

FAQs Your Anaesthetic for Caesarean Section

We have put together some of the questions that anaesthetists are commonly asked in the maternity ward and antenatal clinic. We hope that this information will help you to understand the choices available to you during labour and also the options available should you need a C-Section. If you would like to read more, don't forget to take a look at our [information leaflets](#) and [videos](#).

• Q: When might I need a caesarean section?

A: About one in four babies is born by caesarean section. Two thirds of these caesarean sections are unexpected. If your caesarean section is planned in advance this is called an elective caesarean section. Your obstetrician (the doctor who works with the midwives to care for pregnant women and to deliver babies) might recommend that you have an elective caesarean section if they think you might have difficulties with a normal birth. One example of this might be if your baby is in an unusual position in the later stages of pregnancy. In some cases, your obstetrician may recommend a caesarean section in a hurry, usually when you are already in labour. This is called an emergency caesarean section. They might recommend this to you because your labour is going too slowly, because the baby's condition is getting worse or a combination of both. Your obstetrician will discuss with you why they think you should have a caesarean section and will get your permission first.

• Q: What types of anaesthetics are available for my caesarean section?

A: 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 section, 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. There are three forms of regional anaesthetics. These are spinal, epidural and combined spinal epidural anaesthetics.

A spinal anaesthetic is the most commonly used form. 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.

An epidural anaesthetic is when 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.

A combined spinal-epidural anaesthetic or CSE is 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 caesarean.

General Anaesthesia With a general anaesthetic you will be asleep while the obstetrician carries out the

caesarean section.

General anaesthesia With 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, if there is a reason why a regional anaesthetic isn't suitable for you or if you prefer to be asleep.

• Q: What happens once I am booked to have an elective (planned) caesarean section?

A: Normally you will visit the hospital before you come in for your caesarean section. The midwife will see you and take some blood from you to check your haemoglobin (HB) to make sure that you are not anaemic and to confirm your blood group in case you need a blood transfusion after your operation. She will also check that you don't have MRSA by taking some swabs from your skin. This is just a routine check. Most women go home after the assessment and come back to hospital on the day of the caesarean, but you may need to come in the night before. The midwife will give you tablets to take before your caesarean section to reduce the acid in your stomach and to help to prevent sickness. These are taken the night before your caesarean section and on the morning of the caesarean itself. You need to avoid eating and drinking for a certain period of time before you have your caesarean section. This is to prevent you feeling sick during the surgery and minimise complications. Your midwife will explain all this to you. .

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 of your caesarean section, the midwife will see you to check that you have taken your tablets. Your bikini line may need to be shaved. You will have a name band on your wrist or ankle. The midwife may help you to put on special tight stockings (called TED stockings) to reduce the risk of blood clots forming in your legs. You will be given a theatre gown to put on. Your birth partner, if you have one, will be able to be with you during the caesarean section. A midwife will provide them with special clothes for the operating theatre.

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.
- A **paediatrician** may be also present if he/she is needed

• Q: What happens if I am having a regional anaesthetic?

A: 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.

You will be asked either to sit or to lie on your side, curling your back. The anaesthetist will paint or spray 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.

When the spinal or epidural is starting to work, 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 the numbness has reached the middle of your chest before the caesarean section 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.

After the anaesthetist has finished putting in the spinal, epidural or combined-spinal-epidural, 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. While the anaesthetic is taking effect, a midwife will insert a small tube (a bladder catheter) into your bladder to keep it empty during the operation. This should not be uncomfortable. The bladder catheter will usually be removed once you are able to walk and at least 12 hours after the last "top-up dose" (a dose of spinal or epidural anaesthetic drugs given to maintain the effects of the anaesthetic). This means you won't need to worry about being able to pass urine. The midwife will listen to your baby's heartbeat before the operation starts.

• **Q: Will my partner be able to be with me during the caesarean section when I am awake?**

A: If you have a regional anaesthetic, your birth partner will be able to join you in the operating theatre. They will be asked to sit down and to avoid certain areas of the room. This is to reduce the risk of contaminating sterile operating instruments. (If you are to have a general anaesthetic your birth partner will be asked to wait in another room.)

• **Q: What happens during the caesarean section when I am awake?**

A: Just before the caesarean starts, a member of the theatre team will confirm your name, date of birth and hospital number to ensure that we have the correct patient prior to the start of the caesarean section.

