GIVING BIRTH WITH LABOUR ANALGESIA.

An aware and informed choice

This booklet is meant to be an informative and educational instrument addressed to all the women who want to know about the labour analgesia medical procedure. All the women who want will be able to take advantage from this technique during their labour at the Sassuolo Hospital.

INTRODUCTION:

We ask you to read and pay attention to the following explications and we invite you to write down all your doubts and questions at the end of your reading so you will be able to ask them to the anaesthetist. We remind you that for having access to this service is necessary to do an anaesthesiologic visit around the 35th/36th week of gestation, visit that this booklet can't replace.

LABOUR PAIN:

The labour pain control has the aim to obtain a pain reduction during the labour. Pain is perceived and reported in extremely different ways by women because influenced by many individual variables. Some women prefer to give birth in a completely natural way also accepting the painful part. For others women pain is an obstacle to overcome, it is a passage that absorbs many energies limiting the

possibility of an active and serene involvement in the birth Before the delivery you will have to face three stages (prodrome, dilatative stage, expulsive stage), in every stage pain will be perceived in different ways.

To choose labour analgesia is not an alternative to natural birth. Among non pharmacological techniques that can support a woman in labour, there are the one-to-one assistance, emotive support, use of water, free positions. Furthermore, during pre-delivery courses, midwifes explain relaxing exercises and respiration techniques which help to understand the preparatory meaning of contractions during labour.

MEDICATIONS AND PAIN CONTROL

- Endovenous opiate: these are drugs extremely effective for pain control, but during labour it is not possible their administration at conventional dosages because of the potential dangerous side effects for the mother and the foetus. During labour they can be given with a limited analgesic affect.
- Nitrogen protoxide:this is a weak analgesic that can offer a bit of relief to the pregnant woman as long as a right inhalation through specific mask is executed.
- Epidural and spinal analgesia (PA): it represents the most in use and approved technique all over the world for a good pain control both during the spontaneous and the induct delivery. In the case of induction of labour epidural analgesia is recommended.

These techniques consist of medications administration (local anaesthetic and opiate) in very low doses and concentrations directly in the lumbar tract of the spinal cord.

LABOUR ANALGESIA: WHAT WE ARE TALKING ABOUT

The aim of all these anesthesiological techniques (epidural, spinal and combined technique) is the women continue to feel the contractions arrival, that however are not felt painful anymore.

In fact they must preserve the muscle strain of the abdomen for walk and push during the expulsive period. The labour analgesia does a favourable action on the mother and foetus well being because decreasing the pain felling reduces stress and fatigue in would be mothers whose calmness and better breathing have also positive effects on the new born. The effect of medications on placenta during analgesia, have proved to be absolutely unimportant on the new born conditions. It does exist the possibility (up to 70% of the cases) that, only at the start of the procedure, the baby's heart frequency can reduce for a brief period usually without any consequences for him/her. The PA is efficient in more than the 95% of cases in the dilatative phase, percentage that reduces in the expulsive phase when the pain feeling can still be there, but in a more moderate and different way.

During all the labour the woman is assisted by the midwife and the baby wellbeing is monitored with the cardiotocography.

WHERE AND HOW:

The procedure is done by an anaesthesiologist in the labour room with a sterile manoeuvre, using protections and sterile materials.

IS IT NECESSARY A SEDATION?

Noit is not, a local anaesthesia is sufficient. During the operation you must tell the doctor any bother or pain you may feel (pain, shock, ecc).

LET'S KNOW THE DIFFERENTES TECNIQUES:

- 1. The epidural analgesia consists in the positioning of a thin catheter in the lumbar tract, through which the anaesthesiologist will inject personally or via an electronical pump, the drugs during all the labour. The drug injection will be done every time the woman will start to fell painful contractions, compatibly with the labour phase. The pain relief starts usually after 10-15 minutes after the drug injection.
- 2. Spinal analgesia consists in drug injection in to the subarachnoid space. This space is found few millimetres deeper than the epidural space, direct in contact with the nervous fibres, this makes the pain relief effect faster. This type of analgesia cannot be repeated, therefore, if the labour is going to continue and the delivery is not yet to come, it is necessary to continue analgesia with the epidural catheter

(combined technique spinal-epidural). With this technique pain relief starts usually after 2-3 minutes after the drug injection. The choice of the most appropriate technique is up to the anaesthesiologist. When the labour starts the condition for performing analgesia will be revised by the team (gynaecologist, anaesthetist and midwife) to confirm the eligibility.

