

Your Caesarean Section



Greetings and Welcome to Women's Health
Tena koutou katoa, Kia orana, Talofa lava, Malo e lelei,
Fakaalofa lahi atu, Taloha Ni, Ni Sa Bula Vinaka

Auckland District Health Board
National Women's Health

Introduction

This booklet is for women who have been advised to have their baby by caesarean section. Information is provided on:

- the caesarean operation.
- the different types of anaesthesia used.
- what happens on the day of surgery.
- enhancing your recovery after your caesarean.
- a diary for you to record your progress (if you wish – it is not compulsory).
- pain relief following your caesarean.
- caring for your baby.
- helpful contacts.

Caesarean section

A caesarean section is carried out because a vaginal birth is not possible or safe. It can be just as satisfying as a vaginal delivery and you should not feel this is in any sense a failure. Your obstetrician will tell you the reasons for recommending a caesarean, give an explanation of the operation and obtain your consent.

If the caesarean section is recommended because of concern about your baby, a member of the paediatric team will be present in theatre in case your baby needs continuing specialised care in the newborn service after delivery.

When is a caesarean necessary?

A planned or elective caesarean section.

Your caesarean may be planned in advance; this is called an elective caesarean section. This maybe recommended if:

- The placenta is blocking the cervix (entrance to the womb) so the baby cannot be delivered vaginally. This is called placenta praevia.
- There is an active infection in the birth canal such as genital herpes at the onset of labour.



- There is a complication of pregnancy such as pre-eclampsia or a serious medical condition.
- You have had a previous caesarean and a subsequent vaginal birth is not considered to be safe
- You have had previous major surgery to the uterus (womb) or have uterine abnormalities.
- Growth restriction and prematurity of your baby.
- The baby is in a transverse (lying sideways), or other unfavourable position and is unable to be born vaginally.
- The baby is too large to move through the birth canal.

An emergency caesarean section.

In some cases a caesarean section may be recommended in a hurry, usually when you are already in labour. This is an emergency caesarean section. This maybe necessary if:

- The labour is prolonged and not progressing.
- The baby's heartbeat shows signs of distress.
- The cervix does not open up (dilate) for the baby to pass through.
- An attempt at a forceps or ventouse suction delivery has been unsuccessful.
- The mother develops serious complications of pregnancy such as worsening pre-eclampsia.
- The placenta detaches itself from the uterine wall (called a placental abruption) that results in excessive bleeding.
- The umbilical cord has dropped out through the cervix.
- Infection of the uterus, particularly if the waters have been broken for some time.
- Uterine rupture.

Anaesthesia

There are two main types of anaesthesia for caesarean section. You can be either awake or asleep.

The anaesthetist will meet you before your operation to discuss the choice of anaesthetic, and answer any questions you may have. In some emergency situations this discussion may not be possible.


Obstetric anaesthetists are doctors who specialise in the anaesthetic care and welfare of pregnant women and their babies.

Most caesarean sections are done under regional anaesthesia when you are awake but sensation from the lower body is numbed. There are occasions however when you may be advised that one technique is preferable over another.

Regional Anaesthesia

There are three types of regional anaesthesia:

1. **Spinal.** This may be used in planned or emergency caesarean section. The spinal cord and nerves that carry feelings from the lower body (and messages to make your muscles move) are contained in a bag of fluid inside your backbone. Local anaesthetic and a pain reliever is put inside this bag of fluid by an injection into your back using a very fine needle. A spinal works quickly with a small dose of anaesthetic.
2. **Epidural.** A thin plastic tube (or catheter) is put outside the bag of fluid near the nerves carrying pain sensations from your uterus (womb). An epidural is often used for pain relief in labour, using weak local anaesthetic solutions that are fed through the tube when needed. It can also be topped up if you need a caesarean section by using a stronger local anaesthetic solution. A larger dose of anaesthetic is needed than with a spinal and it takes longer to work. It



can be topped up during the caesarean operation if needed.

3. **Combined Spinal Epidural or CSE** – a combination of the two. The spinal makes you numb quickly and is used for the caesarean section. The epidural can be used to give more anaesthetic if needed during the operation and to give pain relieving drugs afterwards.

Some common questions asked about regional anaesthesia

What will I feel during the caesarean?

