle in the epidural space. During insertion of the catheter you may feel harmless electric shocks in the back or legs, after which the needle is removed. An initial dose of pain medication is administered and the catheter is connected to a syringe pump that allows you to get extra pain relief afterwards if necessary. The midwife will remove it painlessly after birth.

## WHAT PRECAUTIONS SHOULD BE TAKEN AFTER A LUMBAR PUNCTURE?

You can't get up from bed because your legs get a little heavy. You may take a few sips of water, but for your own safety it is not recommended to eat.

Because you no longer have the feeling of having to urinate, the midwife will empty your bladder regularly and monitor your parameters and those of your unborn child.

## WHAT ARE THE ADVANTAGES OF AN EPIDURAL?

Epidural anaesthesia is a very effective method of pain management. In some cases it also makes it possible to perform certain urgent actions (manual delivery) or a caesarean section without the need for general anaesthesia.

## WHEN CAN THE EPIDURAL BE PLACED?

As soon as labour has started, i.e. when the contractions are regular and effective and the dilation of the cervix has reached a minimum of 3cm. From 8 cm dilation onwards, it becomes difficult and less effective. In some cases it is then no longer possible to place an epidural.

## WHAT ARE THE SIDE EFFECTS AND COMPLICATIONS OF THE EPIDURAL?

### Common and mild side effects:

- electrical discharges during catheter placement;
- back pain at the puncture site;
- itching;
- a temporary lowering of blood pressure;
- asymmetry of the effect of the epidural;
- headache (< 1%).

**Serious but rare complications:**

- an allergy to local anaesthetics;
- an epidural hematoma;
- an infectious complication;
- a neurological disorder (1 case per 100,000).

**Contraindications for an epidural?**

- the refusal of the patient;
- clotting disorders;
- poor skin condition at the puncture site (infection, tattoo, birthmark);
- surgery of the lumbar spine with placement of material;
- fever ( $>38^{\circ}$ );
- an allergy to local anaesthetics.

## GOOD TO KNOW

- 1) The epidural works after 15 to 20 minutes. Each new injection of anesthesia, at the press of a button, works after 5 to 10 minutes.
- 2) After the first dose, a syringe pump is connected to the catheter to administer painkillers. When the syringe pump is stopped, the effects fade after 2 to 3 hours. A full recovery takes 4-6 hours.
- 3) An epidural can prolonge the delivery.
- 4) It is important to monitor blood pressure because a drop in blood pressure is detrimental to the fetus.
- 5) Breastfeeding is perfectly possible after epidural anaesthesia.
- 6) After an epidural puncture the risk of paralysis is almost nil provided that the contraindications are respected.
- 7) It is possible that after the epidural you may experience slight back pain for a certain period of time. This will disappear completely over time.

# WHAT IS SPINAL ANAESTHESIA?

Spinal anaesthesia is a locoregional anaesthesia technique that is frequently used in operations and in particular during caesarean sections.

This is a “related” technique of epidural anaesthesia, but easier to perform. No catheter is placed. Unlike epidural anaesthesia, spinal anaesthesia injects local anaesthesia directly into the fluid in which the spinal cord is immersed. The local anaesthetic thus works in direct contact with the nerve roots of the spinal cord.

This technique ensures highly effective and reliable anaesthesia of the trunk and lower limbs.

## HOW DOES SPINAL ANAESTHESIA WORK?

The patient’s blood pressure, heart rate and pulse are monitored.

The technique can be performed sitting or lying on the side. After disinfection of the back, the skin is locally anaesthetized by the anaesthetist. An extremely thin needle is used, the tip of which does not damage the skin tissue.

The injection is carried out between two lumbar vertebrae, at the very bottom of the spine, under the end of the spinal cord.

Surgical intervention can begin within ten minutes because the anaesthetic works very quickly.





## IN PRACTICE

### TO BE PERFORMED BEFORE THE DAY OF THE CAESAREAN SECTION:

- carry out a blood sample check on medical grounds;
- a pre-anaesthesia consultation can be performed according to the wishes of the patient
- fill in the anaesthesia questionnaire and return it to the maternity ward on the day of admission;
- the day before: remove make-up, nail polish and piercings;
- shaving the pubic area. If it is not done at home, it is done in the maternity ward.
- take a shower with half antibacterial soap. Pay particular attention to proper cleaning of the groin folds (i.e. the folds between the pubic area and the legs) and intimate hygiene;
- you shouldn't eat, drink, or smoke starting from midnight. A glass of water is allowed up to two hours before the caesarean section is performed.

### ON THE MATERNITY:

- you will be admitted to the hospital the day before or on the day of the caesarean section, according to the decision of your gynaecologist;
- upon arrival you must register at the admission service;
- you will then be referred to the maternity ward (third floor at the St-Michel site and second floor at the St-Elisabeth site) and installed in your room;
- the anaesthesia questionnaire must be handed in and the staff will be available to answer any outstanding questions;
- if this is not done at home, the midwives will shave the pubic area;

- remove jewellery, watches, piercing(s), dentures, glasses, contact lenses;
- take a shower with the rest of the antibacterial soap;
- it is also the time to set out the newborn's clothes;
- an infusion will be placed for the potential use of medicine (sodium citrate®, zantac®, and primperan®), you will be taken to the operating room;
- your companion may come with you to the operating room;

## AT THE OPERATING ROOM:

- as soon as you arrive in the operating room, an identity check will be performed followed by the installation to perform a local regional anaesthetic. In the case of general anaesthesia, this will be started at the last moment after the preparation of the caesarean section;
- a bladder catheter is placed and the caesarean section begins in the presence of your partner; your baby is cared for by the paediatrician and the midwife. If possible, the baby will then be given to you or the partner for a skin-to-skin contact.

## AFTER THE OPERATION:

- before you return to your room, you will be taken to the recovery room together with the baby and your partner;
- your baby will drink at the breast or receive his first bottle of artificial milk;
- the infusion and bladder catheter will remain in place for the first 24 hours after surgery (in rare cases for a longer period);
- treatment with analgesic medication will be initiated;
- treatment with anticoagulants may start later;
- you will be discharged from the hospital if your gynaecologist gives you permission to do so.

## AFTER DISCHARGE:

- moderate vaginal bleeding is common in the period after surgery and can last up to 6 weeks;
- it is recommended to wait until the blood loss stops before resuming sexual activities;
- showers are allowed from the second day after surgery, but it is recommended to wait 3 weeks before taking a bath;
- after your return home, it is essential to inform your doctor if there is pain, bleeding, vomiting, fever, calf pain or any other abnormality.

**This information brochure may not be able to answer all your questions.  
Do not hesitate to ask your medical team for more information.**

# QUARTIER D'ACCOUCHEMENT BEVALLINGSKAMER OBSTETRICAL WARD



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