NHS
Tameside and Glossop
Integrated Care
NHS Foundation Trust

Your anaesthetic for Caesarean section

Patient information Leaflet

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Key points:

• One in five babies is born by caesarean section
• The most commonly used anaesthetic is spinal.
• If you have a spinal anaesthetic you are awake and can share the experience with your birth partner.
• Occasionally you may need to be put to sleep for your operation, to have a general anaesthetic.

Types of anaesthetic
There are two main types of anaesthetic. You can be either awake (a regional anaesthetic) or asleep (a general anaesthetic). Normally, if you have a Caesarean, you will have a regional anaesthetic. This is where you are awake but you can't feel any sensation in your lower body. It is usually safer for you and your baby and allows both you and your partner to experience the birth together.

1 Spinal:
This is the most commonly used method. It may be used in planned or emergency Caesarean sections. The nerves that carry feeling from your lower body are contained in a bag of fluid inside your backbone. The anaesthetist will inject local anaesthetic inside this bag of fluid, using a very fine needle. This method works fast, and only needs a small dose of anaesthetic.

2 Epidural:
A thin plastic tube or catheter is put next to the nerves in your backbone, and drugs to numb the nerves can be fed through the tube when needed. An epidural is often used to treat the pain of labour using weak local anaesthetic solutions. If you need a Caesarean section, the anaesthetist can top up the epidural by giving a stronger local anaesthetic solution. You would need a larger dose of local anaesthetic with an epidural than with a spinal, and it takes longer to work.

3 Combined spinal epidural or CSE:
A combination of the two. The spinal makes you numb quickly for the Caesarean section. The epidural can be used to give more anaesthetic if needed, and to give pain relieving drugs after the operation.(We don't routinely use this technique.)

4 General anaesthetic
If you have a general anaesthetic you will be asleep while the obstetrician carries out the Caesarean section. General anaesthesia is used less often nowadays. It may be needed for some emergencies where your baby needs to be delivered quickly, if there is a reason why a regional anaesthetic isn't suitable for you or if you prefer to be asleep.

The advantages and disadvantages of each type of anaesthetic are described later in this booklet. First, it is useful to know what happens when a Caesarean section is planned, and a date given for your operation

Elective (planned) Caesarean sections
Normally your section will be planned in the antenatal clinic. The team will see you and plan your admission. They will explain what to expect. You will usually be admitted on the day of surgery but you may need to stay in the night before in certain circumstances for example if you are diabetic.

You will be given tablets to reduce the acid in your stomach and prevent sickness. You should take one the night before the operation and two on the morning of the operation itself. This will be explained to you.

The anaesthetist's visit
You should be seen by an anaesthetist before your Caesarean section. The anaesthetist will talk with you about your medical history and any anaesthetic you have had in the past. You may need an examination or more tests. The anaesthetist will also discuss the different types of anaesthetic you could have and answer your questions.

On the day
- The midwife will confirm the time of your operation and check that you have taken your tablets.
- You will have a name band on your wrist or ankle.
- You will be given a theatre gown to put on.
- Your birthing partner can come with you and the midwife to the operating theatre. A midwife will provide them with special clothes for the operating theatre.
- You will need a catheter to keep your bladder empty during the operation. This can be inserted in the room before you go to theatre or if you prefer in theatre once you are numb. The catheter is usually removed around 6 hours after delivery once you have recovered from your anaesthetic.

There are a lot of people who work in the operating theatre.
- The midwife will be there to help look after you and your baby
- The anaesthetist will have an assistant.
- The obstetrician will have an assistant and a scrub nurse
- There will be another nurse who is responsible for fetching extra equipment. At the very least there will be seven members of staff in the theatre.

In theatre, equipment will be attached to you to measure your blood pressure, heart rate, and the amount of oxygen in your blood. This won't hurt. The anaesthetist will put a cannula (a thin plastic tube) into a vein in your hand or arm and will set up a drip to give you fluid through this. Then the anaesthetist will start the anaesthetic.

Having a regional anaesthetic
If you have a regional anaesthetic your birth partner will be able to join you in the operating theatre once the regional anaesthetic has taken effect. (If you are to have a general anaesthetic your birth partner will be asked to wait in another room.) You will be asked either to sit or to 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.