Some women feel nothing at all. Others feel pulling, pushing and tugging sensations which have been described as similar to baby movements but stronger or like “someone doing the washing up in my tummy.” These sensations are normally short-lived. It is rare to feel discomfort or pain but if you do you must tell the anaesthetist straight away. Extra pain relief can be given if needed. Occasionally it may be necessary to give you a general anaesthetic (when you are put to sleep).

What happens if the regional does not work?


Occasionally the regional anaesthetic fails to work and a general anaesthetic (when you are put to sleep) has to be given.

Are there any side effects?

A regional anaesthetic is usually safer for mother and baby and allows you and your partner/support person to experience the birth together.

Although many women experience no ill effects at all, regional anaesthesia can be associated with some side effects:

- ◆ lowering of the blood pressure. This can make you feel sick but is easily treated.
- ◆ severe headache in 1 in every 200 women. This can be treated.
- ◆ temporary bruising to the nerves in one leg which may last several weeks to several months. This happens in 1 in 10,000 women.



Also they may cause:

- ◆ itching during the operation and afterwards; this can be treated.
- ◆ feeling shaky; this is not serious.
- ◆ feeling sick; this can be treated.
- ◆ tenderness in the back for a few days. This is not unusual and is eased by simple pain relievers such as paracetamol and/or anti-inflammatory pain relief (unless there are contraindications).

Very serious rare complications can include:

- Pressure on the spinal cord from blood clot or abscess; or injury to the spinal cord or nerves causing weakness or numbness of the leg(s). The risk of this lasting more than 6 months is less than 1 in 82,000 women.

Spinals, epidurals or the combination (CSE) do NOT cause chronic backache.

Unfortunately backache is very common after childbirth, particularly among women who have suffered with it before or during pregnancy, but spinals or epidurals do not make it worse.

The risk of a new backache developing is approximately 1 in 10 pregnant women and is usually related to posture. The backache gets better with time and does not require any intervention apart from pain relief. You can ask your midwife to arrange a physiotherapy appointment.

Are there any advantages?

Many women are pleased to have a caesarean section under regional anaesthesia as they are awake and can see their baby immediately after birth.



Other advantages are;

- ◆ regional anaesthesia is usually safer for mothers and their baby.
- ◆ you and your partner/support person share in the birth.
- ◆ you can start bonding with your baby; have skin to skin contact and breastfeed during the operation if you wish, providing surgery is progressing well.
- ◆ baby is more alert.
- ◆ you are not sleepy afterwards and can soon take part in care for your baby.
- ◆ postoperative pain relief is good.

If I had an epidural for labour can it still be used for caesarean section?


- ◆ If you have had an epidural to relieve labour pains and then unexpectedly need to have a caesarean section, we can usually make you more numb for the operation by “topping-up” the same epidural. An epidural can also be left in place after the caesarean for managing pain relief.

General Anaesthesia

What does a general anesthetic involve?

If you have a general anaesthetic you will be asleep for the caesarean section. It is used less often nowadays. There are occasions when a general anaesthetic is needed:

- ◆ there is not enough time for a regional to work.
- ◆ regional anaesthesia is unsuitable/best avoided, such as when the blood cannot clot properly or if there is a lot of bleeding.
- ◆ if you have a very curved back which makes regional anaesthesia very difficult to do or impossible.
- ◆ if you prefer to be asleep.



The anaesthetist will discuss this with you and give advice as to the suitability of this technique for you.

Your support person will be shown where to wait while you are in the operating theatre as they are unable to be present during surgery under a general anaesthetic.

Some questions asked about general anaesthesia

How quickly will I wake up?

- ◆ You will usually wake soon after the operation is completed, but you may be drowsy for a few hours.

Will I be sick after the anaesthetic?

- ◆ You may feel sick after the operation but if you do you can be given medication to relieve this.


Preoperative assessment

If you are having a planned or elective caesarean section you will be invited to attend a preoperative assessment clinic. You will be seen by the preassessment nurse who will explain:

- the time to come to the hospital on the day of your caesarean.
- the time to stop eating and drinking before your surgery.

You will be given:

- tablets to reduce the acid in your stomach; you need to take one the night before your surgery and one on the morning of your surgery with a small drink of water.
- a carbohydrate drink to have on the morning of surgery. Please note that this drink is not suitable for everyone; so please do not be concerned if you do not receive it.



