Anaesthesia for Caesarean Section
An information guide
Anaesthesia for Caesarean Section

Key points:
• One in five babies is born by caesarean section
• Two third of caesarean sections are unexpected
• Caesarean section could be as satisfying as a normal delivery
• The most important thing is that you and your baby are both safe and sometimes caesarean section is the best way to ensure safety.

Your caesarean section may be planned in advance; this is called elective caesarean section. Your obstetrician will recommend it if she/he thinks you might have difficulties delivering your baby naturally.

In some cases your obstetrician will recommend caesarean section in a hurry when you are already in labour. This can occur when your labour is going too slowly or your or your baby’s condition indicates it. This is called emergency caesarean section.

Types of anaesthesia
There are two main types; you can either be awake (regional anaesthetic) or asleep (general anaesthetic). Most caesareans are performed under regional anaesthesia – you are awake but sensation from the lower part of the body is numbed. It is usually safer for mother and baby and allows both you and your partner to experience the birth together.
Elective caesarean section

Assessment

Your midwife will see you in a clinic before your operation and explain what to expect. She will take some blood tests and will give you some medication to reduce stomach acid and prevent sickness. You should take one tablet the night before and one in the morning of your planned operation.

Anaesthetist visit

An anaesthetist should see you before your caesarean section. This may be in the antenatal clinic, on the morning of your surgery or, if your operation is unplanned, just before your operation. They will check your medical history and any previous anaesthetics. They will also discuss the anaesthetic choices with you and answer any questions. We cannot guarantee that you will be able to see an anaesthetist in the antenatal clinic but they will try and meet with you if necessary.

On the day

You will see the midwife who will do your admission preparation which will include the following:

• Check that you have taken your tablets
• Your bikini line may need to be shaved
• You will put on special compression stockings to prevent clots forming in your blood
• You will get changed into a hospital gown
• The midwife will accompany you and your partner to the operating theatre.
When you come into theatre

Equipment will be attached to measure your blood pressure, heart rate and the amount of oxygen in your blood. This does not hurt.

The anaesthetist will insert a drip into your vein to give fluid and medications during your operation. They will do this using a local anaesthetic to numb your skin. Then the anaesthetist will start giving the anaesthetic.

What will happen if I have a regional anaesthesia?

You’ll be asked to sit or lie on your side, curling your back. The anaesthetist will paint your back with sterilising solution, which feels cold. They will then find a suitable point in the middle of the lower back and will give you a little local anaesthetic injection to numb the skin. This sometimes stings for a moment.

For a spinal, a fine needle is put into your back; this is not painful. Sometimes, you might feel a tingling going down one leg as the needle goes in, like a small electric shock. Please mention this, but it is important to keep still while the spinal is being put in. When the needle is in the right position, local anaesthetic and a pain-relieving drug will be injected and the needle removed. It usually takes just a few minutes, but if it is difficult to place the needle it may take longer.

For an epidural your anaesthetist will use a larger needle to be able to place a narrow catheter (tube) into the space next to the nerves in your backbone. Similar to the spinal injection it can sometimes cause a tingling sensation going down your legs. It is very important to tell your anaesthetist about it but to keep very still at the same time. Once the catheter is in place the needle will be removed.
For a **combined spinal epidural** you will be given the combination of the two. The spinal will make you numb quickly for the caesarean section. The epidural catheter will allow you to have more anaesthetics if needed. It is usually used if the caesarean section is expected to take longer than usual.

Once the injection is in you will be asked to lie on your back and the table will be tilted to the left to take the weight of the baby off your tummy.

You will know that your injection is working, as your legs will begin to feel warm and heavy. Some tingling sensation is also normal. The numbness will gradually spread up your body. The anaesthetist will check if the numbness has reached the middle of your chest. Sometimes the team may need to change your position in order to achieve reliable anaesthesia.

While the anaesthetic is taking effect the midwife will place a tube (urinary catheter) in to your bladder to keep it empty for the operation. This should not be uncomfortable.

Your blood pressure will be taken frequently. If your blood pressure drops then you may feel sick. Mention this to the anaesthetist and he will treat it.

