York and Scarborough Teaching Hospitals
NHS Foundation Trust

Caesarean Section

Information for patients, relatives and carers

ⓘ For more information, please contact:
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Contents **Page**

Before your operation 4
Should you be awake or asleep for the operation? 5
Before you come to the Labour Ward 8
On the Labour Ward 9
In the Operating Theatre 12
After the operation 13
Pain relief 14
What are the benefits of a CS? 15
Are there any alternatives? 15
What are the risks of Caesarean Section? 16
Sterilisation at Caesarean Section 18
- What are the benefits of sterilisation? 18
- Alternatives to sterilisation at CS 18
- What are the risks of sterilisation at CS? 19

Physio advice 20
- Back care and comfort 20
- Abdominal exercises 22
- Pelvic floor exercises 26
- Taking care of your back long term 28

At home 29
References 30
Tell us what you think of this leaflet 31
Teaching, training and research 31
Patient Advice and Liaison Service (PALS) 31

Before your operation

There are a number of things that need to be completed in preparation for your caesarean section; these may be done in clinic, on the ward, or in the day assessment unit.

An obstetric doctor will take details of any medical conditions you may have and check the position of the baby. The doctor will discuss the details of the operation with you and make sure you understand what is involved. You will be asked to sign a consent form (FYCON87-1 Caesarean Section) to confirm that you agree to the procedure and understand the information given to you. This form will be kept in your patient notes and you will also be given a copy for your own records.

An anaesthetist (specialist doctor in anaesthetics) will also see you to discuss the anaesthetic with you.

The anaesthetist may give you an information leaflet about anaesthesia. More information about anaesthesia is available from the Royal College of Anaesthetists website on the internet.

Should you be awake or asleep for the operation?

There are two types of anaesthesia for caesarean section. You can be either awake (a **regional anaesthetic**) or asleep (a **general anaesthetic**). Most Caesarean sections in York and Scarborough Teaching Hospitals NHS Foundation Trust are performed using a regional anaesthetic. This is where you are awake but you can't feel any pain in your lower body.

If you are having a regional anaesthetic, it will either be given as a spinal or an epidural. The anaesthetist will ensure you are awake and comfortable. Both kinds of regional anaesthetic involve an injection in your back. They make you numb to the bra line and you will be unable to move your legs for a couple of hours.

You usually feel sensations of movement during the operation. If this is painful then the anaesthetist will give you further pain relief but if you are still feeling pain it may be necessary for a general anaesthetic to be performed (where you are put to sleep). After a regional anaesthetic about one in 200 women may get a headache, which requires further treatment. Other problems are extremely rare. Your anaesthetist will tell you more.

The anaesthetist usually recommends that you stay awake for your caesarean section as there are several advantages:

- You see and hear and hold your baby earlier and can quickly enjoy skin to skin contact with your baby.
- Your baby is not affected by the anaesthetic and so is able to start feeding straight away (when a general anaesthetic is used your baby may be very sleepy as drugs given during a general anaesthetic can cross the placenta).
- Your partner may be able to be with you for the birth.
- You understand what is going on and you are not groggy or confused or sleepy afterwards.
- You are comfortable at the end of the operation and for many hours afterwards.
- Serious problems are rare; they are less common than with a general anaesthetic.

Occasionally the obstetrician or anaesthetist will recommend that you have a general anaesthetic. They will explain the reasons why. Here is a list of 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.
- 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.
- If you need a Caesarean suddenly, there may not be enough time for a regional anaesthetic to work.
- Occasionally women may choose to have a general anaesthetic rather than a regional anaesthetic.

Most preparations for surgery are similar to those for a regional anaesthetic. Your partner, however, will not be able to stay in the operating theatre with you.

Before you come to the Labour Ward

For your safety you must have an empty stomach before your operation. You must not eat from midnight before your operation, but you may drink water until 6.00am.

You will be given tablets to reduce stomach acid.

On the morning of your operation you can have a bath or shower but we ask you to avoid any creams, powder or make up. You will be given a gown to wear. We ask you not to wear underwear but you should put on a warm winter dressing gown and slippers.

Staying warm before surgery can lower the risk of post-operative complications and the hospital environment may be colder than your own home. Please tell staff if you feel cold at any time during your hospital stay.