You will be seen by the anaesthetist who will review your health, pregnancy, medical history and any previous anaesthetics. You may be examined and forms for blood tests will be given. The anaesthetist will discuss the anaesthetic with you. Please do not hesitate to ask any questions or discuss any concerns you may have.

On the day

Operating Room Day of Admission (ORDA)


On the day of your elective caesarean section you will be admitted to ORDA on level 9, Auckland City Hospital. A nurse will prepare you for your caesarean section. It is still important to drink clear fluids until an hour before your appointment time, whether or not you have the carbohydrate drink.

Partner/Support Person Information

If you have a regional anaesthetic and stay awake for your operation, your partner/support person is very welcome to accompany you to theatre and stay with you throughout the surgery. If you are having a general anaesthetic – going to sleep for your operation, your partner/support person will be asked to wait in a waiting area.

Your partner/support person will be shown where to change into theatre clothes and be given a badge to wear. Once inside theatre they will be shown where to sit. The operating theatre is a sterile area, so it is important that they are careful not to touch any of the operating drapes or move around the theatre too much.

Once your baby is born, they will be invited to where the midwife or paediatrician is checking baby.



If they feel unwell at any time they should immediately inform a staff member.

We encourage you to welcome your baby and take as many photos of mother and baby as you wish.

Please note:

- only one person is allowed to support you in the theatre as the space is limited.
- please do not take photos of staff without their permission.
- please do not use cell phones to make or receive calls whilst in theatre.

Operating Theatre

In theatre, whether you are awake or asleep for your caesarean you will have equipment attached to measure your heart rate, blood pressure and the amount of oxygen in your blood. This is quite painless.

The anaesthetist (or technician) will set up a drip to give you fluid into your veins in your hand or arm. A local anaesthetic is used to numb the skin first.

Regional anaesthesia

If you have regional anaesthesia, you will be asked to sit up (or sometimes lie on your side). After painting your back with an antiseptic solution (it will feel cold!), a suitable point in the middle of your back is found and a little local anaesthetic injection is given to numb the skin. Then the regional anaesthetic needle is placed in your back. Sometimes as this needle goes in you feel a momentary tingling, like an electric shock going down one leg.

You should mention this, but it is important to try to keep still. When the needle is in the correct position, an injection of local anaesthetic and pain



relieving medicine is given and the needle removed. This usually takes a few minutes but can take longer if it is difficult to place the needle.

If you are having a combined spinal epidural anaesthetic, after the injection of the anaesthetic medicines, a catheter (tube) is threaded down the needle. The needle is removed leaving the catheter in your back.

The anaesthetic takes effect quickly. Your legs will feel warm, start to tingle and feel heavy. Numbness will spread up your body so you will feel numb from your armpits to your toes.


Whilst the anaesthetic is taking effect, a urinary catheter will be inserted to drain urine from your bladder. This should not be uncomfortable and will be removed 8 – 12 hours after your caesarean section.

You will be placed on your back for the operation with a tilt towards the left side. A screen separates you and your partner/support person from the operation site but if you wish this may be temporarily lowered so you can see the moment of delivery of your baby from your tummy.

A particular advantage of having a regional anaesthetic is that you are awake when your baby is born and you, your partner/support person and baby can start bonding together. Having skin to skin contact time with your baby helps this bonding process. We encourage you to do this and breastfeed if you wish to do so, as long as you are comfortable and the surgery is going well.

Sometimes there are a lot of staff in the theatre with you. Each person has a specific role and is there to make your caesarean as safe and smooth as possible.

You may be given additional pain relieving medicine towards the end or shortly after the surgery. This is usually paracetamol and anti-inflammatory



pain reliever (unless these are not suitable for you).

Occasionally local anaesthetic injections to the wound site, or just above your hips, may be given as further pain relief.

From the start it takes approximately ten minutes before your baby is delivered and a further fifty minutes for the surgery to be finished, when you will be transferred with your support person and baby to the Post Anaesthesia Care Unit (PACU).


What happens if I have a general anaesthetic?

