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Patient Information for Consent Anaesthesia for Caesarean Section



There are different forms of anaesthesia available for a caesarean section. You can decide either to go to sleep (general anaesthetic) or to stay awake (spinal or epidural anaesthetic) for the operation. The anaesthetic will be given to you by an anaesthetist (doctor trained in anaesthesia). Your anaesthetist is usually assisted by a specially trained healthcare practitioner.

Your anaesthetist will discuss the options with you. However, it is your decision on the form of anaesthesia to have.

This document will give you information about the benefits and risks to help you to make an informed decision. If you have any questions that this document does not answer, ask your anaesthetist or the healthcare team.

SPINAL ANAESTHETIC

What is a spinal anaesthetic?

A spinal anaesthetic (or spinal) involves injecting local anaesthetics and other painkillers into the subarachnoid space (an area near your spinal cord). This numbs your nerves to give pain relief in certain areas of your body.

How does a spinal work?

A spinal works by temporarily numbing your nerves to give pain relief. The subarachnoid space is the bag of fluid that surrounds your spinal cord and the nerves that come out from it. Local anaesthetics and other painkillers are injected using a fine needle into this space. The needle is removed and nothing is left in your back.

What happens before a spinal?

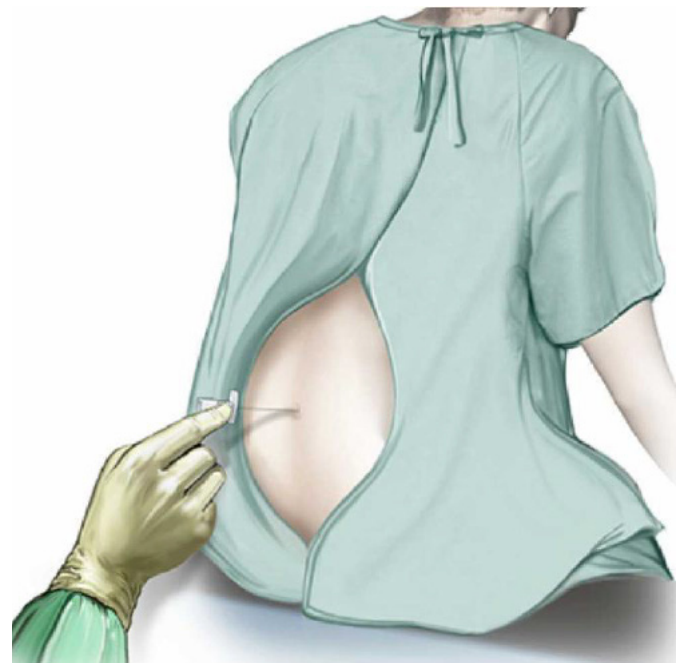
Before you are given the spinal, the healthcare team will attach some monitors to you that

measure your blood pressure and the amount of oxygen in your blood. If you need oxygen, they will give it to you through a mask or small tube under your nostrils.

Your anaesthetist and the healthcare team will carry out some final checks with you and each other. Even though you may have been asked some of the questions before, it is important to answer carefully as the checks are carried out for your own safety.

How is a spinal given?

To insert the needle, your anaesthetist will ask you to either sit up or lie on your side. You will need to curl up and arch your back as much as possible as this makes it easier for your anaesthetist to find the right position.



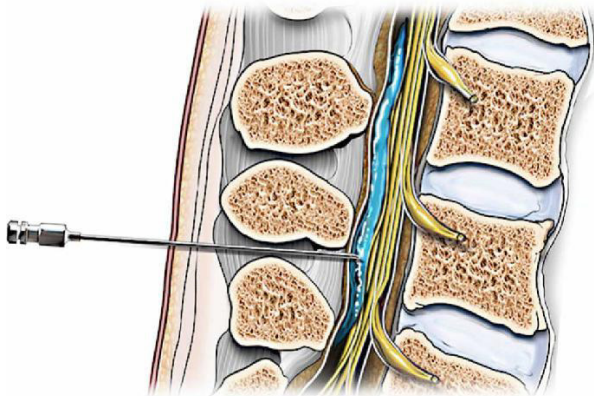
A spinal being given

Your anaesthetist will inject local anaesthetic into the area where they will insert the needle. This stings for a moment but will make the area numb, allowing your anaesthetist to insert the needle with much less discomfort for you.

