This brochure will provide you the information about anaesthesia for caesarean section. It is designed to respond to questions most frequently asked by patients.

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Both regional and general anaesthesia techniques are used for cesarean section. The choice of anaesthesia will depend on the reason for the operation, the baby's health, your wishes and the assessment of your anesthetist and obstetricians.

It is important for you to have your preoperative anaesthesia assessment done by the anesthetist. The preoperative anaesthesia clinic is situated in clinic 6, it is a walk in clinic and timings are from 9 – 6 p.m. from Monday – Friday. It is important for you to tell the anesthetist of any medical illness, allergies or previous problems with anaesthetics so that the safest method can be provided for you and your baby.

**On the day of caesarean section you will have been fasting for six hours.**

You will be taken to the operating room, where you will be kept in the preoperative area for some time. The anaesthetist will review your history and check the documentation. He/she will again ask you about your choice of anaesthesia. There is always an opportunity to ask any question that you may have at this time.

An intravenous infusion (drip) will be started and you will be taken to the operating room. You will have vital signs monitor which includes blood pressure cuff, electrocardiogram leads and oximeter (for measuring oxygen in your blood).

**REGIONAL ANAESTHESIA:**

It includes freezing techniques that block the pain of surgery. You will be awake during baby's birth, able to see and touch your child soon after delivery. There are three regional techniques suitable for caesarean section.
• **Spinal Anaesthesia:**

This is the most common and suitable regional technique for caesarean section. The anaesthetist performing the procedure will ask you to sit or to lie on your side, with your knees folded. A small area of skin on your back is cleansed with antiseptic solution and numbed with a local anaesthetic. A very small needle is inserted into the fluid filled space below the spinal cord. A combination of local anaesthetic and narcotic is injected through the needle and the needle is removed. You will quickly notice tingling and numbness in the lower half of your body and your leg and abdominal muscles will relax.

• **Epidural Anaesthesia:**

The anaesthetist performing the procedure will ask you to sit or to lie on your side with your knees folded. A small area of skin on your back is cleansed with antiseptic and numbed with a local anaesthetic, and then the epidural space is located with a needle. A thin plastic tube (catheter) is passed through the needle into the epidural space. The needle is removed and catheter is taped to your back. A local anesthetic and narcotic is injected through the catheter slowly. Over the next 20 minutes, you will notice a warm, tingling sensation in your legs as the medications begin to take effect. Epidural takes longer to take effect than spinal anaesthesia.
**Combined Epidural and Spinal (CSE)**

The preparation is done in exactly the same way as in spinal and epidural. This technique combines both spinal and epidural. The medication is given in the fluid filled space like spinal and catheter is inserted before withdrawing the needle. The catheter later on is taped to the back.

After giving regional anaesthesia, your abdomen will be cleansed with antiseptic and then covered with sterile sheets. The anaesthetist will make sure that your body waist down is completely numb before surgery.

You may feel gentle tugging sensation and some pressure during the operation, especially when the baby is being delivered. Your baby will be born about 5 – 10 minutes after surgery begins. It then takes 45 – 60 minutes to repair your incision. Sensation and movement return about 1-3 hours after the operation.

The most common complication of spinal or epidural anaesthesia is a temporary drop in blood pressure. Headache can occur in some patients after the anaesthetic and the operation. If the anaesthetic enters blood vessels dizziness, ringing in the ears and a metallic taste in the mouth could occur. If the anaesthetic numbs the nerves above the abdomen it could be interfere with breathing with. One of the rare complications is nerve damage.

Regional anaesthesia is very safe for you and your baby and is generally preferred because it allows the mother to remainawake, experience the birth, and have immediate contact with her baby. It is usually safer then general anaesthesia. Spinal and CSE is preferred over epidural technique because of more rapid onset and better blockade of pain.

**General Anaesthesia (GA)**
This means that you will be completely asleep during the operation and the birth. This technique should be reserved for the situations:

- When spinal or epidural anaesthesia is technically impossible or unsafe.
- When spinal or epidural anaesthesia is not adequate for the entire surgery and general anaesthesia is required in order to complete the operation.

You will breathe oxygen through a face mask for 3–4 minutes, before starting the anaesthetics. Your surgeon is going to clean your abdomen and cover it with sterile drapes while you are still awake. This is done to reduce the amount of anaesthetic going to your baby. Medications are given through an intravenous cannula. You will sleep in 20 – 30 seconds. To protect against vomiting and ensure proper breathing under GA, the anaesthetist places a breathing tube into your windpipe immediately after you are asleep. Once the operation is over and you are awake, the breathing tube is removed. Your throat may feel dry and sore after the Procedure.

No anaesthetic is without some risk. Your anaesthetist will answer any questions that you may have regarding general or regional anaesthesia.

**Recovery Room:**

All patients are cared for in the recovery room until they are fully alert following general anaesthetic or until sensation and movements have returned to the legs following a regional anaesthetic. Usually this takes 1 – 2 hours. The nurse will assess your vital signs (blood pressure, heart rate, breathing and oxygenation). If you feel any pain, nausea and vomiting please inform your nurse, so that medication can be given to you.

The pain killers that you will receive for the next 24 hours are usually started in the recovery room by the orders of the
anaesthetist. You will be assessed by the anaesthetist and will be shifted to your room.

**Pain Management after Caesarean Section:**

In the initial 24 hours pain killers are given by
A. Intravenous route  
B. Epidural catheter

A. **Intravenous Route:** This is the most common method used after caesarean section. Narcotics are used by this route. They are given either by:
1. Continuous infusion where the medications are put in the drip and will be given continuously to the patient.
2. Patient controlled analgesia (PCIA): By this method you can control your own medication by pressing the button connected to the pump provided to you. The acute pain service nurse along with the anesthetist sets the pump. A proper explanation about the pump will be provided to you, if you choose this method for pain relief. Because of the limited numbers of PCIA pump, this facility cannot always be provided to the patient.

B. **Epidural Catheter:** Pain killer through this route is only provided to the patient who has received epidural anaesthesia for caesarean section. You will be provided a mixture of local anesthetic and narcotic through a pump attached to the catheter taped to your back.

Intravenous/epidural narcotic after 24 hours are slowly tapered off and you will be put on oral medication. If during this time you experience any pain, nausea vomiting or any other problem, please inform your nurse and you will be treated accordingly.

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