

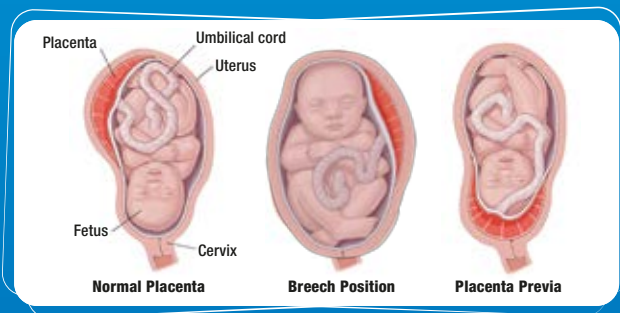
# What is Caesarean Section?

A Caesarean Section is a surgical procedure to deliver your baby through a cut in your lower abdomen and the uterus (womb). This is usually performed under either a regional anaesthesia where the lower part of the body is numbed whilst you stay awake during the operation and less commonly under general anaesthesia where you are put to sleep.

## When may a Caesarean Section be required?

### Elective Caesarean Section (planned)

- When your baby is not in the head-down (cephalic) position e.g. breech positions
- In some cases where you have had a Caesarean Section in the past and are either not keen or not suitable for a trial of vaginal birth
- When you have a low-lying placenta (placenta previa) that obstructs the baby's birth and has a high risk of heavy bleeding in labour



- Some cases where you are having twins, or if you are having triplets or more (multiple pregnancies)
- You prefer the option of a Caesarean Section for your baby's birth rather than a vaginal delivery (maternal request)

### Emergency Caesarean Section (unplanned)

- Your baby shows signs of distress in the womb during labour
- The baby is unable to come through the pelvis successfully due to his or her size or position relative to the pelvis (cephalo-pelvic disproportion)
- Your labour is not progressing adequately
- Unsuccessful trial of vaginal birth after caesarean (VBAC)
- Uterine rupture, which is a life-threatening complication where the muscular wall of the uterus tears during pregnancy or labour, causing the baby to slip into the mother's abdomen
- An umbilical cord prolapse where the umbilical cord slips down in front of the baby after the waters have broken, potentially then coming through the open cervix

## What happens during a Caesarean Section?

A Caesarean Section begins with placing of an intravenous line for medications and fluids followed by anaesthesia, usually an epidural or a spinal block so that the lower half of your body will be numbed but you will stay awake for the birth of your baby. Intravenous antibiotics are usually given before the surgery begins to reduce the risk of infection. Your tummy will be cleaned with an antiseptic solution. A urinary catheter will be inserted into your bladder, sterile drapes placed over your tummy and a screen placed to block your vision of the operating field.

Before starting the surgery, your doctor will check to make sure that you are numb and do not feel any pain. Your doctor will then make a small incision in the lower part of your tummy – this is most often done just above the pubic hairline. In some special situations, a vertical incision instead of a horizontal one over the tummy might be necessary. Your doctor will then make an incision in the lower part of your womb – this may either be a horizontal transverse cut or a vertical cut depending on the situation as well. You may then feel some pressure over the upper part of your abdomen as an assistant presses on the uterus to help with delivery of the baby through the incision of the womb. The umbilical cord is then cut and placenta removed. The surgeon will perform a routine check of your reproductive organs and then proceed to stitch up your uterus. Sometimes, adhesion barriers may be placed at this point to try to reduce the risk of adhesions forming after the surgery. The incision over your tummy will then be closed.

## What are the risks/complications of a Caesarean Section?

Caesarean Section is generally a safe procedure and major complications are uncommon. However, there are risks to a Caesarean Section. Some common risks include bleeding, infection, wound complications and abdominal adhesions.

## How may some of these risks be reduced?

### • Bleeding

Certain medications to help the womb contract properly after delivery of the baby may be used to reduce the risk of excessive bleeding (postpartum haemorrhage).

