

Arterial line

Arterial line involves placement of a plastic catheter into an artery for accurate monitoring of your child's blood pressure. Blood can also be drawn from the line for tests if necessary. Complications may include injury to the vessel/surrounding structures and blood clot.

Central Venous Line (CVL)

A large bore catheter is inserted through your child's neck, chest or groin into a large vein leading to the heart so that we can assess your child's blood volume and heart function better. The central venous line also allows for the administration of drugs and fluids as required. Complications may include inadvertent puncture of the artery or lung, blood clot formation or heart rhythm changes. Very rare complications include nerve injury, damage to the thoracic duct and migration of the catheter out of the vein. In extremely rare cases, some of these complications may be fatal.

Post-operative special care:

Children's Intensive Care (CICU), High Dependency

Post-operative intensive care may be required in cases where intensive monitoring, ventilatory support or cardiovascular support is needed.

High dependency monitoring is necessary for children who require closer monitoring or care after surgery as compared to patients in the general ward.

High-risk patients: the critically-ill or extremely young babies

In a critically-ill child, the risk of peri-operative complications and death is vastly increased. The benefits of anaesthesia need to be weighed against the risks and this balance varies from patient to patient. Your anaesthetist will advise you on the appropriate peri-operative care for your child after a discussion with you and the surgical team.



Your child will be reviewed by an anaesthetist before surgery. Any further queries you may have regarding anaesthesia can be addressed then.

For enquiries regarding surgery, please call the Clinic Hotline.

Useful telephone numbers

Appointments/Specialist Outpatient Clinics	
Enquiries Hotline	+65 6294-4050
KK Ask-A-Nurse Service	1900-KK-Nurse or 1900-55-68773 (chargeable at S\$0.80 per minute)



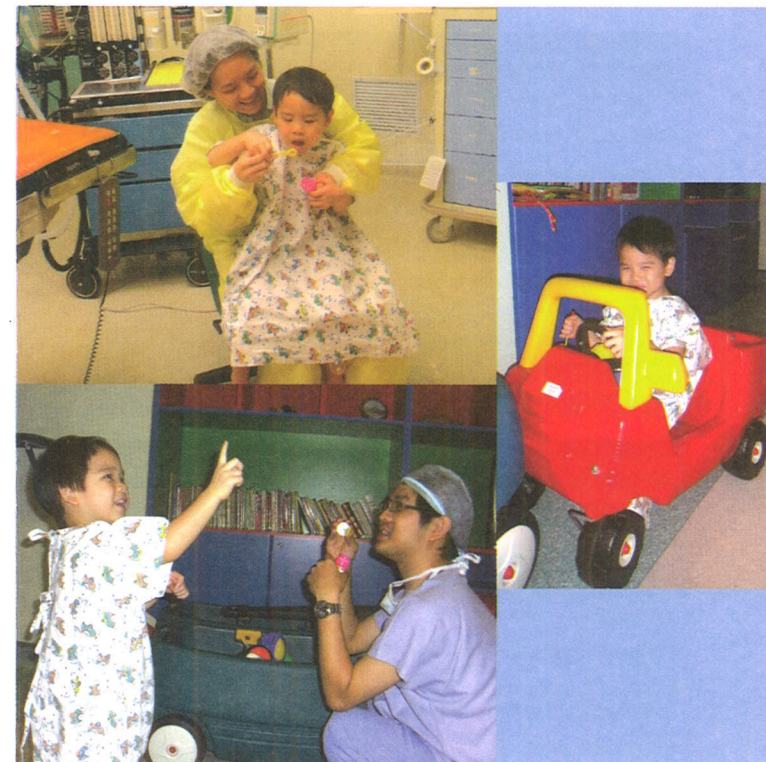
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KK Women's and
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General/Regional Anaesthesia



Reg No 198904227G PPAga1212

PATIENTS. AT THE HEART OF ALL WE DO.

