

Explanatory notes and consent for obstetric pain therapy and anaesthesia

→ Institut für Anästhesie und Intensivmedizin



Patientinnenetikette

Dear mother-to-be

The birth of a child is one of life's most beautiful and exciting experiences. We are delighted that we will be supporting you during the birth of your child, and would like to make this event unforgettable, safe, as close to your wishes and as stress-free as possible for you, your partner and your child. Many pregnant women experience a great sense of anticipation but also of fear when they think about the unknown situation and the pain associated with labour. To reduce this uncertainty and to help you manage your contractions, we would like to provide you with information about labour pain and about methods of pain relief.

LABOUR PAIN

Labour pain is one of the most intensive types of pain. Pain receptors in the birth canal transmit stimuli to the brain. How the pain is interpreted there depends on the extent of the stimulus and on emotional, cultural, social and many other factors. While positive emotions alleviate pain by releasing endorphins (the body's own painkillers), anxiety increases pain by reducing the release of endorphins. This is why extensive preparation for the birth and good support from midwives and gynaecologists during the birth are essential.

In addition, there are various pain relief measures. While midwives and birth attendants use some of these methods, such as gas and air and painkillers, anaesthetists like us use different ones. Although this information sheet provides details on these methods, it cannot replace a face-to-face discussion.

Please do not hesitate to call us at any time if you have any questions: Secretary's Office Anaesthesia, Monday to Friday, 08–17 Uhr, T 041 399 33 03

Please read this information sheet carefully, complete the questionnaire, and bring it with you when you are admitted to hospital. To enable us to act quickly and safely, we rely on the information you provide and on your written consent.

REGIONAL ANAESTHESIA IN OBSTETRICS

Regional anaesthesia is pain relief or pain elimination in one part of the body while the patient remains fully conscious.

Local anaesthetics are used for this purpose and block not only nerves that transmit pain stimuli, but also nerves that transmit impulses to muscles, which results in a loss of muscle strength in the legs. To keep this adverse effect to a minimum, an opioid (strong painkiller) is used at the same time to reduce the amount of local anaesthetic required.

The following procedures are used in obstetrics:

- » **Epidural anaesthesia (EDA):** This method is the standard form of pain medication during labour: After a local anaesthetic is applied to the skin around the lumbar spine, a hollow needle is used to insert a fine catheter (about 1 mm) into the epidural space (between the dura mater and the spinal cord). The injection fluid containing a local anaesthetic and opioids is injected into this catheter and then surrounds the nerves leading from the uterus and the birth canal to the spinal cord, which blocks the transmission of pain signals and reduces the sensation of pain.

 - **Benefits:** Rapid effect and easy to control through continuous adaptation of concentration and quantity of medicine administered through the catheter. If a Caesarean section or manual detachment of the placenta becomes necessary, the required amount of local anaesthetic can be administered through the epidural catheter. EDA has no negative effects on the newborn. On the contrary, by reducing the mother's stress, it can contribute to a better oxygen supply for the baby and have a positive effect on the birth process. EDA does not increase rates of Caesarean section.
 - **Risks:** The possible, but rare side effects of regional anaesthesia in obstetrics include: allergic reaction, sense of warmth, trembling, tingling, itching, tedious labour (weak contractions), which may make it necessary to administer a hormone to stimulate contractions. A drop in blood pressure requiring the administration of fluids or medicine to increase blood pressure. Uncommon (1:100): severe headache upon standing up after the birth. Rare (1:1000–10,000): weakening of respiratory muscles, absorption of the medicine into the bloodstream, causing unconsciousness or convulsions in very rare cases. Extremely rare side effects include: lasting nerve damage (1:13,000), paralysis (1:250,000), epidural infection (1:50,000), epidural haematoma (1:170,000).
- » **Spinal anaesthesia:** This method is used when birth is imminent. Like with epidural anaesthesia, this procedure involves an injection into the back: an extremely fine needle is used to inject a local anaesthetic and an opioid (strong painkiller) directly into the cerebrospinal fluid that surrounds the nerves and spinal cord. The effect is of limited duration.

 - **Benefits:** More straightforward and rapid injection, immediate pain relief.
 - **Risks:** The risks are the same as those associated with EDA. In addition, if the birth takes longer than anticipated or a Caesarean section becomes necessary, the spinal anaesthetic will have to be repeated with another injection.
- » **Combined spinal and epidural anaesthesia (CSEA):** In certain situations, spinal anaesthesia can be combined with EDA to ensure that it starts to work quickly and that pain relief via the catheter can be continued for as long as required. The procedure is the same as that of EDA. Before the catheter is inserted, a hollow needle is used to inject an additional medicine into the spinal canal.