A screen will separate you and your birth 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 caesarean section is under way you will hear the sound of instruments and suction of fluids from around the baby.

- **Q: Will I feel anything during the caesarean section with regional anaesthetic?**

A: During the caesarean section, 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.

- **Q: How long does the caesarean section take?**

A: From the start of the operation it usually takes about 10 minutes until your baby is born. The obstetrician will take about another half-hour to complete the operation. However, because every caesarean section is different, it may take longer than this.

- **Q: What happens to my baby after it is born when I am awake?**

A: Immediately after the birth of your baby, the midwife dries and examines your baby. A paediatrician may do this with the midwife. After this, as long as they are happy with that the baby is doing well, you and your partner will be able to cuddle your baby and, in some cases, have skin-to-skin contact.

- **Q: Am I given any other medicines during the caesarean section ?**

A: Before your caesarean section starts, an antibiotic will be put into your drip to reduce your risk of getting an infection. After the birth, a drug called oxytocin is put into your drip to help tighten your womb and to cut down blood loss. If you feel sick, you may be given medicine to help you stop feeling sick or vomiting. If you feel any discomfort, the anaesthetist may give you extra medicine to help relieve the discomfort and sometimes, they will need to give you a general anaesthetic. At the end of the caesarean section, you may be given an anti-inflammatory suppository in your back passage to relieve pain when the anaesthetic wears off.

- **Q: What happens when the caesarean section is over when I am awake?**

A: After the operation, you will be taken to the recovery room where your blood pressure will continue to be monitored. Your partner and baby will usually be with you. Your baby will be weighed if not already done so in the theatre and then you can begin breastfeeding if you want to. In the recovery room your anaesthetic will gradually wear off and you may feel a tingling or itching sensation. Within a couple of hours you will be able to move your legs again.

- **Q: Why might I need a general anaesthetic for my caesarean section?**

A: 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 spinal or epidural anaesthetic.
- If you need a caesarean very urgently, there may not be enough time for a spinal or epidural 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.

- **Q: Will my partner be able to be with me when I have a general anaesthetic?**

A: Unfortunately, your partner will not be able to come into the operating theatre with you. However, he will be near to the operating theatre and he will be able to see your baby when he or she is born.

- **Q: What happens when I arrive in theatre for the general anaesthetic?**

A: Most of the preparations are similar to those for a regional anaesthetic. 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. You will be asked to lie down on the operating table, tilted to the left.

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.

- **Q: How will the general anaesthetic be given?**

A: The anaesthetist will give you oxygen to breathe through a tight fitting face mask which they put on your face 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 as 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 allow a machine to breathe for you and also to prevent fluid from your stomach from entering your lungs. 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 or obstetrician will put in some local anaesthetic which will help with the pain relief afterwards. At the end of the operation, you may be given a suppository (tablet) up your bottom to help relieve pain when you wake up.

- **Q: What happens when I wake up from the general anaesthetic?**

A: When you wake up, your throat may feel uncomfortable from the tube, and you may feel a little sore from the operation. If you have any pain, you will be given some more medicine to help with pain in the recovery ward. You may also feel sleepy and perhaps a bit sick for a while, but you should soon be back to normal. You will be taken to the recovery area where you will join your baby and partner. If your baby needed assistance from the neonatal team at delivery, he or she may have been taken away to the neonatal unit for further care. You will be able to visit him or her on the neonatal unit as soon as you feel well enough.

- **Q: What is an emergency caesarean section?**

A: An emergency caesarean section 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 caesarean section. On the other hand, some caesarean sections 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 drop in your baby's heart rate (sometimes called 'fetal

distress’).

- **Q: How do the preparations for an emergency caesarean section differ to those of the planned caesarean section?**

A: If you need a very urgent caesarean section, then the preparations that we would normally do may be changed and some steps may be 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.

- **Q: Do I have to have a general anaesthetic for an emergency caesarean section or can I be awake?**

A: You don't always need to have a general anaesthetic for an emergency caesarean section. 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 local anaesthetic so that the pain block is strong enough for surgery. Another alternative is to give you a spinal anaesthetic.

The anaesthetist will have to judge 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 enough time for this to work well enough, you will need 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 caesarean sections 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.

- **Q: What happens about pain relief after your caesarean section?**

A: There are several ways to give you pain relief after a caesarean section.