Then, for a spinal anaesthetic, a fine needle is put into your back. Sometimes, you might feel a tingling going down one leg as the needle goes in, like a small electric shock. You should tell the anaesthetist if this happens, but it is important that you keep still while the anaesthetist carries out the spinal injection. When the needle is in the right position, they will inject local anaesthetic and a pain relieving drug and then remove the needle. It usually takes just a few minutes, but if it is difficult to find the right spot for the needle, it may take longer.

For an epidural (or combined spinal epidural), the anaesthetist will use a larger needle so they can place the epidural catheter (tube) into the space next to the nerves in your backbone. As with a spinal, this sometimes causes a tingling feeling or small electric shock down your leg. It is important to keep still while the anaesthetist is putting in the epidural, but once the catheter is in place they will remove the needle and you don't have to keep still.

You will know when the spinal or epidural is working because your legs will begin to feel very heavy and warm. They may also start to tingle. Numbness will spread gradually up your body. The anaesthetist will check that it has reached the middle of your chest before the operation begins. It is sometimes necessary to change your position to make sure the anaesthetic is working well. The team will take your blood pressure often.

For the operation, you will be placed on your back, and tilted to the left. If you feel sick at any time, you should mention this to the anaesthetist. A feeling of sickness is often caused by a drop in blood pressure. The anaesthetist will give you treatment to help this.

The operation

A screen will separate you and your birthing partner from the lower part of your body and the surgery. The anaesthetist will stay with you all the time. You may hear a lot of preparation in the background. This is because the obstetricians work with a team of midwives and staff in the operating theatre.

Your skin is usually cut slightly below the bikini line. Once the operation is under way you will hear the sound of instruments and suction of fluids from around the baby. You may feel pulling and pressure, but you should not feel pain. Some women have described it as feeling like 'someone doing the washing up inside my tummy'. The anaesthetist will talk to you while the operation is happening and can give you more pain relief if needed. Occasionally they may need to give you a general anaesthetic, but this is unusual.

From the start of the operation it usually takes about 10 minutes until your baby is born. After the birth, a drug called Oxytocin is put into your drip to help tighten your uterus (womb) and remove your placenta. The obstetrician will take about another half hour to complete the operation.

When the operation is over

After the operation, your blood pressure and pulse will continue to be monitored. Your partner and baby will usually be with you. Skin to skin contact is encouraged until your baby has had its first feed. Your anaesthetic will gradually wear off and you may feel a tingling and itching sensation. Within a couple of hours you will be able to move your legs again.

The pain relieving drugs given with your spinal or epidural should continue to give you pain relief for a few hours. It is better to take regular pain medication when nurses or doctors offer it to you than to wait until you are sore. The drugs they give you won't affect your baby when you breastfeed.

Having a general anaesthetic

These are some of the reasons why you may need a general anaesthetic.

- If you have certain conditions when the blood cannot clot properly, it is best not to have a regional anaesthetic.
- If you need a Caesarean suddenly, there may not be enough time for a regional anaesthetic to work.
- Abnormalities in your back may make a regional anaesthetic difficult or impossible.
- Occasionally, a spinal or epidural anaesthetic can't be put into the right place, or doesn't work properly.

Most of the preparations are similar to those for a regional anaesthetic. However, your partner will not be able to stay in the operating theatre with you. You will be given an antacid to drink (to reduce the acid in your stomach) and a midwife may insert a catheter into your bladder before the general anaesthetic is started. The anaesthetist will give you oxygen to breathe through a face mask for a few minutes.

Once the obstetrician and all the team are ready, the anaesthetist will put the anaesthetic in your drip to send you to sleep. Just before you go off to sleep, the anaesthetist's assistant will press lightly on your neck. This is to prevent stomach fluids getting into your lungs. The anaesthetic works very quickly.

When you are asleep, the anaesthetist will place a tube into your windpipe to prevent fluid from your stomach from entering your lungs, and to allow a machine to breathe for you. The anaesthetist will continue the anaesthetic to keep you asleep and allow the obstetrician to deliver your baby safely. But you won't know anything about any of this. The anaesthetist may also give a nerve block for pain relief after the operation.