 - **Benefits:** Immediate pain relief through the spinal anaesthetic and easy to control through the EDA.
 - **Risks:** Technically more complex, otherwise the same as for EDA and spinal anaesthesia.

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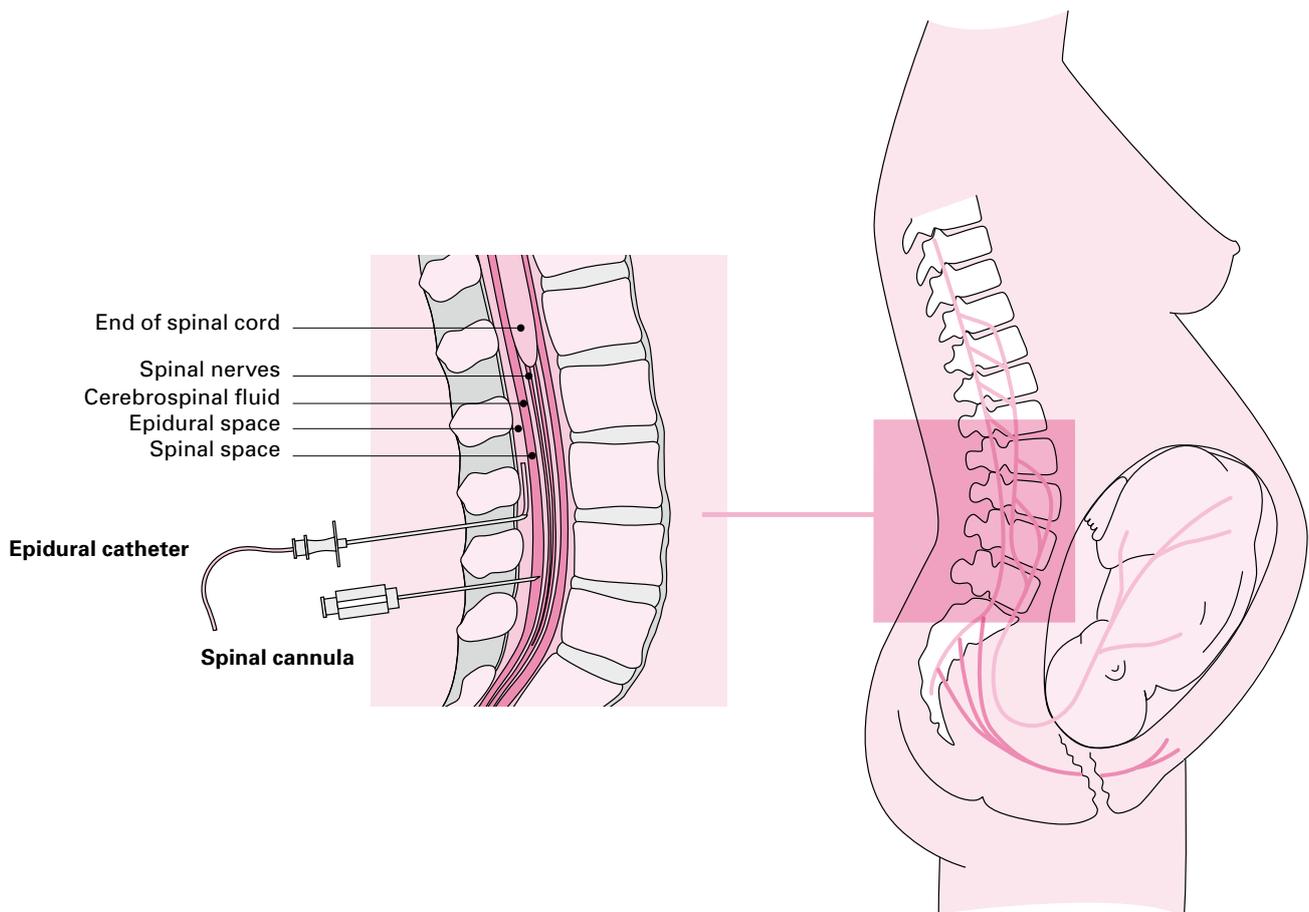
What will you still be able to feel after the regional anaesthetic near your spinal cord has started to work?

