

INFORMED CONSENT FORM: CHILDBIRTH-ANALGESIA

Specific informed consent

INFORMATION ON CHILDBIRTH-ANALGESIA

WHAT IS EPIDURAL ANALGESIA (OR DELIVERY-ANALGESIA)

It is the best and safest technique to control the pain of labour and delivery. It allows to safeguard the full participation and maternal collaboration during labour and delivery and to exclude pharmacological effects on the unborn child; it does not affect breastfeeding in any way, nor the mother-infant relationship. This technique can be managed in various ways and can also be associated with spinal analgesia (combined spinal/epidural technique). In particular cases, even only spinal analgesia can be performed with the same effectiveness and safety of epidural analgesia. The epidural technique involves placing a small catheter (a very thin tube) in the back, inside the vertebral canal (in the epidural space) during labour. In the case of a combined spinal/epidural procedure, an anaesthetic injection is simultaneously performed into the spinal (or subarachnoid) space and the epidural catheter is placed. In very advanced labour, however, a single injection of local anaesthetic into the spinal space is indicated (spinal analgesia only). The type of technique is decided by the anaesthetist based on the situation of the labour. Medications (local anaesthetics and opioids) are administered through the catheter which act on the nerves involved in the transport of painful sensations from the uterus and perineum and which allow pain to be reduced during labour and delivery without interfering with normal physiology.

WHEN ANALGESIA STARTS

Analgesia starts when labour has started and the midwives take decisions on the basis of precise parameters (frequency-duration-regularity of contractions and situation of the neck of the uterus). In some special cases, it can start in the prodromal phase (upon request and in agreement with the gynaecologist). It can also be performed in the very advanced stages of labour (over 6-8 cm): in this case it must be assessed on the spot whether it is appropriate to place an epidural catheter or only to perform spinal analgesia.

HOW TO PERFORM EPIDURAL ANALGESIA

Analgesia is usually started when labour is well underway, i.e. firm, regular and painful contractions (active labour).

A local anaesthetic injection is made in the space between the two lumbar vertebrae; then when the skin is numb, the epidural needle is introduced and a thin plastic tube is passed through (the epidural catheter) and it will remain in the epidural space for the entire time of labour and delivery, without causing any discomfort.

After placement of the catheter, the needle is removed.

The catheter can be supplied at any time with analgesic medications, without any other punctures.

After 15-20 minutes the pain related to the contractions is significantly reduced (in 95-100% of cases a good analgesic efficacy is obtained); in the expulsive phase the analgesic efficacy is reported as satisfactory in 75-80% of the cases.

If spino-epidural analgesia is performed, the catheter is simultaneously positioned in the epidural space and a puncture is performed in the spinal space with the administration of medications (local anaesthetic + opioid).

In the very advanced stages of labour, only a puncture is made in the spinal space (or subarachnoid) with the administration of medications (local anaesthetic and opioids). Unlike the epidural, an almost immediate analgesic effect is obtained with spinal analgesia (a few minutes).

In any case, however, the contractions remain valid and noticeable, in order to allow the woman to actively participate in the delivery.

However, the reduction of pain does not imply phenomena of muscle paralysis, motility of the lower limbs is maintained, the woman can move and stand and possibly walk.

Epidural analgesia and caesarean section

If during labour there is a need to perform a caesarean section, the epidural catheter is used to provide anaesthesia, except in cases where the gynaecologist declares the need to obtain anaesthesia in a shorter time (spinal anaesthesia) or very quickly in case of emergency (anaesthesia. general).

RECOMMENDATIONS

Epidural analgesia is recommended to all women who request it (maternal request). The analgesia requested by the woman during labour can only be carried out with the consent previously signed during the anaesthetic visit, normal biochemical analyses and the consent of the gynaecologist on duty.