**During your operation**

- A screen separates you and your birth partner from the operation site. You may hear noises in the background, as the team is getting ready for the procedure
- Your anaesthetist will stay with you all the time
- You will have antibiotics put in to the drip to prevent any infections
• During the operation you should not feel pain but will probably feel pulling or pressure. Some women describe it as like washing in a washing machine

• If you are uncomfortable the anaesthetist can give you more pain relief. Occasionally it is necessary to give you a general anaesthetic but it is very rare

• It usually takes about 10-15 minutes before the baby is delivered and another 30-60 minutes afterwards to complete the operation. There are, however, many reasons why it may take longer than this

• After your baby is born the midwife dries and examines your baby. After this you and your partner will be able to cuddle your baby

• You will be given a drug called Syntocinon to make the muscles of your womb tighten and reduce bleeding. You may be given a painkilling suppository in the back passage whilst you are still numb

• After the operation you will be transferred back onto your bed. If all is well you can go back to the ward. Occasionally you may remain in the labour ward for a few hours for observation. Your partner and baby can usually be with you and you can begin breastfeeding if you like

• Your anaesthetic will gradually wear off and you may feel a tingling sensation in your legs. Within a couple of hours you will be able to move again. You will be given regular painkilling tablets. If you need more pain relief, ask the midwife who will give you morphine, either as a syrup or by injection. Some ladies feel very itchy after the spinal and treatment for this is available

• The day after your operation an anaesthetist will visit you to ask for your comments and check for any problems.
What will happen if I have general anaesthesia?

If you have a general anaesthetic you will be asleep for the operation. This may be needed if:

• spinal anaesthesia is unsafe, for example in severe infection or if your blood cannot clot properly
• the operation is an emergency and there is not enough time for the spinal to work
• the anaesthetist is unable to place the spinal injection or if it does not work well
• the surgery is more complicated than usual.

Your partner will not be able to come into theatre with you. You will be given an antacid to drink and a catheter inserted into your bladder. The anaesthetist will give you oxygen to breathe through a facemask for a few minutes.

Once everybody is ready, the anaesthetist will give the anaesthetic into your drip and you will drift off to sleep in a few seconds. Just before you go off to sleep the anaesthetic assistant will press lightly on your neck. This is to prevent stomach fluid getting into your lungs.

When you are asleep, a tube is put into your windpipe to prevent stomach contents from entering your lungs and to allow a machine to breathe for you. The anaesthetist will continue the anaesthetic throughout the operation. At the end of the operation a pain-relieving suppository may be given before you wake up.

When you wake up, your throat may feel uncomfortable from the tube and you may feel sore from the operation. You may feel sleepy and perhaps sick for a while. You will be given a patient controlled analgesia machine, which provides pain relief when you press the button. You will also be given regular tablets for pain.
You may return to the ward or remain on the labour suite for observation for a few hours. Your baby and partner can be with you and it is usually possible to start breastfeeding if you wish.

**What is an emergency caesarean section?**

An emergency operation is one that has not been planned, although it can sometimes still be performed in the same way as a planned operation, but you will only have time for one antacid tablet beforehand. On the other hand, some operations may need to be done very quickly. This might be within an hour of the decision or, rarely, as soon as possible. The most common reason for a very urgent caesarean is if there is a sudden problem with your baby (sometimes called ‘fetal distress’). Only about one in 10 caesareans is very urgent.

If you need a very urgent caesarean section then the preparation may be changed or even left out.

You will need a cannula (needle) placed in a vein in your hand or arm if you do not have one already.

The team will give you antacid medication to reduce the acid in your stomach through the cannula rather than as tablets. You will also have an antacid liquid you need to drink before the operation.

You will be given oxygen to breathe from a tight-fitting mask.

If you have already been given an epidural to give you pain relief during labour and it is working well, then the anaesthetist may try to give you a large dose of stronger anaesthetic (top up) through this so that the pain block is strong enough for surgery.

The anaesthetist will decide whether there is enough time to top up an epidural, or give you a spinal if you do not have an epidural or if your epidural is not providing enough pain relief. If there is not time to attempt a regional anaesthetic, or there is not time for it to work well enough, you will have to have a general anaesthetic.
Sometimes, if there is a great hurry, the team will not have time to explain fully what is going on to you and your birth partner. Your partner may also have to wait in the delivery room while you have the operation. This may worry or upset you. However, the staff will always talk to you afterwards to explain what happened and why.

**What pain relief can I have after my caesarean section?**

There are several ways of relieving your pain after your operation.

- You can be given a long lasting pain relief through your spinal injection or the epidural catheter
- You can have suppositories at the end of your operation
- You may get some morphine injections
- You can get a drip containing Morphine in a machine, which will be controlled by you. This is called Patient Controlled Analgesia (PCA)
- You can get tablets such as Paracetamol, Codeine, Ibuprofen.

**What are the advantages of regional over general anaesthesia?**

It is usually safer for you and your baby than a general anaestheticYou and your partner can share in the birthYou won’t be sleepy afterwardsYou can hold and feed your baby earlierYou will have better pain relief afterwardsYour baby will be born more alert.

