

## Caesarean section

### Introduction

A caesarean section is an operation to deliver a baby. It involves making a cut in the front wall of a woman's abdomen (tummy) and womb.

The operation can be:

a planned (elective) procedure, when a medical need for the operation becomes apparent during pregnancy  
an emergency procedure, when circumstances during labour call for urgent delivery of the baby

A caesarean section is usually carried out under regional anaesthetic, where the lower part of your body is numbed. It usually takes 30-45 minutes. Some caesarean sections are performed under general anaesthetic.

When a caesarean might be needed

A caesarean section is usually carried out when a normal vaginal birth could put you or your unborn baby at risk, for example because:  
your labour doesn't progress naturally  
you go into premature labour  
you have placenta praevia (where the placenta is low lying in the womb and covering part of the womb entrance)  
you have a viral infection, such as a first attack of genital herpes  
your baby is in the breech (feet first) position

Find out more about when a caesarean section is necessary.

Pregnant women are not immediately entitled to a caesarean section if they do not have any physical or mental need for it. If you ask for the operation, you'll be asked why you're requesting it and you'll be given information about the risks and benefits. You should be allowed to have a caesarean if, after discussion and support, you still want to have the operation.

A caesarean section is major surgery and many women opt for a vaginal birth after learning more about what the surgery involves.

## New guidelines in the UK

In 2011, the National Institute for Health and Clinical Excellence (NICE) published new guidelines on caesarean sections. This aimed to avoid unnecessary operations.

NICE made a few new recommendations:

Some women who are HIV positive and women who have had a previous birth by caesarean section should be offered the option of a vaginal birth.

Women should be given antibiotics before surgery (rather than after surgery) to prevent infection.

If a woman requests a caesarean section because she's anxious about childbirth, she should be referred to a healthcare professional with expertise in providing mental health support. She should be offered a planned caesarean if, after discussion and support, she still feels a vaginal birth is not an acceptable option.

## Risks

Like any surgery, a caesarean section carries a certain amount of risk, such as the wound becoming infected or the baby developing breathing difficulties. Read more about the risks of a caesarean section.

## Recovery

It takes longer to recover from a caesarean section than it does from a vaginal birth. You will typically need to spend three to four days in hospital after surgery.

## Why a caesarean section is necessary

A caesarean section is usually performed when a normal vaginal birth could put you or your unborn baby at risk.

It can either be planned or carried out as an emergency procedure.

## Planned caesarean section

Before you give birth, your nurse or doctor should discuss the benefits and risks of having a caesarean section compared with a vaginal birth.

Medical reasons for having a planned caesarean section include:

Severe pre-eclampsia – this is pregnancy-related high blood pressure.

Expecting twins or other multiple births – the babies may be premature and more safely delivered through caesarean section. One or more of the babies may be in an abnormal breech position (bottom or feet first), or two or more of the babies may share a placenta, which means a caesarean section is necessary to avoid the babies being deprived of oxygen.

Small pelvis – sometimes scans show that the baby's head is larger than the space in the mother's pelvis through which it needs to travel.

Position of the baby – your baby may be in an abnormal position inside the womb, such as the breech position, which makes it unlikely to fit through the birth canal.

Placenta praevia – this is when the placenta blocks the exit to the womb.

Infection – if you have certain viral infections, such as a first attack of genital herpes, you may be offered a caesarean section because a normal delivery would risk transferring the virus to your baby.

A medical condition – for example, a heart problem may put you at risk during a normal delivery.

Restricted growth of the baby – some babies who are not growing well in the womb are at higher risk of dying or being ill around the time of birth. There is not enough evidence to show whether having a planned caesarean makes any difference to these risks, but it is likely you will be offered one.

## Emergency caesarean

In an emergency, there may not be enough time to discuss fully the options of a caesarean section. If vaginal delivery poses significant risks to your own or your baby's health, the nurse or doctor will decide if a caesarean section is the safest option.

Reasons for needing an emergency caesarean include:

Your unborn baby is not getting enough oxygen and a vaginal delivery will take too long and put your baby at risk.

Your labour is not progressing despite your efforts and fails to move the baby sufficiently and quickly down the birth canal (from the womb through to the vagina), causing distress to you and your baby.

Your labour has been induced (brought on) for a medical reason but the methods used are failing to produce contractions effective enough to lead to a vaginal delivery.

You have vaginal bleeding during your labour.

In some emergency situations, a baby may need to be delivered very quickly, even within half an hour. In such emergencies, a caesarean section can be the safest way to protect both you and your baby.

Older women

Women over 35 years old are more likely to need a caesarean section because they have an increased risk of certain complications during pregnancy, such as:

high blood pressure

gestational diabetes

slow dilation (widening) of the cervix

having a large baby

the baby adopting an awkward position in the womb, such as the breech position

placenta praevia

How a caesarean section is performed

Your caesarean section should be performed under a regional anaesthetic. This numbs the lower part of your body but means you will be awake during your operation.

This is safer for you and your baby than a general anaesthetic, when you are put to sleep.

The regional anaesthetic will be given into your spine (called an epidural). You may be offered a pain-relief injection at the same time that will come into effect after your operation.

You will need to have a catheter (tube) inserted into your bladder to empty it. This is because, with a regional anaesthetic, you will not be able to tell if your bladder is full and needs emptying.

Before the procedure, you'll be offered antibiotics to reduce your risk of developing an infection after the operation.

The procedure

A caesarean section usually takes 30–45 minutes. In an emergency, the operation can be done within 30 minutes.

A screen will usually be placed across your abdomen during the procedure so you do not have to watch the operation being done. However, you can choose to have the screen lowered to see your baby being born.