Labour pain during birth varies considerably from woman to woman. We aim to provide significant pain relief while still allowing the woman to take an active part in the birth process. You may experience your contractions as a sense of pressure and feel your midwife or gynaecologist examining you. Possible side effects, which fade away once the medicine is no longer effective, include feelings of numbness, sense of warmth, and impaired muscle strength.

To reduce any risk, please inform your anaesthetist immediately of anything that seems strange to you while the anaesthetic is being administered.

When should a regional anaesthetic not be administered?

In the case of blood-clotting disorders, nervous system disorders, or after neurosurgery. In the case of skin infections and significant changes to the spine, regional anaesthesia is not always possible without complications. Please make sure you discuss further details with your anaesthetist.



→ Epidural anaesthesia and spinal anaesthesia

Illustration: Swiss Society of Anaesthesiology and Reanimation (SGAR)

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- » **Remifentanil PCA:** If you are not able to have a regional anaesthetic, there is the option of administering a short-acting opioid (remifentanil PCA) intravenously during contractions.

With this method, you are given a button that you can press at the beginning of a contraction to administer a dose of medicine that enters your bloodstream via an infusion.

Remifentanil is an ultra short-acting opioid that is often used in anaesthesia. It has also been used in obstetrics for several years, although it has not yet been authorised in this country (off-label use). We offer this method because of good experience with it at an international level and in Swiss hospitals.

- **Benefits:** Rapid onset of pain relief as the effect of remifentanil develops quickly. As it is rapidly broken down without affecting organs, it is extremely safe for you and your child. Based on current knowledge, there are no negative effects on the unborn child. Investigations in Swiss hospitals have shown that rates of Caesarean section have been reduced thanks to remifentanil.
- **Risks:** Allergic reaction, fatigue, nausea, vomiting and itching. As remifentanil is a strong opioid, it can also result in respiratory depression, which is why the oxygen saturation levels of your blood need to be monitored continuously by means of a clip on your finger.

- » **Gas and air:** Gas and air is another alternative when regional anaesthesia cannot be used or is not available. This mixture of 50% N₂O (gas) and 50% oxygen has been used in obstetrics for many years now.

Gas and air provides pain relief and is safe for you and your baby. You breathe in the gas mixture, which takes about 30–45 seconds to work, so you use it during the contraction. The great advantage is that gas and air can be used extremely quickly.

- **Benefits:** Can be used quickly, can be used in all birthing rooms. Can be used as an alternative when regional anaesthesia is contraindicated.
 - **Risks:** Cannot be used in the birthing pool. Dizziness, causes a sense of euphoria («high»), perceptual disturbances and, in rare cases, nausea and vomiting.
- » **General anaesthesia in obstetrics:** A general anaesthetic is used in exceptional cases during a Caesarean section if a regional anaesthetic is not possible for technical or medical reasons, has an inadequate effect, or is refused by you. Due to its safety advantages, a regional anaesthetic is the preferred anaesthetic procedure in the case of a Caesarean section. As the mother remains conscious with this method, she can fully experience the moment of birth.
 - **Benefits:** Most rapid anaesthetic procedure if a Caesarean section has to be performed as a matter of urgency.
 - **Risks:** Allergic reaction, dental damage (in particular in the case of difficult intubation and defective teeth), aspiration (inhaling) of stomach contents into the lung, injury to vocal cords. Unpleasant symptoms that may occur after a general anaesthetic, but generally do not last long include hoarseness, difficulty swallowing, nausea and vomiting, shivering with cold, feeling cold and difficulties passing urine.

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Die Seiten 5 und 6 werden für die elektronische KG eingescannt



Patientinnenetikette

Please read these explanatory notes on anaesthesia carefully and bring them with you to your pre-anaesthesia consultation.



Your questions _____

Additional notes or drawings by the anaesthetist during the pre-anaesthesia consultation.

PLANNED ANAESTHETIC PROCEDURE _____

I herewith confirm that I have received a clear, comprehensive and appropriate explanation regarding the planned anaesthetic procedure (advantages and disadvantages of the different methods, potential complications, risks of specific procedures, risk-increasing factors) and that I agree to the anaesthetic procedure being performed, including any changes or extensions that may be necessary.

Place, date _____

Signature of mother-to-be

Signature of anaesthetist

CONTACT/INFORMATION If you have any questions or if anything is unclear, please do not hesitate to contact us at any time, even outside the opening hours of the secretary's office. **Physician on Duty, anaesthesia:** T 041 399 33 10

Anaesthesia questionnaire – please complete carefully

Dear mother-to-be

To allow us to estimate the risk involved in the anaesthesia and to plan the obstetric anaesthetic procedure, please answer the questions below; your signature confirms the accuracy of your responses.

