**Epidural analgesia during childbirth: Answers to your questions**

The purpose of this document is to inform you on the epidural analgesia, its advantages and risks. Please read carefully so that you can give your consent for this procedure. You might ask for it yourself for your future childbirth or, as the case may be, the medical team might propose it to you. The department of anaesthesiology of HUG Maternity Hospital organises an information course on the epidural analgesia in obstetrics that we recommend you to attend before your 38th week of pregnancy. If despite all that you have questions, an anaesthetist can answer them according to his availability on Wednesday, from 8.00 a.m. to 12.00 p.m., at 079 553 27 27.

**What is epidural analgesia?**
It is a technique performed by an anaesthetist in order to relieve the feeling of pain during the childbirth. The puncture site is situated between two vertebrae in the lumbar region. A catheter (very thin flexible tube) is inserted in the epidural space by means of a needle that is then removed. The epidural space is situated just before the membrane which surrounds the cerebrospinal fluid and the nerves from the spinal cord. During childbirth, the catheter allows the administration of local anaesthetics, which are medicines that reduce the feeling of pain coming from the uterus and perineum.

**How its application takes place?**
The anaesthetic care starts by:
- The attachment of an intravenous infusion (drop by drop).
- The control of your vital functions (heart, blood pressure, breathing).
- The monitoring of your baby’s well-being.

The anaesthetist asks you to get in sitting position or lying on one side and to round up you lower-back. It is important to remain still and that you let him/her know when a contraction is coming. For your comfort, a local anaesthetic is applied to the skin (sting or moderate burn sensation), then the epidural space is detected (sensation of pressure in the back). The administration of the epidural analgesia lasts between 10 and 20 minutes. Once the dressing is applied, the injection of medicines to ease the pain starts. The effect is fast: 5 to 15 minutes. The analgesia is then maintained by continuous administration of anaesthetics and you can administrate yourself additional doses of anaesthetics by operating a control button.

**To give birth with or without epidural analgesia?**
Epidural analgesia is not compulsory. It is proposed to you for your comfort. The choice is yours. However, in certain cases, the epidural analgesia may be appropriate for medical reasons and in order to facilitate the childbirth. The obstetrician, the anaesthetist or the midwife might then recommend it to you.

**Are there any contraindications or difficulties in applying an epidural analgesia?**
**Contraindications:** in case of blood clotting disorders, skin infection, back infection or generalised infection.

**Possible difficulties:** in case of spine deformities (scoliosis) or excess weight, the intervention may be less easy to perform.

Furthermore, the epidural space contains blood vessels, it sometimes happens that the catheter goes into one of them. In this case it is necessary to replace it.
What are the benefits of epidural analgesia?
Currently, this is the most effective method to relieve the pains related to childbirth while preserving at a maximum the other sensations, such as the force and the urge to push. Most of the patients used it. It does not increase the risk of caesarean section. A spinal anaesthesia – injection of anaesthetic directly into the cerebrospinal fluid – is frequently associated with the epidural analgesia for faster effect. In case of caesarean section, performed as an emergency or not, an anaesthesia becomes necessary. If the epidural catheter is in place, it will be used and thus you can fully participate in the birth of your child. However, in case of insufficient anaesthesia or in case of absence of epidural catheter, the anaesthetist might resort to a spinal anaesthesia or to a general anaesthesia, depending on the amount of time available.

What inconveniences might occur?
During the application:
- You may feel an electrical “shock” in a leg. It is minor, however it must be reported to the anaesthetist.
- In the first minutes, a transient drop in blood pressure can be seen manifesting itself in a sensation of malaise or nausea. This effect is corrected with intravenous medications and, if necessary, oxygen.

After the application:
- The reduction in sensations in the lower body may lead to the loss of the sensation of need to urinate, so that sometimes a painless probing is necessary to be performed by the midwife.
- Possible itching, which is not an allergy, might occur. It is treated if proves to be bothersome.
- Pains at the puncture site might be felt for a few days. The back pain is frequent after any pregnancy, not specifically connected with the epidural analgesia.

Report any discomfort or pain to the healthcare team.

What are the complications related to the epidural analgesia?
Relatively frequent:
- An asymmetric or insufficient analgesia might require partial removal of the catheter and even a new puncture to reapply the epidural analgesia (5%).
- The epidural analgesia can cause headaches (0.5%). If the symptoms persist, a specific treatment will be proposed to you in the following days by the anaesthetist.
- Benign generalised tremors can sometimes occur both with and without epidural analgesia.

Rare:
- Temporary neurological damages (<0.1%), which disappear within less than 6 months, such as tingling, decreased sensitivity or a weakness in a leg. They are often related to the position of delivery.
- Neurological disorders (<0.01%) such as malaise, as well as convulsions, related to the injection of local anaesthetics in the blood circulation.

Exceptionally:
- A complete spinal anaesthesia (<1/10,000) causing a too serious spinal anaesthesia. It needs a general anaesthesia, for the time during which its effects dissipate.
- A permanent neurological damage (<1/50,000/-250,000), caused by a compressive haematoma, a deep infection or a direct trauma caused by the needle, which needs specialised treatment.

Frequently asked questions
- Is the epidural analgesia dangerous for the baby?
  No. The injected medicines act locally and don’t have direct effects on the baby.
- Does it influence the labour duration?
  It has no significant influence and it does not increase the risk of caesarean section, but it can slow down the second phase of labour (expulsion).

Contact
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Informational videos available on http://www.hug.ge.ch/anesthesiologie/la-peridurale
Additional information on www.sgar-ssar.ch/fr