Your anaesthetist will insert the needle and when they are certain that it is in the right position they will inject the anaesthetic through it. They will remove the needle.

You can help your anaesthetist by keeping still while they insert the needle. It should not be painful, although it can be uncomfortable. If you feel pain, let your anaesthetist know.

During labour, if you are having an epidural that is working well and you need a caesarean section, your anaesthetist can give an extra dose of anaesthetic to make you numb.



A spinal needle in the subarachnoid space

Another technique is to insert a small tube in the epidural space at the same time as inserting the needle for the spinal (combined spinal-epidural). Your anaesthetist will be able to discuss the options with you.

What effect does a spinal have?

The effect of the spinal can be varied by changing the type and amount of medication given. A spinal has three main effects.

- Pain relief – The spinal numbs the sensory nerves responsible for pain and touch. This gives pain relief but can also make the area feel numb or heavy. Pain nerves are easier to block than touch nerves so although you may be able to feel someone touching or pulling you, it should not

hurt. Sensory nerves are more easily affected than movement nerves, so sometimes you can be numb but still able to move your legs or toes.

- Weakness – The nerves supplying muscles may also be affected. This can make it difficult for you to move your legs. It may also make it difficult for you to pass urine properly
- Low blood pressure – The nerves that help to control blood pressure are the most easily affected. Some women will not be aware of this happening but others feel sick or light-headed if they have low blood pressure. Your anaesthetist will be monitoring you closely for any problems with low blood pressure.

If you are having your caesarean section using only a spinal, it will not start until your anaesthetist is satisfied that the spinal is working well.

The time that the spinal lasts for varies but is usually 1 to 3 hours. Your anaesthetist will put enough anaesthetic through the needle to make sure that it lasts longer than the expected length of the operation.

Sometimes surgery takes much longer than expected and the spinal starts to wear off. Your anaesthetist will discuss other forms of pain relief with you.

A spinal gives good pain relief but, like other forms of pain relief, cannot guarantee that you will be pain-free.

What will it feel like during the operation?

You may be aware of pulling and pushing around your abdomen. You may also feel short of breath because the sensory nerves around your chest will be numb. This does not mean that there is any problem with your breathing.

After the birth you may get a feeling of heaviness

or pressure in your chest. This settles after a few minutes, but if it is severe let your anaesthetist know.

What are the benefits of a spinal?

Compared to a general anaesthetic, a spinal has benefits to both you and your baby.

- As you are awake, you and your partner can share in the birth and your baby can be brought to you shortly after delivery.
- You can breastfeed soon after the operation.
- A spinal is slightly safer than a general anaesthetic, although both types are safe.
- Recovery is usually more comfortable and quicker.
- There are no significant side effects for you or your baby. A general anaesthetic may make your baby drowsy at first

What complications can happen?

Your anaesthetist will try to make the spinal as safe as possible but complications can happen. Some of these can be serious and can even cause death (risk: 1 in 70,000).

The possible complications of a spinal are listed below. Any numbers which relate to risk are from studies of people who have had a spinal. Your anaesthetist may be able to tell you if the risk of a complication is higher or lower for you.

- Failure of the spinal. Most spinals work well first time but sometimes they do not. Your anaesthetist may repeat the injection or discuss with you other options such as a general anaesthetic.
- Itching, if morphine or similar painkillers are given. The effect is usually mild, although it can sometimes be more severe. Medication can be used to treat the itching and it always goes away, usually after 1 to 2 days.