Last name _____ First name _____

Date of birth _____ Weight _____ kg Height _____ cm

| | yes | no |
|--|--------------------------|--------------------------|
| Have you been seriously ill in the last few years? If yes, with what? | <input type="checkbox"/> | <input type="checkbox"/> |
| Can you climb two flights of stairs without stopping to rest? | <input type="checkbox"/> | <input type="checkbox"/> |
| Have you ever had an allergic reaction to medication (in particular, antibiotics, painkillers, local anaesthetics), latex, iodine, plasters, foodstuffs or insect bites? If yes, to what? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do you suffer from increased bleeding or frequent nosebleeds/bleeding gums? Do you suffer from bruising that has no particular cause? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are you taking blood-thinning medication or anti-platelet drugs? Examples of corresponding product names: Sintrom®, Marcoumar®, Aspirin, Tiatral®, Plavix®, Eflient®, Brilique™, Xarelto®, Fragmin®, Fraxiparine®, Fraxiforte®, Clexane®, Pradaxa®, Eliquis® | <input type="checkbox"/> | <input type="checkbox"/> |
| Do you suffer from: | | |
| – high blood pressure (arterial hypertension), low blood pressure with a tendency to collapse? | <input type="checkbox"/> | <input type="checkbox"/> |
| – heart disease (e.g. angina pectoris, heart attack, heart valve defects, heart failure or cardiac arrhythmia, such as atrial fibrillation)? | <input type="checkbox"/> | <input type="checkbox"/> |
| – Do you wear a pacemaker or ICD (implantable cardioverter-defibrillator)? | <input type="checkbox"/> | <input type="checkbox"/> |
| – lung disease (e.g. asthma, chronic bronchitis), sleep apnoea? | <input type="checkbox"/> | <input type="checkbox"/> |
| – heartburn, diaphragmatic hernia, stomach ulcer, vomiting? | <input type="checkbox"/> | <input type="checkbox"/> |
| – diabetes (diabetes mellitus)? | <input type="checkbox"/> | <input type="checkbox"/> |
| – kidney disease? | <input type="checkbox"/> | <input type="checkbox"/> |
| – disease of the liver or pancreas (e.g. cirrhosis of the liver, hepatitis, pancreatitis)? | <input type="checkbox"/> | <input type="checkbox"/> |
| – thyroid disease (e.g. overactive or underactive thyroid, goitre)? | <input type="checkbox"/> | <input type="checkbox"/> |
| – muscular disease (e.g. muscular paralysis, malignant hyperthermia, muscular dystrophy, myotonia, multiple sclerosis (MS), etc)? | <input type="checkbox"/> | <input type="checkbox"/> |
| – rheumatism (e.g. joint rheumatism, soft tissue rheumatism, rheumatic fever)? | <input type="checkbox"/> | <input type="checkbox"/> |
| – migraine, epilepsy, stroke? | <input type="checkbox"/> | <input type="checkbox"/> |
| – back pain, sciatica (lumbago), herniated disc? | <input type="checkbox"/> | <input type="checkbox"/> |
| – chronic pain, anxiety/panic attacks, psychiatric conditions (e.g. depression, schizophrenia)? | <input type="checkbox"/> | <input type="checkbox"/> |
| – infectious diseases (e.g. HIV/AIDS, hepatitis B, hepatitis C)? | <input type="checkbox"/> | <input type="checkbox"/> |
| Have you or your blood relatives experienced any anaesthesia-related incidents? | <input type="checkbox"/> | <input type="checkbox"/> |
| Have you ever received a blood transfusion? If yes, did it result in any complications? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are you on regular medication? If yes, what? | <input type="checkbox"/> | <input type="checkbox"/> |
| Have you had an operation before? If yes, what type of operation and when? Year _____ Year _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| Do you smoke? If yes, how many cigarettes a day? For how long (in years)? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do you drink alcohol regularly? If yes, what and how much? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do you take drugs? If yes, what? | <input type="checkbox"/> | <input type="checkbox"/> |
| Do you have loose teeth? Do you wear dental prosthetics/bridges/crowns? | <input type="checkbox"/> | <input type="checkbox"/> |

Place, date _____

Signature of mother-to-be _____