At the end of the caesarean section, you may be given a suppository (tablet) up your bottom to relieve pain when the anaesthetic wears off. If you've had a regional anaesthetic, the pain-relieving drugs given with your spinal or epidural should continue to give you pain relief for a few hours. In some hospitals, the team will leave the epidural catheter in place so they can give you more drugs later on. If you've had a general anaesthetic, you may be given local anaesthetic to numb some nerves in your tummy as well as morphine injection or a similar painkiller. In some hospitals, you may be given a drip containing morphine or a similar drug. You can control the amount of painkiller you have yourself. This is called patient-controlled analgesia or PCA.

A midwife will give you tablets such as diclofenac or ibuprofen, paracetamol or morphine. 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 may make you feel sleepy. Sometimes if you are breastfeeding, your baby may be affected by the pain-relieving drugs and may be a little bit sleepy too.

• **Q: What are the advantages of a regional anaesthetic compared with a general anaesthetic?**

A:

- Spinals and epidurals are usually safer for you and your baby.
- They let you and your partner share in the birth.
- You will feel less sleepy afterwards.
- They will let you feed and hold your baby as early as possible.
- You will usually have good pain relief afterwards.
- Your baby will usually be more alert when it is born.
- Less post operative nausea and vomiting.

• **Q: What are the disadvantages of regional anaesthesia compared with general anaesthesia?**

A:

- 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 anaesthetist may need to give you a general anaesthetic.
- You may have a tender area in the back where your needles goes in
- You may develop a post dural puncture headache (See below under risks and side effects associated with regional anaesthesia for caesarean section)

• **Q: What are the risks and side effects associated with regional anaesthesia for caesarean section?**

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

Risks and side effects of regional anaesthetic	
Possible problem	How common the problem is
Itching	Common – about 1 in 3 to 10 people, depending on the drug and dose
Significant drop in blood pressure	Spinal: Common – about 1 in 5 Epidural: Occasional – about 1 in 50
Epidural given during labour not effective enough to be topped up so another anaesthetic is needed for the Caesarean section	Common – about 1 in 8 to 10
Anaesthetic not working well enough and more drugs are needed to help with pain during the operation	Spinal: Occasional – about 1 in 20 Epidural:

Regional anaesthetic not working well enough for Caesarean section and general anaesthetic is needed	Common – about 1 in 7 Spinal: Occasional – about 1 in 50 Epidural: Occasional – about 1 in 20
Severe headache see leaflet	Epidural: Uncommon – about 1 in 100 Spinal: Uncommon – about 1 in 500
Nerve damage (For example, numb patch on a leg or foot, weakness of a leg)	Effects lasting less than six months: Quite rare – about 1 in 1,000 to 2,000 Effects lasting more than six months: Rare - about 1 in 24,000
Meningitis	Very rare – about 1 in 100,000
Abscess (infection) in the spine at the site of the spinal or epidural	Very rare – about 1 in 50,000
Haematoma (blood clot) in the spine at the site of the spinal or epidural	Very rare – about 1 in 168,000
Abscess or haematoma causing severe injury, including paralysis (paraplegia)	Very rare – about 1 in 100,000
With an epidural: A large amount of local anaesthetic being accidentally injected into a vein in the spine A large amount of local anaesthetic being accidentally injected into spinal fluid, which may cause difficulty in breathing and, very rarely, unconsciousness	Very rare – about 1 in 100,000 Quite rare - about 1 in 2,000

Accurate figures are not available for all of these risks and side effects. Figures are estimates and may vary from hospital to hospital.

• Q: What are the risks and side effects associated with general anaesthesia for caesarean section?

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

Risks and side effects of general anaesthetic	
Possible problem	How common the problem is
Shivering	Common – about 1 in 3 people
Sore throat	Common – about 1 in 2 people

Feeling sick	Common – about 1 in 10 people
Muscle pain	Common – about 1 in 3 people
Cuts or bruises to lips and tongue	Occasional – about 1 in 20 people
Damage to teeth	Quite rare – about 1 in 4,500 people
The anaesthetist failing to insert a breathing tube when you are asleep	Uncommon - about 1 in 250 people
Chest infection	Common – about 1 in 100 people – but most infections are not severe
Acid from your stomach going into your lungs	Quite rare – about 1 in 1,000 people
Awareness (being able to recall part of the time during your anaesthetic)	Uncommon – about 1 in 670 people
Severe allergic reaction	Rare – about 1 in 10,000 people
Death or brain damage	Death: Very rare – fewer than 1 in 100,000 people (1 or 2 people a year in the UK) Brain damage: Very rare – exact figures are not known.