**What are the disadvantages of spinal anaesthesia?**

- Rarely the spinal may not work perfectly so a general anaesthetic is necessary. This may occur even if your tummy is numb before surgery starts
• It can make you feel dizzy or sick. This is because it can lower your blood pressure
• It may make you feel shaky
• Rarely, it may cause tingling down one leg. Very rarely, this may last for weeks or months
• It may cause headache in about 1 in 200 women. This will be temporary
• It may cause itching during and after the operation. This can be treated
• It may result in tenderness in your back over the injection site for a few days. It does not cause long-term backache
• Serious complications are very rare, but include pins and needles down the leg, leg weakness and stroke.
## Risk of having spinal or epidural in labour

<table>
<thead>
<tr>
<th>Type of risk</th>
<th>How often?</th>
<th>How common?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant drop of blood pressure</td>
<td>1 in 5 – spinal</td>
<td>Common</td>
</tr>
<tr>
<td></td>
<td>1 in 50 – epidural</td>
<td>Occasional</td>
</tr>
<tr>
<td>Not working well enough for a caesarean section so you need to have a general anaesthetic</td>
<td>1 in every 20 – epidural</td>
<td>Sometimes</td>
</tr>
<tr>
<td></td>
<td>1 in every 100 - spinal</td>
<td>Occasional</td>
</tr>
<tr>
<td>Severe headache</td>
<td>1 in 100 – epidural</td>
<td>Uncommon</td>
</tr>
<tr>
<td></td>
<td>1 in 500 - spinal</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Nerve damage (numb patch on leg or foot, or having a weak leg) Effects lasting for more than 6 months</td>
<td>Temporary – 1 in 1,000</td>
<td>Rare</td>
</tr>
<tr>
<td></td>
<td>Permanent – in 13,000</td>
<td>Rare</td>
</tr>
<tr>
<td>Epidural abscess (infection)</td>
<td>1 in 50,000</td>
<td>Very rare</td>
</tr>
<tr>
<td>Meningitis</td>
<td>1 in every 100,000</td>
<td>Very rare</td>
</tr>
<tr>
<td>Epidural Haematoma (blood clot)</td>
<td>1 in every 170,000</td>
<td>Very rare</td>
</tr>
<tr>
<td>Accidental unconsciousness</td>
<td>1 in every 5000</td>
<td>Rare</td>
</tr>
<tr>
<td>Severe injury, including being paralysed</td>
<td>1 in every 250,000</td>
<td>Extremely rare</td>
</tr>
</tbody>
</table>
## Risk of general anaesthetic

<table>
<thead>
<tr>
<th>Type of risk</th>
<th>How often does it happen</th>
<th>How common</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest infection</td>
<td>1 in every 5 women</td>
<td>Common (most are not severe)</td>
</tr>
<tr>
<td>Sore throat</td>
<td>1 in every 5 women</td>
<td>Common</td>
</tr>
<tr>
<td>Feeling sick</td>
<td>1 in every 10 women</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Airway problems leading to low blood-oxygen levels</td>
<td>1 in every 300 women</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Corneal abrasion (scratch of the eye)</td>
<td>1 in every 600 women</td>
<td>Uncommon</td>
</tr>
<tr>
<td>Damage to teeth</td>
<td>1 in every 4,500 women</td>
<td>Rare</td>
</tr>
<tr>
<td>Awareness (being awake part of the time during your anaesthetic)</td>
<td>1 in every 250 to 1000 women</td>
<td>Rare</td>
</tr>
<tr>
<td>Anaphylaxis (a severe allergic reaction)</td>
<td>1 in every 10,000 to 20,000 women</td>
<td>Very rare</td>
</tr>
<tr>
<td>Death or brain damage</td>
<td>Death: less than 1 in 100,000 women</td>
<td>Very rare (1 or 2 a year in the UK)</td>
</tr>
<tr>
<td></td>
<td>Brain Damage</td>
<td>Very rare (exact figures do not exist)</td>
</tr>
</tbody>
</table>

If you have any questions please ask your midwife. If you wish, you can meet with an anaesthetist in the antenatal clinic to discuss any issues.
For more information:

• NICE guidelines, intrapartum care. www.nice.org.uk/CG055
• NHS choices. www.nhs.uk

This leaflet is partly based on the Obstetric Anaesthetists’ Association “Anaesthesia for your Caesarean Section” booklet. The OAA is not responsible for the contents of the local leaflet.

Further information and references are available on www.labourpains.com
If English is not your first language and you need help, please contact the Ethnic Health Team on 0161 627 8770

For general enquiries please contact the Patient Advice and Liaison Service (PALS) on 0161 604 5897

For enquiries regarding clinic appointments, clinical care and treatment please contact 0161 624 0420 and the Switchboard Operator will put you through to the correct department / service

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