1. You will be positioned comfortably on the anaesthetic table lying on your back, with a tilt towards the left.
2. You will be given oxygen to breathe and the anaesthetic is injected into your drip. As you quickly go to sleep, gentle pressure is placed on your neck so that stomach contents do not enter your lungs.
3. When you are asleep a tube is placed in your windpipe to allow a machine to breathe for you, and to prevent stomach contents entering your lungs.
4. When you wake up you may feel sleepy and your throat may feel sore from the tube. Medicines are given to keep you comfortable and stop you feeling sick.

After the operation you will be transferred to the Post Anaesthetic Care Unit (PACU). Your support person/partner and baby will join you there when you are comfortably awake, depending on numbers of staff on duty.

Vitamin K

Vitamin K is essential for normal clotting of blood. Newborns are at risk of bleeding because vitamin K is produced in the gut only after micro-



organisms are introduced. It would be good to have discussed this in detail with your Lead Maternity Carer (LMC) before the birth to enable you to make an informed choice. It can be given as either an injection into the baby's thigh muscle at birth or as 3 oral doses - at birth; at 5 days; and at 6 weeks of age. Vitamin K is medically recommended for all babies.

Neonatal Intensive Care Unit (NICU)

If your baby is admitted to the Neonatal Intensive Care Unit (NICU) your partner/support person can usually accompany the baby to the unit. If possible we will take you via NICU to see your baby before you go to the ward.

Post Anaesthetic Care Unit (PACU)

From the operating theatre you will be transferred to the PACU with your baby and partner/support person. During this recovery time you will be carefully monitored by the Nursing recovery staff. If you choose, you are welcome to have/continue skin to skin contact with baby and will be given help as needed with breastfeeding. You will normally be allowed to drink water once in PACU.

Please feel free to take photos of mother and baby, whilst respecting the privacy of other patients.

The effects of a regional anaesthetic should wear off over approximately 2-3 hours. After 1-2 hours you will be transferred to a postnatal ward— Tamaki Ward or Wards 96/98.

Please note :

- visiting is restricted to one support person only because we need to monitor your recovery closely.

- please do not use cell phones to make or receive calls.

If you have had a general anaesthetic your partner/support person will visit as soon as you are comfortably awake. You will be given help to nurse baby safely.

Enhancing your recovery after your caesarean section. (EROS)



Enhanced recovery is a programme specifically designed to accelerate recovery after surgery and improve patient experience. It has a structured approach to care in which you are actively involved and encouraged to set goals for your recovery.

For enhanced recovery after caesarean section you should:

First 24 hours after Caesarean Section:

- Drink clear fluids as instructed in preassessment until 2 hours before your surgery time. This has been shown to improve your comfort and reduce nausea and sickness.
- Take a non fizzy carbohydrate drink (which will be given to you to drink in ORDA or you may have been given one to drink at home). This has been shown to reduce the stress of the operation on your body, so helping your recovery.

Please note it is not suitable for everyone, for example if you are diabetic or have developed diabetes in the pregnancy. So please do not get concerned if you do not get one.

- It is important that you have the clear fluids as instructed.
- you should drink water and start postoperative pain relieving medications in PACU.



On the postnatal ward your goals to enhance your recovery are:

- aim to drink normally.
- have a snack or light meal.
- start mobilising 6-8 hours after your operation such as moving from your bed to sit in a chair or taking a short walk round your room.
- YOUR MIDWIFE WILL CHECK IT IS SAFE FOR YOU TO GET OUT OF BED.
- feed your baby.
- your bladder catheter will be taken out 8 -12 hours after the caesarean section.

Please note:

Some of these activities may not be possible if your caesarean operation is in the afternoon.

24-48 hours after Caesarean Section, your goals are:

- ◆ eating and drinking your usual diet.
- ◆ have a shower (with assistance).
- ◆ change into your own clothes (loose fitting).
- ◆ moving regularly such as walking around your room; walking to the bathroom; moving from your bed to sit in a chair.
- ◆ feeding and caring for your baby.
- ◆ stopping your pain pump.
- ◆ taking regular oral pain relievers.
- ◆ possible transfer to Birthcare/home if planned.

48-72 hours after Caesarean Section, your goals are:

- ◆ eating and drinking your usual diet.
- ◆ self washing and dressing.
- ◆ regular walking around the ward and to the bathroom.
- ◆ performing all cares for your baby
- ◆ taking regular oral pain relievers.

- ◆ possible transfer to Birthcare if planned, or to home.