### • Infection

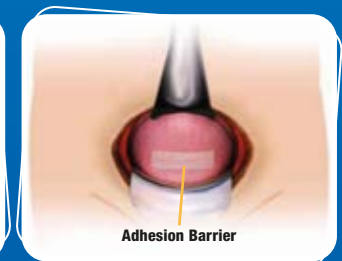
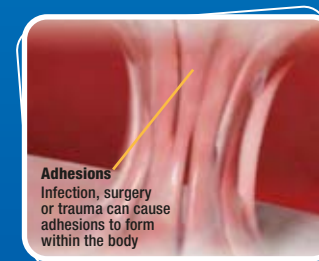
Antibiotics are administered before the surgery to reduce the risk of infection over the wound and within the tummy.

### • Wound complications

Wound separation or dehiscence, which is the surgical wound opening up either partially or completely along the sutures, is a potential complication after Caesarean Section. This can prolong the recovery time and may also negatively affect a mother's ability to recover and care for her newborn. Although there is currently no conclusive evidence about how the skin should be closed after a Caesarean Section, studies show that the use of non-absorbable staples is associated with an increased risk of skin separation and therefore need for repeat stitching for closure of the wound. Other methods of wound closure include the use of topical skin adhesives or glue which can also function as a physical barrier against bacteria mostly commonly associated with Caesarean Sections.

### • Intra-abdominal adhesions

Some possible ways which adhesions within the tummy can be reduced include strategies such as better surgical techniques, minimising foreign materials that enter the tummy (e.g. surgical glove powder) and also ensuring that all bleeding is secured before the wound is closed up. Also, overlying some anti-adhesion barriers over the surface of the womb may also help to prevent adhesions from forming.



## What to expect after a Caesarean Section

You will usually stay in the hospital for a few days after a Caesarean Section.

You will be given adequate pain relief to cope with pain management once the effects of the anaesthesia begin to fade. You will also be allowed to start back on fluids and food rather quickly in most situations. You will be encouraged to walk as soon as you can which helps to prevent blood clots in the legs (deep vein thrombosis). You may also be given a blood thinner injection to reduce the risk of deep vein thrombosis. Your bladder catheter will likely be removed as soon as possible.

You will be encouraged to start breast-feeding as soon as you can. A lactation consultant may be available to help you with this process and troubleshoot any problems that might arise.

You will be deemed ready for home once you are able to empty your bladder well, walk independently and are taking food well. You will be given instructions on how to take care of your wound at home.

## When you go home after a Caesarean Section

It may take about 6 weeks to recover from a Caesarean Section. The area of your wound may feel numb – this is expected but may get better with time.

- Exercise

Gentle exercise, such as walking, will help you recover from your Caesarean Section, but do wait until you have had your 4-6 week postnatal check before returning to your pre-pregnancy levels of exercise. Pelvic floor exercises can also help to reduce the risk of pelvic floor problems such as urinary or faecal incontinence in the long run.

- Wound care and scar prevention

Aside from optimal surgical management during the operation, proper care of the wound after surgery can also help to minimise the risk of scar formation. Avoid scrubbing or wiping your Caesarean Section scar too vigorously, and do try to avoid exposing your scar to the sun as sunlight can make your scar darker or lighter. Measures taken to reduce skin tension, and to provide taping, hydration and ultraviolet (UV) protection of the early scar tissue can also help to minimise the risk of scar formation. In some cases, silicone sheeting/gel/sprays may be used to prevent excessive scarring or keloid formation. However, despite best measures, formation of keloids or hypertrophic scars may still occur.



- Pain relief

The wound will continue to feel sore for a few weeks, and you will likely need to take pain killers for about 1 to 2 weeks after the Caesarean Section. You will be prescribed this before home.

- Preventing constipation

Take plenty of fluids and fibre-rich foods (whole wheat bread, vegetables, fruits) to reduce the risk of constipation. Keeping active and walking can also help in this aspect.



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# Caesarean Section

Information Pamphlet