During the procedure, the operating table will be tilted sideways to an angle of at least 15 degrees. This takes the pressure off your womb and abdomen, reducing your chance of getting low blood pressure and feeling sick during the operation.

A horizontal cut will be made to your lower abdomen at the top of your pubic bone, often described as along your bikini line. This allows another horizontal incision to be made in the wall of your womb to deliver your baby. The low incision will cause you less pain afterwards and looks better than a vertical (up and down) scar.

Sometimes a baby's skin may be cut when the opening in the womb is made. This happens in 2 out of every 100 babies delivered by caesarean section.

Once your baby has been delivered through the incision made in your womb, the placenta soon separates and is also removed. The wall of your womb and abdomen will be closed with stitches that will later safely dissolve.

You should be given an injection of the hormone oxytocin once your baby is born, to encourage your womb to contract and reduce blood loss. Your healthcare team will encourage you to have skin-to-skin contact with your baby as soon as possible.

### **Reducing the risk of a blood clot**

If you have a caesarean section, you have a higher risk of a blood clot.

You may be offered elastic support stockings during and after your operation to reduce your risk of getting a clot, and you'll be helped to walk around after your operation.

If you are at high risk of getting a blood clot, you may also be offered injections.

### Recovery from a caesarean section

It takes longer to recover from a caesarean section than it does after a vaginal delivery.

You should be able to get out of bed fairly soon after the operation, and your wound dressing will be removed after 24 hours. Women generally stay in hospital for two to three days after a caesarean section. However, if you and your baby are well and want to go home earlier, you should be able to leave after 24 hours and have your follow-up care at home.

In the first few weeks after giving birth, try to get as much rest as possible. Avoid walking up and down stairs too often as your tummy may be sore. But take gentle walks daily to reduce your risk of blood clotting.

You should be given regular painkillers to take at home for as long as you need them. Your nurse should also give you advice on how to look after your wound to prevent infection, such as wearing loose comfortable clothing and cotton underwear, and gently cleaning and drying the wound daily.

### Getting back to normal

In general, it will take about six weeks for all your tissues to heal completely. Before this time, basic activities, such as caring for your new baby and looking after yourself, should be possible.

However, you may not be able to do some activities straight away, such as driving a car, exercising, carrying heavy things and having sex. Only start to do these things when you feel able to do so. Ask your nurse for advice if you're unsure.

If you drive, check your insurance cover for any restrictions about driving after a caesarean. Some companies require your DOCTOR to

certify that you are fit to drive. Most women do not feel fit to drive for a few weeks after a caesarean and many wait until after their six-week postnatal check.

### Future pregnancies

If you have had a delivery by caesarean section, it does not necessarily mean you will have to have a caesarean again in the future. You can discuss future pregnancy options with your DOCTOR, who should take account of:

your preferences and priorities

the overall risks and benefits of a caesarean section

the risk of tearing the wall of your womb (uterine rupture) along the scar from your previous caesarean section

the risk to your own and your baby's life and health at the time of birth

If the caesarean was carried out for a health reason that will not change in your next pregnancy (for instance, if you have a very narrow birth canal), it is likely that a caesarean section will be necessary for each birth.

If you want to have a vaginal birth, your healthcare team should support your decision. However, make sure you are aware of the serious complications you may be at risk of, including your scar tearing.

During your labour, you should be offered electronic foetal heart rate monitoring to keep a constant check on your baby. You should also be cared for in a maternity unit that has blood transfusion services and the facilities to do a caesarean section very quickly if necessary.

### Symptoms to watch out for

After having a caesarean section, contact your nurse or DOCTOR straight away if you have the following symptoms:

severe pain

leaking urine

painful or excessive vaginal bleeding

a cough or shortness of breath

swelling or pain in your calf

These symptoms may be the sign of an infection or blood clot, which should be treated as soon as possible.

## Risks of a caesarean section

Although it is a common procedure, a caesarean section is still major abdominal surgery. Like any operation, it carries a certain amount of risk.

### Risks to you

The main risks to you when having a caesarean section include:

infection of the wound

infection of the womb lining, known as endometritis, which can cause fever, womb pain and abnormal vaginal discharge

blood clot (thrombosis) in your legs, which can be dangerous if part of the clot breaks off and lodges in the lungs

excess bleeding

damage to your bladder or ureter (the tube that connects the kidney and bladder), which may require further surgery

However, a recent change in practice means that infections should become a lot less common. Doctors now give women antibiotics before operating, which reduces the risk of developing an infection more than if antibiotics are given after the operation.

### Aspiration

If you have an emergency caesarean section, there is a risk that you will vomit during your operation. If this happens, food and fluid particles can pass from your stomach into your lungs. This is known as aspiration. This can cause potentially serious inflammation (swelling) of the lungs, known as aspiration pneumonitis.

Eating during labour may increase the amount of food and fluid in your stomach and increase your risk of aspiration if you need to have an emergency caesarean.

If there is a chance that you may need to have a caesarean section, drinking isotonic drinks (that have the same concentrations of salt and sugar as human body fluid) can give you energy during labour without giving you a full stomach.

## Risks to your baby

Having a caesarean section has not been shown to increase or decrease the risk of your baby having the most serious complications, such as an injury to the nerves in the neck and arms, bleeding inside the skull, cerebral palsy or death. These complications are very rare and affect fewer than 20 in 10,000 babies.

The most common problem affecting babies born by caesarean section is breathing difficulties, although this is mainly an issue for babies born prematurely. For babies born at or after 39 weeks by caesarean section, this breathing risk is reduced significantly to a level similar to that associated with vaginal delivery.

Straight after the birth and in the first few days of your baby's life, they may breathe abnormally fast. This is called transient tachypnea. Most newborns with transient tachypnea recover completely within two or three days.