You are advised not to shave your pubic hair prior to your caesarean section as this can increase the risk of developing a wound infection. The midwife may remove some hair using clippers immediately prior to your surgery.

Please note that the date that you have been given for your operation could be changed if the labour ward becomes very busy.

On the Labour Ward

You will be introduced to a midwife who will be looking after you and your baby on the labour ward. You will also meet the surgeon, the anaesthetist and the anaesthetic assistant.

A drip will be inserted into your arm and fluids given.

If you have a general anaesthetic:

You will be given an antacid to drink (to reduce the acid in your stomach) and a midwife will insert a catheter into your bladder before the general anaesthetic is started or after you are asleep. 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.

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. You will be taken to the recovery area where you will join your baby and partner.

If you have chosen to be awake:

Your spinal or epidural will be inserted into your back, usually with you in a sitting position.

With a spinal you start to feel numb very quickly. An epidural takes longer to take effect.

Your blood pressure will be checked very frequently once you lie down. If you feel sick tell the anaesthetist, since it may be due to your blood pressure falling and this can be corrected.

The midwife will insert a urinary catheter into your bladder once you are numb; this will keep your bladder empty throughout the operation.

If your partner is to accompany you into the operating theatre he or she will change into theatre clothes.

Calf pumps or anti-embolic stockings are put on to help your circulation while you are on the operating table. It is important to wear the stockings for as much of the time as possible, day and night, whether in hospital or afterwards at home, until you are back to your usual level of activity. You will also be prescribed an anticoagulant injection, which reduces the chance of your blood clotting and causing a DVT or PE. The injection normally prescribed is called low molecular weight heparin (LMWH). This is usually injected once a day into the skin on the top of your leg. You may experience a temporary stinging sensation when the injection is given. This is normal and you are advised not to rub the area around the injection site. The injections should be continued at home for seven days following your surgery; some people will need the injection for longer. Your midwife and doctors will discuss this further with you. We will give you instruction on how to self-administer this.

The anaesthetist will check that you are adequately numb before the procedure is started.

In the Operating Theatre

Your tummy is cleaned and covered with surgical drapes (sterile sheets). One drape makes a curtain so you do not see the operation.

There will be at least two people performing your operation. The tummy is cut, usually in a horizontal line at the bikini-line. The uterus is cut in a similar manner inside. You will feel a sensation of movement in your tummy but you should not feel pain.

It usually takes five to 10 minutes to deliver your baby but the whole operation can take an hour.

Your baby will be checked by the midwife and or a paediatric doctor in an adjacent room and then bought back for you to hold until the end of the operation.

After the operation

You will stay on your bed in the Labour Ward for about an hour. During this time your blood pressure, pulse and oxygen levels are checked frequently. When all these observations are satisfactory you can eat and drink. You will then be transferred to the post natal ward.

Later the catheter will be removed from your bladder and the drip taken out the next day.

Your midwife will advise you when you can get up and look after yourself and your baby.

Pain relief

At the end of the operation, with your permission, we will give you a long acting painkiller by suppository.

A different long acting painkiller will usually be given with your spinal or epidural. If you need more pain relief please ask a midwife and she will give you a tablet or injection.

If you have a general anaesthetic, we usually give you a pump attached to your drip so you can give yourself a small dose of morphine when you need it.

If you are in pain please tell someone. We can help you. You should be able to walk around and care for your baby soon after the operation and if you are not able to because of pain you can ask for more pain killers.

If you feel sick or itchy after the operation, tell a midwife and she will be able to give you an injection to help.

If you have had an elective (pre-planned) CS, you will usually be fit to go home the day after the operation. You may need to be in hospital longer if you have had an emergency CS.

What are the benefits of a CS?

A caesarean section ensures safe delivery of your baby in situations where the risks of vaginal birth are considered greater than those of a caesarean section.

Are there any alternatives?

The only alternative is to continue to attempt a vaginal birth.

What are the risks of Caesarean Section?