General Anaesthesia (GA)

General Anaesthesia is administered either by giving medicine through a plastic tube inserted into your child's vein, or gas through a mask or breathing tube. This keeps your child asleep for the duration of surgery or medical procedure. If your child is very anxious or fretful, we may give him/her some sedation beforehand (pre-medication). In addition, we may give painkillers and other medication to facilitate surgery.

Are there any risks from GA?

GA is remarkably safe today, even for a young child. In general, anaesthetic risks depend on your child's medical condition as well as the type of surgery. Side effects are sometimes unavoidable but generally transient.

Common temporary side effects

- Headache, dizziness
- Nausea and vomiting
- Pain or bruising at injection sites
- Sore throat
- Drowsiness, short-term memory loss
- Shivering or teeth-chattering
- Emergence Delirium: a restless and irritable recovery process during which your child may thrash about, cry or seem inconsolable.
- Skin redness or rash from tapes/medication

Uncommon complications

- Awareness
- Damage to teeth, dental prosthetics, lip or tongue
- Damage to vocal cords or larynx
- Allergic reactions
- Injury to nerves or vulnerable pressure areas
- Pressure sores (especially if the surgery is long and involves cardiopulmonary bypass)
- Corneal injuries

Extremely rare and serious complications

- Severe allergy (anaphylaxis) or shock
- Very high temperature (malignant hyperthermia)
- Aspiration resulting in lung complications

Fasting guidelines

Our staff will advise you on fasting requirements. If breakfast is allowed, please serve only plain bread, MILO® or milk. Water may be allowed afterwards. Your child must finish eating or drinking by the stipulated time. You will be informed of the fasting times. Please write down the times given to you below and follow strictly.

Last meal/milk feed to complete by: _____h

Last water intake by: _____h

During the relaxed anaesthetised state, food and fluid can flow back from the stomach into the mouth and be inhaled into the lungs (known as aspiration). This can be life threatening. Therefore **fasting before anaesthesia is ESSENTIAL and universally practised.**

Note: If you **do not follow instructions**, the procedure may be **postponed or cancelled** in your child's best interest.

Regional Anaesthesia (RA)

Regional Anaesthesia involves injecting local anaesthetic drug around the nerves that carry pain sensation from the surgical site. This provides pain relief during and after surgery. The exact place where the local anaesthetic drug is injected depends on the surgical site. Your child's anaesthetists will discuss with you which nerve block will work best for your child, as well as potential risks associated with it. Depending on the age and medical condition, RA can be performed awake, or more commonly under GA or sedation in children.

Common types of regional anaesthesia include:

- A. Peripheral block: eg. Penile Nerve, Ilioinguinal Nerve, Brachial Plexus, Femoral Nerve**
- B. Central block: eg. Epidural, Caudal or Spinal Anaesthesia**

In epidural anaesthesia, a special needle guides the placement of a fine bore tubing (catheter) into a space near the spine between the backbones. Continuous pain relief can be achieved by administering local anaesthetic

and painkillers via this catheter. This catheter may be left in place up to several days after surgery. This allows for continued post-operative pain relief. Caudal anaesthesia is essentially epidural anaesthesia given at the bottom of your child's spine. It can be given as a single injection or repeated at the end of surgery. Alternatively, a catheter may be left in place like in an epidural.

Are there any risks?

It may take several hours for the effects of regional anaesthesia to wear off. As the anaesthetised site is numb, extra care should be taken to avoid accidental injury. Where central blocks or ilioinguinal nerve blocks are used, your child should not ambulate until the numbness has subsided and strength regained in the legs. Rarely, the nerve blocks may fail or result in an incomplete patchy block.

Common side effects (usually temporary) of central blocks

- Numbness or tingling sensation in lower limbs
- Weakness of muscle over numbed areas
- Shivering
- Itching
- Backache and bruising over injection site
- Inability to pass urine
- Dizziness, headache
- Drop in blood pressure (uncommon in children)

Serious but rare side effects

- Trauma to surrounding structures
- Nerve damage
- Blood clot (Haematoma)
- Seizures
- Breathing difficulties
- Infection, abscess formation
- Cardiac arrest

Invasive monitoring

Invasive monitoring may be required if your child is critically ill or undergoing major surgery.