- Low blood pressure. The risk depends on your medical condition and the type of medication used. It is easily treated and you will be closely monitored by your anaesthetist. Sometimes the first sign of a fall in blood pressure is feeling sick or light-headed. It is important that you let your anaesthetist know straightaway if this happens.
- Difficulty passing urine because the nerves to your bladder are numbed. You will have a catheter (tube) in your bladder to help you to pass urine.
- Headache is common after an operation. There is a particular type of headache that can happen if the bag of fluid around your spinal cord leaks (risk: 1 in 100). This headache can vary from mild to severe and can be treated.
- Backache is common after an operation. It is common to have a bruised feeling for a few days where the spinal was inserted. There is no evidence that having a straightforward spinal causes long-term backache.
- Blood clots (haematoma) (risk: 1 in 200,000).
- Nerve damage (risk: less than 1 in 24,000). This is not usually serious and gets better. Sometimes the damage can be permanent (risk: 1 in 80,000).
- Unexpected high block, if the local anaesthetic spreads beyond the intended area (risk: 1 in 2,000). This can make it difficult for you to breathe, cause you to have low blood pressure and, rarely, cause you to become unconscious.
- You may be transferred to the intensive care unit or high dependency unit so the healthcare team can monitor you more closely.

You should ask your anaesthetist if there is anything you do not understand.

A complication may happen after you have had a spinal or the epidural has been removed. If you have any of the following problems, you or your doctor should contact the hospital straightaway.

- Pus, redness, tenderness or pain where the epidural was inserted.
- A high temperature.

- Feeling unwell, even after recovering from the operation itself.
- Discomfort when in a bright room or sunlight (photophobia).
- Neck stiffness.
- Difficulty moving or feeling your legs.
- Difficulty passing urine.
- Bowel incontinence

GENERAL ANAESTHETIC

What is a general anaesthetic?

A general anaesthetic is a combination of drugs that produce deep sleep. It is used for operations or procedures as it causes a loss of sensation. You will not be aware of what is happening and afterwards you will not remember anything that has happened.

What happens before a general anaesthetic?

Before you are given the anaesthetic, the healthcare team will attach some monitors to you that measure your blood pressure and the amount of oxygen in your blood. If you need oxygen, they will give it to you through a mask or small tube under your nostrils.

Your anaesthetist and the healthcare team will carry out some final checks with you and each other. Even though you may have been asked some of the questions before, it is important to answer carefully as the checks are carried out for your own safety.

How is a general anaesthetic given?

Most people are sent to sleep by injecting the anaesthetic through a drip (small tube) in a vein. It takes about 30 seconds to work. The injection can ache a bit at the time but any discomfort will be gone when you wake up.

Before you go to sleep, your anaesthetist will ask you to breathe some oxygen through a face mask. As you go to sleep you will feel the assistant pressing on the front of your neck. This is to prevent anything in your stomach from passing up into your lungs. To help protect your lungs during the operation, your anaesthetist will place a breathing tube into your windpipe (trachea). This will be removed at the end of the operation, when you are awake.

You will be kept asleep by breathing anaesthetic gases. Your anaesthetist will monitor you closely. When the operation has finished, the anaesthetic wears off, allowing you to wake up again.

What complications can happen?

Your anaesthetist will try to make the general anaesthetic as safe as possible but complications can happen. Some of these can be serious and can even cause death. The possible complications of a general anaesthetic are listed below. Any numbers which relate to risk are from studies of people who have had a general anaesthetic. Your anaesthetist may be able to tell you if the risk of a complication is higher or lower for you

How does a spinal work?

A spinal works by temporarily numbing your nerves to give pain relief. The subarachnoid space is the bag of fluid that surrounds your spinal cord and the nerves that come out from it. Local anaesthetics and other painkillers are injected using a fine needle into this space. The needle is removed and nothing is left in your back.

- Feeling or being sick after the operation (risk: 1 in 4). The risk is higher with certain people and certain operations but can be reduced with medication either given by your anaesthetist at the time of the anaesthetic or by the ward doctor after the operation. If you think you may

be prone to being sick, let your anaesthetist know.