Care for your baby may influence the time of your discharge/transfer to Birthcare, even though your recovery has been as good as expected. You will be given a diary so that you can record your progress. Relatives/friends can help. It is not compulsory.

Pain Relief after your Caesarean Section

Your pain relief will be a combination of regular oral pain relievers and a pain relieving pump.

Pain Relieving Pump

The pump is safe and under your control. There are two types of pain relieving pump. You will have either:

A Patient Controlled Intravenous Analgesia Pump (PCIA)


This contains morphine, a strong pain reliever and is connected to your cannula in your vein. When you press the button on your hand held controller the morphine is delivered into your blood stream.

OR

A Patient Controlled Epidural Analgesia Pump (PCEA).

This contains pethidine, a strong pain reliever. If you have an epidural catheter left in your back after your anaesthetic, you will have this type of pump.

It is connected to the epidural catheter. When you press the button on the hand held controller the pethidine is delivered into your epidural space. This will not affect your ability to move.



It is also important to avoid using hot or cold packs, or hot water bottles whilst you are still numb from your anaesthetic or whilst your epidural is in progress.

The anaesthetist will decide which type of pain pump you have after discussion with you in the preassessment clinic and/or when you arrive in ORDA.

Both types of pain relieving pump will help to keep you comfortable after your caesarean operation. They are safe with breastfeeding.

You will usually have the pain relieving pump for 24 hours. The recovery nurses and the midwives on the ward will explain and show you how to use the pump.

Oral Pain Relief

In addition to the pain relieving pump you will have regular oral pain relief:

- This will be paracetamol with breakfast, lunch, dinner and bedtime, and an anti-inflammatory pain reliever such as Voltaren or Ibuprofen (unless these are not suitable for you).
- It is important that you take these tablets regularly as they may help to decrease your drug requirement from the pain relieving pump. You should continue taking them after you leave hospital until pain no longer affects you (usually 7-14 days after surgery)
- You may also have oral opioids - M-Eslon (or Oxycodone if morphine is not tolerated). These are strong pain relievers and are given either on a regular basis for up to 3 days, or as needed.
- A short acting morphine tablet (Sevredol) can be given when you no longer need the pain pump but need more pain relief than paracetamol and the anti-inflammatory pain relief give on their own. It is fast acting, becoming effective within twenty minutes.

- Tramadol may also be used for relief of moderate pain when you no longer have your pain pump. This medicine takes about thirty minutes to be effective.

TALL THESE MEDICATIONS ARE SAFE TO TAKE WHILST BREASTFEEDING YOUR BABY.

Side Effects

- Possible side effects of the pain relieving medicines may include nausea, vomiting, constipation and itch.
- If you experience any of these please let your midwife, obstetrician or pain team know.
- Medication is available to prevent or reduce these side effects.
- Please be aware that whilst there is no advantage to you feeling pain after your caesarean, some discomfort is normal as long as it does not significantly affect your activities.
- The pain team will visit you daily for as long as you need the pain relieving pump, and will give you advice on any aspect of your pain relief.

Postnatal care and Discharge Planning

Birthcare and National Women's work in partnership to provide quality postnatal care for women.

Birthcare is a stand alone maternity unit in the grounds of the Domain. It is staffed by experienced midwives 24 hours a day, 7 days a week. At Birthcare you will have access to expert breastfeeding support by a midwife and/or lactation consultant, paediatric care and physiotherapy services. Birthcare provides oral pain relief for women.

Your stay at Birthcare in a shared room is free if you are eligible for



publicly funded treatment.

With the Enhanced Recovery Programme we would hope that you will be able to transfer to Birthcare or home 24-48 hours after delivery. However, if you or your baby continue to need medical supervision, you will stay at Auckland City Hospital.

The length of your postnatal stay will vary depending on your clinical need, but on average will be 24 -72 hours if you stay at Auckland City Hospital.

Please discuss your discharge planning and post natal care with your Lead Maternity Carer (LMC).

- Birthcare website - www.birthcare.co.nz

Emotional aspects associated with Caesarean birth

Although some women are pleased to be having a caesarean, it is not uncommon to have feelings of anxiety, failure or guilt. You may have found having to have a caesarean traumatic and upsetting and feel cheated about not having the birth you had planned for. Talking these feelings through with your partner, family members, your doctor and midwife may help. You may also like to talk about the plan for future pregnancies.