For you

- Injury to abdominal organs, including bladder, bowel, ureters and blood vessels (1 in 1000 women)
- Major haemorrhage needing blood transfusion (3 in 100)
- Emergency hysterectomy (2 - 8 in 1000)
- Return to theatre for further surgery (5 in 1000)
- Admission to Intensive Care Unit (9 in 1000)
- Rupture of the womb scar in a future pregnancy or labour (2–7 in 1000)
- Blood clot in a vein (deep vein thrombosis) or lung (pulmonary embolism) (4 -16 in 10,000)
- Stillbirths in future pregnancies (1-4 in 1000)
- Placenta praevia (this is when the placenta covers the neck of the womb) in future pregnancy (4-8 in 1000)
- Death of the woman from complications (8 in 100,000)
- Anaesthetic complications (anaesthetist will discuss these with you).

Other risks (frequently occurring) include:

Unsightly, uncomfortable or numb scar, nerve damage (1 in 1000), incomplete removal of placenta, chronic pelvic pain, vaginal bleeding, infection, bruising or breakdown of wound or uterus, hernia or endometriosis in caesarean scar, adhesions and difficulty conceiving in the future, painful intercourse, increased risk of future caesarean.

You may need to return to hospital for further treatment or an operation if you have these problems.

For your baby[1]

The most common complication for babies born by caesarean section is temporary breathing difficulty. Your baby is more likely to need care in the special care baby unit than a baby born vaginally.

There is a small risk of your baby being cut during the caesarean section. This is usually a small, shallow cut (this happens in 1 to 2 out of every 100 babies delivered by caesarean section and usually heals without further harm).

There is a more serious but rare risk that a bone is fractured (can happen in around 1 in 1000 caesarean sections[2]) or a joint is dislocated.

Sterilisation at Caesarean Section

If you are planning to be sterilised as part of the caesarean section operation, then you may find the following information useful.
You will be asked to sign an additional consent form (FYCON114-1 Sterilisation at Caesarean Section).

What are the benefits of sterilisation?

Up to 40% of the adult male and female population of the UK are sterilised. It offers a reliable form of irreversible contraception so no other forms of contraception need to be taken after your operation.

Any sterilisation must be regarded as permanent

It is very important that you are sure that you will not regret this decision in the future. It may be worth considering other reversible methods of contraception (Mirena or a copper coil or an implant or injection) or considering a vasectomy for your partner as this is a slightly safer operation with a lower failure rate (one in 2000 after vasectomy).

Alternatives to sterilisation at CS

Alternatives are to use other contraceptive methods, insertion of Hormonal (Mirena) Coil at Caesarean Section or have a separate/later operation to perform sterilisation after full recovery from Caesarean Section.

What are the risks of sterilisation at CS?

The risks are the same as that for caesarean itself (as previously described).

Additional risks of sterilisation include:

Failure of sterilisation (one in 200): At the time of caesarean section, the tissues are very vascular and potentially heal better. A sterilisation procedure done at this time may therefore carry a higher risk of failure than the usual one in 200 because the fallopian tubes heal together again.

There is an increased chance of ectopic pregnancy following sterilisation (less than 1 in 100) with potentially life-threatening complications if early help is not sought.

If you already have a lot of adhesions in your pelvis and your tubes cannot be safely reached, it may be wiser not to attempt the procedure, in which case you may need to opt for other means of contraception.

It is important that you are certain you wish to be sterilised as it is considered permanent and non-reversible.

Menstrual problems: these are often due to the discontinuation of previous contraceptives, e.g. the pill, which had given you lighter periods.

Physio advice

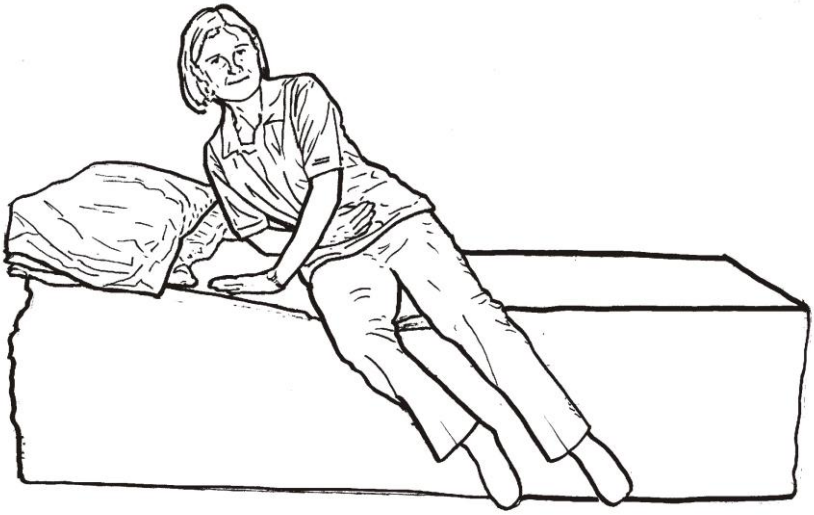
Back care and comfort

- **Stand tall**
  Always stand straight from the first day you are allowed up. A good posture is essential to help protect your back.

