Making an Informed Choice – Epidural Anaesthetic Explained

Introduction

An epidural is an injection of local anaesthetic delivered via a catheter inserted into the epidural space which surrounds the spinal cord. The catheter is sited in the lumbar area of the spine and can be topped up regularly or delivered as a continuous infusion. It has the effect of numbing the nerves which transmit pain signals from the uterus and birth canal, giving effective relief from the pain of contractions. An epidural is administered by a trained anaesthetist and takes between 10 and 20 minutes to take full effect.

An epidural can be administered at any time during the first stage of labour, however many care givers recommend that labour be fully established and some dilatation of the cervix have taken place. It is the most common form of anaesthetic used for a caesarean section. It can also be administered to reduce high blood pressure during labour.

While an epidural is the most effective form of pharmacological pain relief available to the labouring woman, it is also the most invasive and not without its risks. It is important for all women considering an epidural to be aware of the advantages and disadvantages of this procedure.

Effects on the Labouring Woman

The most compelling advantage of an epidural is that it usually provides complete pain relief from uterine contractions and the sensations of giving birth. It is useful in a forceps or ventouse birth and also allows you to remain awake during a caesarean section. If you experience exhaustion and tension during labour, an epidural can help you to relax and rest prior to giving birth.

If you do decide to have an epidural in labour it is important to be aware that you will be completely numb from the waist down. This means that you will be confined to bed and have your contractions and baby's heart rate monitored continuously by a CTG machine. You will also probably be unable to control your bladder and may need to be catheterised.

An epidural can also have the effect of slowing the progress of your labour, leading to the need for oxytocic drugs to be administered via intravenous drip. A drip is always inserted prior to an epidural being administered in case your blood pressure becomes too low and treatment for this is required.

The lack of mobility in labour coupled with relaxation of the pelvic floor muscles can prevent rotation of your baby as it enters the birth canal. This poor positioning, along with a lack of pushing urges due to numbness, leads to a much higher incidence of forceps and ventouse births. Another problem is the possibility of incomplete coverage, where parts of the lower body are numb and others still have partial or complete sensation. Sometimes this problem cannot be resolved and can be distressing for you and your support people.

The longer your epidural is in place, the more likely it is that you will also experience a rise in body temperature. This rise in temperature can affect your baby, making foetal distress more likely. If your baby becomes distressed you are more likely to need a caesarean section.

In addition to these common side effects of epidural anaesthetic, rarer and more serious complications do occasionally arise. About 1 in 100 women will experience headaches for some time

after the birth due to accidental puncturing of the dura, a sheath which covers and protects the spinal cord. Approximately 1 in 550 women will suffer from prolonged areas of numbness, which may take up to 12 weeks to resolve. 4-18 in 10,000 women will experience ongoing weakness in the lower body which can also take up to 12 weeks to disappear. Very rarely a woman will experience permanent nerve damage, convulsions or cardiac and respiratory problems (1 in 20,000) and occasionally death does result (1 in 200,000). While these outcomes are extremely rare, a knowledge of them is an important part of the decision making process for you and your family.

Effects on the Baby

The most common advantage of an epidural for your baby is your ability to be conscious during a caesarean section, allowing you to bond with and breastfeed your baby much sooner than if you had a general anaesthetic. If you do suffer from high blood pressure during your labour and an epidural is administered, the resulting drop in blood pressure can help prevent your baby from becoming distressed during labour. Another possible advantage is that you may be more connected with and able to care for your baby if an epidural has alleviated the effects of a difficult and exhausting birth.

Despite these advantages, it is important to be aware that the drugs used in this form of anaesthetic can have a negative impact on your baby during and after birth. Their will be some exposure of your baby to the drugs used in your epidural, the extent of which will depend on the type of drug used and the length of time the epidural is in place before birth. Common side effects for babies are difficulty settling and irritability.

Due to the increased risk of ventouse, forceps and caesarean section with epidural anaesthetic, it is also important to take into account the additional risks to your baby if these interventions are required. For example, babies born by caesarean section are more likely to have breathing difficulties. In addition to these possible disadvantages, it is useful to be aware that any obstetric intervention in the normal course of labour and birth increases the chance your baby will need to be separated from you in the immediate post natal period.

Conclusion

It is clear that epidural anaesthetic has compelling advantages for a woman finding it difficult to cope with the sensations and demands of giving birth. However, you need to be aware of the possible negative side effects that can result from the epidural itself or the increased risk of further interventions and complications. Before you consent to having an epidural, discuss other options with your care giver and partner or other support person. With their assistance and encouragement you may be able to use other methods, such as warm water, massage and movement to provide effective and satisfying relief without the need for drugs.

This pamphlet was compiled by Birth Matters SA using information from the following sources –

Buckley, S, Epidurals: real risks for mother and baby, available on the web at www.acegraphics.com.au/articles/sarah02.html

MIDIRS Informed Choice Leaflets, The use of epidural analgesia for women in labour

Robertson, A (2002) Preparing for Birth: Mothers, Background notes for Pre-natal Classes, Birth International, Australia.