

The Royal Australian and New Zealand College of Obstetricians and Gynaecologists Excellence in Women's Health

Caesarean Section

A caesarean section is an operation in which a baby is born through an incision (cut) made through the mother's abdomen and the uterus (womb). The cut is usually made low and around the level of the bikini line.

Planned (elective) caesarean section involves the decision, between you and your doctor, to have a caesarean birth prior to the onset of either labour or unexpected complications requiring urgent delivery. Unplanned (emergency) caesarean section may be required if complications develop and delivery needs to be quick, either during or before your labour.

There are several reasons why your obstetrician may recommend an elective caesarean section. Your doctor will discuss the reason for making this recommendation based on your particular situation and, in some cases, your preferences.

Caesarean section on maternal request

A small number of pregnant women may prefer a caesarean section to vaginal birth. Women considering elective caesarean section should discuss this decision with their doctor or midwife.

There are some risks and benefits to this decision for both mother and baby. It is important to know that some risks may not be apparent until subsequent pregnancies. Your doctor and midwife will respect your right to be involved in the decision-making regarding the type of birth, considering your wishes, your perception of the risks and plans for future pregnancies.



Emergency caesarean section

An emergency caesarean might occur for the following reasons:

- concern for your baby's wellbeing prior to or during labour
- your labour is not progressing
- there are maternal complications, such as severe bleeding or severe pre-eclampsia
- there is a life-threatening emergency for you or your baby

These may include:

- you have already had a number of caesarean sections.
- your baby is in a breech position (bottom or feet first) and cannot be turned, or a vaginal breech birth is not recommended.
- your placenta is partly or completely covering the cervix (opening to the womb).
- your baby is lying sideways (transverse) and is not able to be turned by the doctor.
- you have a twin pregnancy, with your first baby in a breech position.

Whenever a caesarean section is recommended, your doctor should explain why it is necessary and describe any important complications. Relevant risks will be explained to you when you complete the consent form for the operation, whether for an elective or emergency caesarean section. Do not hesitate to ask questions. It is important to make an informed decision.

Risks for your health

A caesarean section is major surgery. Major complications rarely occur, but may have serious consequences when they happen. Not all of these risks are unique for caesarean section but are different from those associated with a vaginal birth.

These consequences include:

- blood loss
- wound infection
- blood clots in your legs (known as a deep vein thrombosis, or DVT). You may be given injections while in hospital to minimise the risk of developing clots in your legs and lungs.
- a blood clot that moves from your leg to your lungs (known as a pulmonary embolus). This is a rare, but serious complication of caesarean section.
- potential damage to organs near the operation site, including your bladder. This might require further surgery.
- anaesthetic risks such as low blood pressure, nausea and vomiting and post-dural puncture headache. This occurs when the epidural or spinal needle punctures the dura (tissue which surrounds the spinal cord). When a puncture occurs, it causes the spinal fluid to leak out of the hole and it is this which causes a headache. Most headaches will settle within a few days but some may last longer. Information about the risks of anaesthesia during a caesarean section and for pain relief can be found at https://www.anzca.edu.au/patient-information/ anaesthesia-information-for-patients-and-carers/painrelief-and-having-a-baby
- slower recovery.
 - after you have had one caesarean section, future pregnancies are deemed a high risk and the risk of complications increase with each subsequent caesarean.
 - all of these risks are increased if you are overweight.

Caesarean Section



Risks for your baby

The most common problem affecting babies born by caesarean section is temporary breathing difficulty. There is also a small risk of your baby being cut during the operation. This is usually a small cut that isn't deep. This happens in 1 to 2 out of every 100 babies delivered by caesarean section, but usually heals without any further harm.

Thin adhesive strips may be needed to seal the wound while it heals. It is important to note that some babies are still difficult to deliver during a caesarean and forceps or vacuum may be used. They therefore may still have bruising around their head or body.

In the operating theatre

The procedures for a caesarean section are very similar whether the operation is elective or an emergency.

When you arrive in the operating theatre, there will be a number of people present. All of them have an important role to play to ensure the safety of you and your baby.

Anaesthetist – will provide your anaesthetic and pain relief Obstetrician – will perform the operation and deliver your baby Surgical assistant – assists the obstetrician

Scrub nurse – coordinates the theatre and passes the instruments to the doctor

Scout nurse – assists the scrub nurse and gathers additional equipment that is required

Anaesthetic nurse – assists the anaesthetist

Paediatrician - receives the baby and cares for it at birth

Midwife – receives the baby and cares for it until you return to the postnatal ward

Theatre technician – helps move you on and off the operating table, positions lights and equipment.

Support people – Due to the large number of people present and the sterile environment of the operating theatre, the number of support people who are able to be with you will be limited.

Attendance of anyone other than your immediate partner or support person may not be possible, and your preference for any additional people will need to be discussed with your doctor or midwife.

There will be a buzz of activity happening at this time, before the operation starts. A plastic cannula (thin tube) will be put into the vein in the back of your hand or arm so that fluids and medication can be given to you. A catheter (a soft, plastic tube) will be inserted into your bladder to keep your bladder empty during the operation.

You will receive a shave of any hair covering the operation site. You will be wearing special stockings known as 'TED' stockings during the surgery until you are moving around after the operation. The purpose of these stockings is to reduce the risk of blood clots forming in the legs during inactivity.

Anaesthesia

The anaesthetist will provide the most appropriate form of anaesthesia suited to you during the operation. This may be an epidural, spinal block or general anaesthetic.

An epidural and a spinal block are a similar procedure where an anaesthetic, (a drug that gives either partial or total loss of sensation) is injected by the anaesthetist into the small space in your back near your spinal cord.