WHAT ARE MY STEPS

- 1. The maternal choice of delivery with analgesia must be free, aware and informed, because of this, information and the consent expression should be performed preferably out of the painful phase of the labour.
- 2. Clinical conditions, more or less connected with pregnancy, or conditions that may occur during labour, can lead to a proposal of analgesia that the mother is free to accept or not.
- 3. Blood cell count and coagulation exams are necessary at least 30-40 days before the estimated day of delivery.
- 4. To start the analgesia labour must be well on its way with regular and valid contractions (at least 2/3 pain full contractions in 10 minutes).

CLINICAL INDICATIONS:

In case of operative manoeuvres post-delivery (as sutures), the epidural catheter will be used for providing

anaesthesia. In case of urgent caesarean section, because of the catheter in place, we can rapidly convert analgesia in anaesthesia for surgery, reducing risks related with anesthesiological techniques done in urgency. This conversion takes at least 10 minutes, as in emergency cases we have to perform general anaesthesia. The catheter is used also for post-operatory analgesia. The effect of analgesia on the labour progression have been fully studied. The first phase of labour (dilatative) doesn't result extended, whereas the second phase (expulsive) can be extended for 15-30 minutes, with more use of oxytocin and increase use of obstetric vacuum extractor. Within the possible causes of this effect there is the interference of local anaesthetic on the push reflex and on the push strength. However, the labour analgesia doesn't increase caesarean section risk, the bleeding risk, the risk of manual placenta extraction or the risk of perineal wound.

CLINICAL CONTROINDICATIONS:

- Bleeding disease, severe thrombocytopenia (very low blood platelets count).
- Anticoagulant drugs
- Lack of woman collaboration.
- Generalized infections or skin infections on the puncture site.
- Acute neurological disease.
- Local anaesthetic allergy.
- Spinal column malformation.

PARTIAL CONTROINDICATIONS:

- Previous interventions on the spinal column
- Tattoo on the site of puncture
- Therapy with some antiplatelet or anticoagulant drugs, when the possibility to respect the time of suspension is not there.
- Anatomical difficulties.

SIDE EFFECTS AND COMPLICATIONS:

The labour analgesia is an effective and safe method, but in some cases can result technically difficult or impossible and some times the effect can be incomplete. As for every medical act, side reactions and complication can appear. All these are rare but can include:

Paraesthesia: unpleasant and transient sensation of electric shock when the catheter is insert and/or during the spinal puncture.

Inadequate relief: in case some nervous route are not completely soaked by the local anaesthetic, in this case it may be necessary to repeat the puncture or leave the procedure.

Shivers: transient and benign reaction that can occur even in a labour without analgesia.

Itch: can occur as consequence of some drugs for contrasting pain. Generally it is well tolerated and not

frequent. It passes spontaneously after 1 hour from the last dose of drug.

Hypotension: rare with the doses of drugs used for labour analgesia. If it happens it can be easily treated with intravenous liquids or appropriate drugs.

Fever: in women undergoing labour analgesia, a rising in body temperature can happen more than in a woman without analgesia, this happens more during long labours.

Back pain: this type of pain is due to the stress of the spinal column during pregnancy and labour, independently from analgesia. Very rarely this inconvenience is caused by the needle, usually it lasts fore 3-4 days.

Urinary retention: can happen in a low percentage of people as a consequence of local anaesthetic effect. In these cases it will be necessary to empty the bladder with a catheter.

Headache/ post dural puncture headache: can occur within 72 h from the delivery with an incidence between 1 and 3% of the cases. It can be controlled by resting in bed for 48 h, drinking a lot of water and taking pain killers; can be associated with balance problems or light intolerance. This bother can last for some days, and for this the mother can be hospitalized for more than 2/3 days. This headache usually lasts from 2/3 days to 7 days. In severe cases to accelerate the symptoms resolution, in addition to the conservative treatment (rest and hydration)it can be necessary a treatment called Blood Patch. This treatment consists in the injection of a modest quantity of blood

(blood from the patient herself) in the site of the catheter positioning.

Allergic reactions: reactions at local anaesthetic are very rare, but when they happen it can be very problematic: for this it's important to have the anaesthesiologic evaluation before performing PA.

Serious complications like permanent neurological damages (1 on 200:000), epidural bleeding (1 on 150.000), infections (meningitis, epidural abscess, aracnoidites, generalized sepsis) are considered very rare.

CAN I BREAST FEED?

Of course, drugs are rapidly washed out from your body.

I MUST BE AWARE THAT:

- 1. For organization reason (ex other urgent or emergent operations going on) the PA can be delayed or temporarily suspended. We apologise in advance in case this happens, but we assure you that if it's possible, it will be our concern to answer to all your requests.
- 2. You can ask for suspension of the analgesia in every moment.
- 3. Once the procedure is started you will not be allowed anymore to immerge in the bah tub.