Accurate figures are not available for all of these risks and side effects. Figures are estimates and may vary from hospital to hospital. If you have any questions you should discuss these with your anaesthetist.

A national survey has found that regional anaesthesia use for pregnant women carries lower risks of permanent harm than for other groups of patients [Cook TM, Counsell D, Wildsmith JAW. Major complications of central neuraxial block: report on the third National Audit Project of the Royal College of Anaesthetists. British Journal of Anaesthesia 2009; 102: 179-190]

• Q: Where can I get more information about my anaesthetic?

A: You can get more information on anaesthetics and anaesthetic risks from the Royal College of Anaesthetists www.youranaesthetic.info or from the OAA: www.labourpains.com.

You can find more information about standards of care for Caesarean section in the book: Caesarean section: Clinical Guideline (National Collaborating Centre for Women's and Children's Health; commissioned by the National Institute for Clinical Excellence. London: Royal College of Obstetricians & Gynaecologists Press, 2004).

• Q: Who has given the above information?

A: These FAQ's were written by the Information for Mothers Subcommittee of the Obstetric Anaesthetists' Association.

The subcommittee is made up of the following people.

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Dr Mary Mushambi (consultant anaesthetist)
Dr Claire Candelier (Royal College of Obstetricians and Gynaecologists representative)
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We have tried to make sure all leaflets and translations are accurate, and all information was correct at the time of writing.

We would like to thank the previous subcommittee members for their work on the previous editions.

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• **Q: What references have been used to provide the above data?**

- A: • Holdcroft A, Gibberd FB, Hargrove RL, Hawkins DF, Dellaportas CI. Neurological complications associated with pregnancy. *British Journal of Anaesthesia* 1995 – chapter 75, pages 522–526.
- Jenkins K, Baker AB. Consent and anaesthetic risk. *Anaesthesia* 2003 – chapter 58, pages 962–984.
 - Jenkins JG, Khan MM. Anaesthesia for Caesarean section: a survey in a UK region from 1992 to 2002. *Anaesthesia* 2003 – chapter 58, pages 1114–1118.
 - Jenkins JG. Some immediate serious complications of obstetric epidural analgesia and anaesthesia: a prospective study of 145,550 epidurals. *International Journal of Obstetric Anesthesia* 2005 – chapter 14, pages 37–42.
 - Reynolds F. Infection a complication of neuraxial blockade. *International Journal of Obstetric Anesthesia* 2005 – chapter 14, pages 183–188.
 - Ruppen W, Derry S, McQuay H, Moore RA. Incidence of epidural hematoma, infection, and neurologic injury in obstetric patients with epidural analgesia/ anesthesia. *Anesthesiology* 2006 – chapter 105, pages 394–399.
 - Cook TM, Counsell D, Wildsmith JAW. Major complications of central neuraxial block: report on the third National Audit Project of the Royal College of Anaesthetists. *British Journal of Anaesthesia* 2009; 102: 179-190
 - Pandit JJ, Cook TM. The 5th National Audit Project of the Royal College of Anaesthetists and The Association of Anaesthetists of Great Britain and Ireland. Accidental Awareness during General Anaesthesia in the United Kingdom and Ireland. September 2014.
 - Soltanifar S, Tunstill S, Bhardwaj M, Russell R. The incidence of postoperative morbidity following general anaesthesia for caesarean section. *IJOA*. 2011;20(4) 365.
 - Morgan BM, Aulakh JM, Barker JP et al. Anesthetic morbidity following cesarean section under epidural or general anesthesia. *Lancet* 1984;1:328-30.

- The Royal College of Anaesthetists. Anaesthesia explained. Information for patients, relatives and friends. RCoA 2008. 3rd edition. www.rcoa.ac.uk/patientinfo.

Please note: These questions and answers are by their nature quite general. We are afraid that the OAA cannot enter into discussions about nor answer enquiries about specific cases. If you have any questions, comments or complaints about your own care, you should take this up with the unit responsible. Please note that all hospitals have a Patient Advice and Liaison Service (PALS) who can help you if you are unsure how to go about this.

If you would like to read more, please also see our [Further Resources](#) section of the website.