- Sore throat (risk: 1 in 6). This gets better quickly.
- Headache (risk: 1 in 20). This is not usually severe and settles with time. Simple painkillers such as paracetamol may help.
- Muscle and back pains caused by the medication used or being in one position during the operation (risk: 1 in 20). If you know that certain positions are likely to cause problems, let your anaesthetist know.
- • Dental damage affecting your front teeth or crowns (risk: less than 1 in 100). Your anaesthetist will always ask to look inside your mouth. Let your anaesthetist know if you have any loose teeth, crowns or bridgework.
- Difficulty passing urine. You may need a catheter in your bladder for 1 to 2 days.
- Breathing difficulties. Your anaesthetist may have difficulty placing the breathing tube in your windpipe (risk: 1 in 100). They may need to wake you before you have the caesarean section and recommend an alternative technique for you (risk: 1 in 1,000).
- Awareness during the operation (risk: 1 in 200). This is more common during a caesarean section than other operations.

Overall about 4 in 10 people report some problem after a general anaesthetic.

You should ask your anaesthetist if there is anything you do not understand

What effects are there on my baby?

Some anaesthetic will pass from you to your baby. This may make your baby drowsy for a short while but there are no long-term effects. You will not be able to hold your baby or breastfeed until you are awake enough.

How will my anaesthetist know that I am really asleep?

There is not a monitor available that can reliably say that someone is asleep. 1 in 750 women report being aware of what is happening during a general anaesthetic when they should be asleep. Your anaesthetist continuously monitors the amount of anaesthetic in your body to reduce this risk.

Your anaesthetist will give you as little anaesthetic as possible before your baby is born, so there is a small risk of you being aware of some sensations during the operation

Summary

The forms of anaesthesia for caesarean section are usually safe and effective but complications can happen. You need to know about them to help you to make an informed decision about the anaesthetic. Knowing about them will also help to detect and treat any problems early.

Keep this information document. Use it to help you if you need to talk to the healthcare team.

Some information, such as risk and complication statistics, is taken from global studies and/or databases. Please ask your surgeon or doctor for more information about the risks that are specific to you.

This document is intended for information purposes only and should not replace advice that your relevant healthcare team would give you.

Fasting Instructions

Practice Guidelines for Preoperative Fasting of Adult Patients (age > 15 years)	
Ingested Material Period	Minimum Fasting
Clear liquids (examples include water, fruit juices without suspended particles, carbonated beverages, clear tea, and black coffee)	2 hours
Non-human milk, fruit juices with suspended particles, tea/coffee with milk, and other non-clear liquids	6 hours
Light snack (examples include dry toast, bread, crackers, or biscuits)	6 hours
Regular meal, fried, fatty, or oily food, and meat	8 hours

✓ Examples of clear liquids: Water, clear fruit juice (apple juice, white grape, etc.), tea and black coffee without milk or creamer, carbonated beverages

× Examples of non-clear liquids: Fruit juice with pulp (orange juice, pineapple juice, etc.), milk, creamer, milk formulas, yogurt and other milk products



**PLEASE DO NOT
EAT OR DRINK.**

Moving Beyond “NPO at Midnight”

Healthy Patient of Any Age

(i.e., not diabetic, obese,
pregnant, ileus/SBO, difficult
airway)

Undergoing Elective Procedure

(i.e., not emergent)

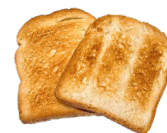
General or Regional Anesthesia

(i.e., not merely local
anesthesia)

Hours Pre-Op

Allowable Food or Beverage

>8	Heavy foods (fried/fatty) and meats
6	Light meal (e.g., toast + clear liquid) Cow's milk (in moderation) Infant formula
4	Breast milk
2	Non-alcoholic clear liquids (e.g., water, fruit juice without pulp, nutritional drinks, clear tea, black coffee)
0-2	NPO



Benefits of Clear Liquids up to 2 hours Pre-Op

- ✓ LESS patient thirst and hunger
- ✓ LOWER risk of aspiration