- **In sitting**
  Placing a small pillow or roll in the small of your back may increase your comfort and support your back, especially when feeding your baby.

- **In lying**
  A pillow under your knees or thighs may increase comfort if you are lying on your back or a pillow between your knees if you are lying on your side.

- **Getting out of bed**



Bend your knees and role onto your side
Support your wound with your hand and take your time.

Push yourself up to a sitting position using your hands and allowing your legs to swing down to the floor.

Reverse this process when getting back into bed.

Abdominal exercises

- To help prevent backache and pelvic pain
- To improve posture
- To increase abdominal tone
- To increase pelvic core stability

1. Pelvic Tilting

- Pull in your tummy muscles
- Press the small of your back onto the bed
- Hold this for approximately a count of two
- Slowly let go
- Repeat several times, aim to increase to 10 at least two to three times a day

This exercise can also be done in a side lying, sitting or standing position.

2. Knee Rolling

- Lie with your knees bent and your feet resting on the bed
- Pull in your tummy muscles
- Take both knees gently to your right side as far as it is comfortable
- Repeat this to your left side
- Repeat several times as comfortable

3. Start to exercise the transverse abdominis muscle

- Breathe in to prepare, as you breathe out gently tighten your pelvic floor muscles “**nip**”
- Gently draw your belly button back and up towards the spine, hold “**zip**”

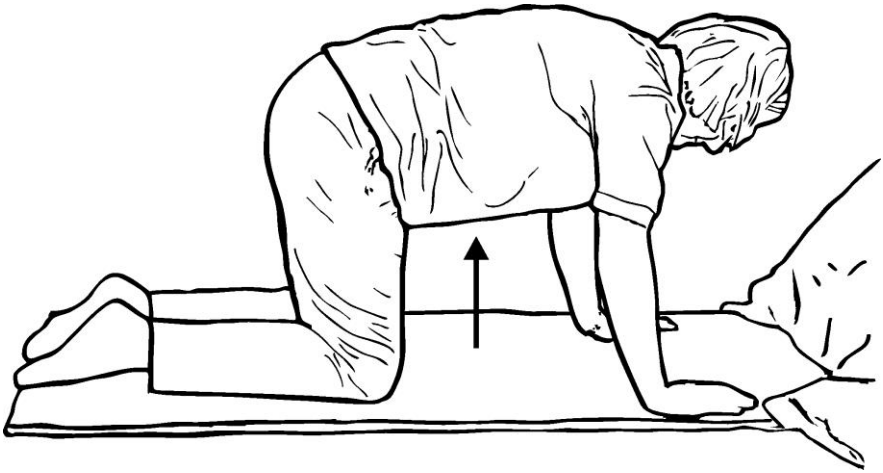
Increase the number of seconds you hold until you reach five.

Do the nip and zip exercise in any position, for example standing, side lying or on your hands and knees. Start using the muscles functionally for example:

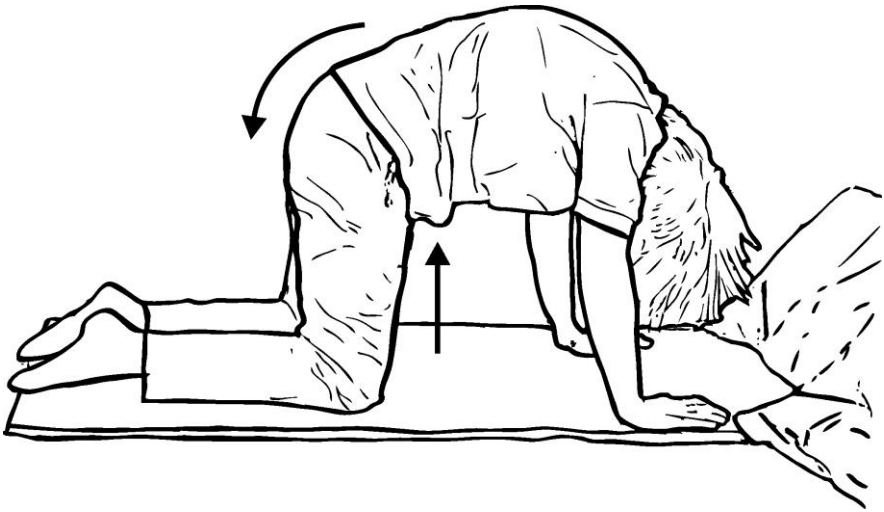
- When moving from a sitting to a standing position
- Walking
- Going up and down stairs
- Lifting your arms above your head when reaching up to a shelf
- Reaching forwards into the boot of a car

Always engage the core muscles when lifting.

4. After six weeks you should include the following exercises



"Nip and zip"



"Pelvic Tilt"

Pelvic floor exercises

These muscles have been very stretched during pregnancy .If allowed to remain weak, stress incontinence, vaginal slackness or prolapse may result.

Exercise will:

- Encourage healing and help ease discomfort
- Maintain and improve bladder control
- Improve the support for the pelvic organs
- Enhance sexual intercourse

To exercise

Imagine that you are trying to stop wind and at the same time trying to prevent the flow of urine. This **squeeze and lift** is your pelvic floor exercise.

Start with short quick contractions

- Squeeze, lift firmly and let go
- Repeat four or five times
- Aim to increase to ten
- Use this quick reaction to stop you from leaking urine when you cough or sneeze

On about day three

- Squeeze and lift as before and hold for as many seconds as you can and let go slowly. Progress this hold to a maximum of 10 seconds
- Rest for four seconds
- Repeat the exercise at least four times
- Repeat the above throughout the day
- This will help to build up the strength of your pelvic floor muscles

Link your exercises with an activity, for example feeding your baby, having a drink or washing up.

Remember

Pelvic floor exercises are for life.
It may take three to six months to get good results.

When you have improved,
exercise twice a day for the rest of your life.

Taking care of your back long term

Your back will be vulnerable for five to six months after delivery. In addition to the abdominal exercise, remember to take care of your back during everyday activities.

This will help to prevent strain and discomfort whilst:

- **Standing**

Stand and walk tall with a stretched spine. Feel your bottom and tummy tucked in.

- **Sitting feeding baby**

Have your back supported. Legs uncrossed and supported. Baby supported by a pillow on your lap.

- **Nappy changing**

On a surface which is level with your waist.

- **Lifting**

Always bend your knees. Hold things close to your body. Keep your back straight. Avoid twisting.

At home

- Take painkillers for as long as you need them.
- Try to get as much rest as you need.
- Continue with the recommended exercises.
- Commence driving when you can wear a seat belt, do an emergency stop, reverse without discomfort and your insurance company agrees (normally after two weeks).

Try to avoid heavy lifting, forceful pulling and pushing, over stretching and strenuous high impact exercise for the first six weeks. Remember any exercise should feel comfortable.

References

[1]Information on risks for baby reproduced from: Royal College of Obstetricians and Gynaecologists. Choosing to have a caesarean section. Patient Information Leaflet. London: RCOG; 2015, with the permission of the Royal College of Obstetricians and Gynaecologists.

[2]Planned caesarean section versus vaginal birth for breech presentation at term: a randomised multicentre trial.
Mary E Hannah et al. Term Breech Trial Collaborative. The Lancet Volume 356, Issue 9239, 21 October 2000, Pages 1375 – 1383.

Tell us what you think of this leaflet

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact: Clinical Governance – Women's Health, telephone York 01904 721327 or Scarborough 01723 236253.

Teaching, training and research

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

Patient Advice and Liaison Service (PALS)

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email yhs-tr.patientexperienceteam@nhs.net.

An answer phone is available out of hours.

Leaflets in alternative languages or formats

If you would like this information in a different format, including braille or easy read, or translated into a different language, please speak to a member of staff in the ward or department providing your care.

Patient Information Leaflets can be accessed via the Trust's Patient Information Leaflet website: www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/

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