Partners' feelings are important too. They may also feel a sense of failure, anger, guilt or helplessness. Talk to each other about your feelings. Partner support is important to you at this time.

For some women bonding with baby happens straight away, whereas for some women it takes longer. Regardless of the type of delivery you have, bonding will happen.

Give yourself time to get to know your baby.

Caring for your baby

Breastfeeding your baby either during or as soon as possible after the operation will help to establish your milk supply.

Initially, your midwife will help to care for your baby and help position you both comfortably for breastfeeding. Some women experience a delay with milk “coming in” after a caesarean. Keep feeding the baby regularly to help your milk supply get established.

Some babies can be mucousy for about 48 hours following the birth. This is not usually a problem but occasionally gentle suctioning may be needed. If your baby is unwell and has to be cared for in the newborn unit you will be encouraged to visit often and to express milk for your baby.

On the second night it is normal for babies to be more unsettled. Please read “*Baby’s second night*” which is available in your room


More tips to help your recovery in the hospital and at home

Do not over tire yourself. A morning or afternoon rest can be helpful. The kinder you are to yourself and the more assistance you accept the sooner you will return to full health. Your midwife is there to help. Please ask for assistance as she may not be aware of all your needs.

Remember to eat well and drink plenty of fluids.

Do not let visitors over tire you - limit them if necessary. You can ask your partner and midwife to assist you to control the number of visitors. Aim to rest when the baby is asleep.

To aid healing of the wound we recommend that you avoid lifting for up to six weeks after your surgery. This includes lifting other children, full laundry baskets, nappy buckets and heavy groceries. We also suggest you avoid vacuuming and that you do not drive a car for approximately four to



six weeks after your caesarean. After this time begin to resume normal day to day activities, as you feel able to.

Your LMC will continue to provide your postnatal care for up to six weeks. Discuss any concerns you have with your LMC. This could include discussion about your recent surgery as well as advice for future pregnancies. You will be referred to a well child provider for on-going follow-up of your baby.

Can I have a natural birth in future?

At National Women's, we encourage women who have had a caesarean to plan for a vaginal birth after caesarean (VBAC) in their next pregnancy. A VBAC is the safest outcome for both you and your baby. At National Women's two out of three women who attempt VBAC will have a vaginal birth.

We recommend waiting at least one year before having another pregnancy in order to allow the womb to heal from your caesarean and thus be able to plan a safer VBAC. Please discuss contraception with your midwife or GP to better plan the right timing for your next pregnancy.

We recommend discussing with your midwife or the doctor who performed your caesarean the reasons you had your caesarean, and if there is a medical reason you could not attempt a VBAC in your next pregnancy. You can refer yourself to the Positive Birth After Caesarean (PBAC) Clinic at Greenlane to discuss your childbirth options for your next pregnancy. There is also a helpful video about a PBAC Clinic visit on the national women's website at the following link:

<http://nationalwomenshealth.adhb.govt.nz/health-information/information-videos#PBAC>

Additional Resources

Information about pain relief and anaesthesia:

<http://www.labourpains.com/>

National Women's Health Website

A–Z Fact Sheets - C - Caesarean

<http://nationalwomenshealth.adhb.govt.nz/health-information/a-to-z-fact-sheets#Clist>

Mokopuna Ora

Healthy pregnancy, baby and parenting information

<http://mokopunaora.nz/>

Raising Children Network (Australia)

Bathing your baby and other useful videos in 13 different languages


http://raisingchildren.net.au/articles_bathing_newborn_video.html/context/819

Helpful contacts

National Women's Hospital	09 307 4949
Delivery Unit	09 307 2888
Social Work Counsellors	09 307 4967
Maternal Mental Health	09 630 9943 x 4454
Health Advocates Service	0800 555 050
La Leche League (breastfeeding help)	09 846 0752



Notes:



Remember to immunise your baby as he/she grows and develops into a healthy child.

Immunise at 6 weeks; 3 months; 5 months; 15 months; and 4 years. If you are unsure talk to your family doctor or practice nurse about this to make an informed choice.

The National Women's Health website has good, accurate and up to date information which you may find helpful.
nationalwomenshealth.adhb.govt.nz

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