When you wake up, your throat may feel uncomfortable from the tube, and you will feel sore from the operation. You may also feel sleepy and perhaps a bit sick for a while, but you should soon be back to normal. After continued monitoring, you will be taken to the delivery suite where you will join your baby and partner.

Emergency Caesarean section

An emergency operation is one that has not been planned for more than a day or two. How urgent it is can vary a lot. One that is less urgent can be done in much the same way as a planned operation, although you will only have time for one antacid

tablet at most 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').

If you need a very urgent Caesarean, then the preparations that we would normally do may be changed or even left out. You will need a cannula (a thin plastic tube) placed in a vein in your hand or arm if you do not have one already. The team may give you antacid medication to reduce the acid in your stomach through the cannula rather than as tablets. You may be given oxygen to breathe from a tightfitting 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 enough anaesthetic through this for you to have an emergency Caesarean. They will give you a large dose of strong local anaesthetic so that the pain block is strong enough for surgery.

The anaesthetist will have to 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. If you have told the anaesthetist you would prefer a regional anaesthetic, the chances of having to have a general anaesthetic for a Caesarean are, for most women, very low. Only about one in 10 Caesareans is very urgent.

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.

Pain relief after the operation

There are several ways to give you pain relief after a Caesarean section.

- You can be given a long acting painkiller with the spinal or epidural.
- A midwife may inject morphine, or a similar painkiller.
- A midwife will give you tablets such as Morphine, diclofenac, paracetamol or Ibuprofen.

Advantages of a regional anaesthetic compared with a general anaesthetic

- Spinals and epidurals are usually safer for you and your baby.
- They let you and your partner share in the birth.
- You will not be sleepy afterwards.
- They will let you feed and hold your baby as early as possible.
- You will have good pain relief afterwards.
- Your baby will be more alert when it is born.

Disadvantages of regional anaesthesia compared with general anaesthesia

- Spinals and epidurals can lower your blood pressure, though this is easy to treat.
- In general they take longer to take effect, so it will take longer to get you ready for the operation than a general anaesthetic.
- Occasionally, they may make you feel shaky.

- Rarely, they do not work well enough, so the team may need to give you a general anaesthetic.
- About four in 10 women who have an epidural and two in 10 women who have a spinal may get a tender area in the back where the needle goes in. This tender spot may last for weeks or months, but this is rare.

Having a baby by Caesarean section is safe and can be a very rewarding experience. Many women choose to be awake for the procedure.

Others may need to be asleep for the reasons discussed above. We hope that this booklet will help you to make the best choice for you if you find you need a Caesarean section.

The risks of a regional anaesthetic are shown in a table below. The information comes from the following published documents. The figures shown in the table are estimates and may be different in different hospitals.

Risks of having an epidural or spinal to reduce labour pain

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

There are no accurate figures available from published literature for all of these risks. Figures are estimates only and may vary from hospital to hospital

Risks of general anaesthetic

Type of risk	How often does this happen?	How common is it?
Chest infection	1 in every 1000 women	Uncommon
Sore throat	1 in every 10 women	Very common
Muscle pains	1 in every 1000 women	Uncommon
Feeling sick/Vomiting	1 in every 10 women	Very common
Airway problems leading to low blood oxygen levels	1 in every 300 women	Uncommon
Corneal abrasion (scratch of the eye)	1 in every 600 women	Uncommon
Damage to teeth	1 in every 1000 women	Uncommon
Awareness (being awake part of the time during your anaesthetic)	1 in every 1000 women	Uncommon
Anaphylaxis (a severe allergic reaction)	1 in every 10,000 to 100,000 women	Very rare
Death or brain damage	Death: less than 1 in 100,000 women Brain Damage	Very rare (1 or 2 a year in the UK) Very rare (exact figures do not exist)

If you have any questions you want to ask, you can use this space below to remind you

If you have a visual impairment this leaflet can be made available in bigger print or on audiotape. If you require either of these options please contact the Patient Information Centre on 0161 922 5332

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