However, there are certain situations that constitute a medical recommendation for childbirth-analgesia:

- Labour induction
- Pathological pregnancies (gestosis, preeclampsia)
- Gestational diabetes or mellitus
- Pathologies pre-existing pregnancy
- Occipito-posterior presentation
- Gestational hypertension
- Prematurity
- IUGR (intrauterine growth retardation)
- Prodromes or prolonged labour
- Uncoordinated uterine contractility
- Maternal cardiac or respiratory disease
- Possible retinal detachment

CONTRAINDICATIONS

In the same way, parturients with ABSOLUTE CONTRAINDICATIONS ARE EXCLUDED from epidural analgesia, such as:

- Disorders of coagulation or platelet aggregation
- Taking anticoagulant drugs
- Systemic or skin infections of the lumbar region
- Allergy to local anaesthetics
- Viral or toxic or pregnancy-induced liver disease
- HELLP syndrome (pathology of pregnancy with severe coagulation disorders)
- Outcomes of meningoencephalitis that started less than 1 year ago
- Refusal of the parturient

Serious pathologies of the lumbar spine (scoliosis or previous spinal disc herniation operations) are not a contraindication, but must be evaluated on a case-by-case basis).

THERAPEUTIC ALTERNATIVES

Relaxation techniques, massage and physical contact, breathing or water (labour and/or birth in water) are alternative analgesic techniques. The results are certainly less effective than the epidural, but they are also very subjective.

BENEFITS/ADVANTAGES:

Beyond the ritualization of pain, culturally understood as an obligatory step in the maternity process, analgesia during labour and delivery has proved to be very useful for both the mother and the unborn child; in fact especially if birth pain is very intense, prolonged or psychologically unaccepted, it determines important negative effects on the physiological implementation of the labour as well as has clinically relevant effects on the mother and the unborn child.

Maternal benefits of analgesia:

- improvement of maternal-foetal well-being through a reduction in stress and associated hormonal secretion;
- improvement of maternal ventilation and consequently of foetal oxygenation
- control of maternal metabolic acidosis and reduction of the secretion of catecholamines and stress hormones
- improvement of the placental circulation
- reduction of anxiety
- greater maternal collaboration
- it provides superior analgesia compared to other methods of pain control during delivery
- it provides analgesia for an instrumental or surgery delivery
- it reduces the need for general anaesthesia in the event of an urgent caesarean as general anaesthesia is carried out through the epidural catheter
- It can facilitate or allow labour and delivery in those particular cases in which there are maternal pathologies (e.g. severe asthma, gestosis, diabetes, significant states of anxiety, panic attacks, epilepsy, and many more.. .) as well as it avoids a caesarean section in several cases

The foetus also obtains benefits reflected by the maternal condition:

- reduced metabolic acidosis
- improved placental circulation as a result of vasodilatation
- better oxygenation and lower oxygen consumption.

DISADVANTAGES OF CHILDBIRTH-ANALGESIA

On the other hand, the disadvantages related to analgesia are:

- The need for increased maternal-foetal monitoring (vital signs measurements, cardiotocography): after each bolus for approximately 20 minutes
- Need for venous access
- The possible extension (12-20 minutes) of the duration of the expulsive phase
- The increase (by 10%) of the probability of having to resort to a delivery with a ventouse.

MAIN RISKS OF THE PROCEDURE

Epidural/spino-epidural or spinal techniques are generally safe, however such practices can still lead to very rare cases of complications ranging from mild to fatal or serious permanent damage, especially of a neurological type, as happens with all medical disciplines, even if implemented with diligence, prudence and skill.

The potential complications of this method reported in the medical literature consist of:

- Increased incidence in the use of the ventouse
- Mild and transient hypotension (10-40/100, i.v. liquid administration)
- Back pain which may last for a few days (13/100)
- transient thermal rise (7-36/100)
- Insufficient and inadequate pain control (1-3/100) due to bad positioning or dislocation of the catheter, anatomical problems

- Post dural puncture headache (0.2-3/100) due to accidental puncture of the sac containing CSF which leaks causing headache. It is postural and irradiated to the neck, it regresses in 4-5 days with bed rest, liquids, coffee and anti-inflammatories. Other treatments are rarely used.
- Neurological disorders: persistent tingling and/or weakness in lower extremities (0.7-3.7/10,000), rapid absorption of local anaesthetics which could produce convulsions and coma (0.08/10,000), total spinal anaesthesia (0,06/10.000)
- Respiratory and cardiac arrest (0.06/10,000)
- Medullary compressive hematoma which may require surgical treatment (1/200,000)
- Epidural/spinal infection (1/560,000).