The medication can then act directly on the nerves to stop the pain signals from being sent to the brain. If you have a spinal block or epidural anaesthetic, you will be awake throughout the operation, but you will feel no pain. If you have a general anaesthetic, you will be asleep during the operation. Information about the use of anaesthesia during a caesarean section and for pain relief can be found at https://www.anzca.edu.au/patient-information/anaesthesiainformation-for-patients-and-carers/pain-relief-and-having-a-baby

If you are awake during the operation, you will still feel tugging and pulling, but you won't feel pain or sharpness. Some women describe the feeling as though "someone is doing the washing up in their stomach". A screen will be put across your chest so that you cannot see what is being done. You will hear the sucking of the waters that surrounded the baby until just before the baby is lifted out.

The operation usually takes about 30 to 40 minutes and the doctors will talk to you during the operation and let you know what is happening. One advantage of an epidural or spinal anaesthetic is that you are awake at the moment of delivery and can see your baby immediately.







Recovery after a caesarean section

Supporting breastfeeding

Assuming your baby doesn't require additional resuscitation or support from the paediatric team, skin to skin contact is important as soon as possible after birth. Your baby should have warmed blankets placed over their back and a bonnet on their head. This is because it is quite cold in theatre and in the recovery room. The rest of your baby's body should be in direct contact with your skin. This will help stabilise their temperature and start to initiate an instinctive feeding response that will enhance bonding and help with establishing breastfeeding. Some hospitals will allow your baby to stay with you in recovery and to have skin to skin contact during this time to increase those responses and the likelihood that baby will attach and feed well at the breast.

Pain relief

Pain is common after surgery. After a caesarean birth you will be uncomfortable for a few days but this can usually be managed well with medications. The anaesthetist will provide you with a number of options to help control your pain. Taking regular pain relief is very important to your recovery. Let your midwife know if you require any pain relief or anti-sickness medication.

Emotional support

Some women feel very positive about having a caesarean, while others feel disappointed or sad, particularly if it was unexpected. It can be very helpful to talk through your feelings with your partner, family, or carers. The doctor or midwife can also discuss the birth experience with you.

Mobility and exercise

Initially after your operation you will be resting in bed. During this time it is important to do deep breathing and leg exercises regularly. Your catheter, drip and wound drain (if you have one) will be removed in the first one to two days depending upon your recovery. Once these have been removed, it is important to take a gentle walk every day.

This will reduce the likelihood of chest infections and blood clots in your legs. Postnatal exercises are especially important after a caesarean section to get your muscles working again, but take things at a gentle pace. The midwife or physiotherapist will tell you when you should begin them.

Care of your wound

Your caesarean incision may have been closed with staples which are usually removed within three to seven days of delivery.

If you have stitches, they are usually, reabsorbable sutures, meaning they are absorbed by the body and do not need to be removed. Keep your wound clean and dry. Wear loose clothing and look for signs of infection (such as redness, pain, swelling of the wound or bad-smelling discharge). Report these to the doctoror midwife.

The incision will heal over the next few weeks. During this time, there may be mild cramping, light bleeding or vaginal discharge, as well as pain and numbness in the skin around the incision site.

Most women will feel well by six weeks postpartum, but numbness around the incision and occasional aches and pains can last for several months.





The first few weeks

After a caesarean section, women usually stay in hospital for about three to five days. This can vary between hospitals or if there are problems with your recovery. In some hospitals, you can choose to go home early and have your follow-up care at home. The midwife will explain what your hospital offers and will discuss what best suits your needs.

Looking after a new baby is hard for all women. Be kind to yourself. It may take a few weeks or even longer to recover, particularly if you have had complications. Get as much rest as you can. If you feel that you need extra help and support, ask family or friends to help.

Be careful of your back when you lift and don't lift anything that causes you pain.

You should not drive a car until you have fully recovered, and your wound has healed. This may take up to 6 weeks. Your obstetrician can provide advice about when it is safe to drive again.

Avoid sex until you feel comfortable. After birth of any kind, it is quite normal to take weeks, even months, before you are ready to have sex.

What about the effect on future pregnancies and births?

1. If you plan to have a vaginal birth next time

Information about vaginal birth after a previous caesarean section can be found on the RANZCOG website under patient information.

2. If you plan to have another caesarean section

As the number of previous caesarean sections increases, so does the risk of rare but serious complications. You should consider the size of the family you want. If you have three or more caesarean births, some complications become more common.

These include:

- Problems with your placenta implanting low in the uterus, near your scar, in future pregnancies. This condition is referred to as placenta praevia.
- Problems when your placenta does not come away as it should when your baby is delivered. This condition is known as placenta accreta and the risk of it increases with each caesarean section. It is a potentially serious complication you should discuss with your doctor.
- Extra procedures that may become necessary during the caesarean section such as a blood transfusion or emergency hysterectomy, particularly if there is heavy bleeding at the time of your caesarean section. A hysterectomy would mean you are unable to have any further children. The risk of needing to undergo a hysterectomy at the end of a subsequent pregnancy increases with each caesarean section, but overall is still very low.

3. Other pregnancy complications following caesarean section

These include the rare occasion of caesarean scar pregnancy, a type of ectopic pregnancy where the fertilised egg implants into the scar from a prior caesarean section in the front wall of the uterus. This most often results in a recommendation to remove the early pregnancy tissue, due to risks to the mother of the pregnancy continuina.

Think about all of your options carefully. If a caesarean section is recommended, your obstetrician or midwife is available to discuss any questions that you may have.

Whether your baby is born vaginally or by caesarean section, the aim is for a safe, rewarding and satisfying experience for you and your family.

Other RANZCOG resources - Caesarean section video

https://ranzcog.edu.au/womens-health/patient-information-guides/ patient-information-videos/caesarean-section-video



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