Anaesthetic Information for Parents

Who gives anaesthetics at Princess Margaret Hospital?

The Department of Anaesthetics and Pain Management at Princess Margaret Hospital for Children ensures your child has a safe and successful anaesthetic.

An anaesthetist is a doctor who has undergone a further five years of specialist training and examinations. The members of the Department have additional training and experience in all areas of anaesthesia for children.

Princess Margaret Hospital is also a teaching hospital for surgical and anaesthetic trainees in WA. Many anaesthetics are given by specialists-in-training under supervision. All complex cases are supervised directly by a specialist paediatric anaesthetist.

Preparation for hospital – how a parent can help

Help your child know what to expect

Nearly all children coming to hospital for routine operations or procedures respond well to a simple explanation of the procedure a few days ahead. Any questions your child asks should be answered simply and truthfully. Children may become very distressed on the day if a parent has not told the truth about going to hospital. Parents sometimes do this in an attempt to protect their child or because of their own anxieties about the procedure. Unfortunately this can result in major distress for the child in hospital.

Reduce your own anxiety

Parental anxiety is another significant cause of distress in a child in hospital. Children rapidly sense when a parent is anxious or upset. Reducing your own anxiety is vital to minimise your child’s distress. If you have ongoing concerns about the procedure or anaesthesia, these should be addressed before your child goes to the operating theatre.

Before surgery

• Fasting
  Fasting is necessary to reduce the risk of food or fluid being vomited under anaesthesia and inhaled into the lungs. This can be a very serious condition. You will receive specific information about fasting, usually by phone a day or two before. These short periods of fasting before surgery are completely harmless, even for small babies.

• Medications
  Medicines and puffers should be given as per usual. Non-prescription or herbal medicines can sometimes cause problems including increased bleeding. Please stop them a week before and tell us if your child is taking these medicines.

• Comforters
  Bring any special toys or comfort objects that may help to reduce child anxiety.

• Discussion with the anaesthetist
  You will usually meet your child’s anaesthetist on the pre-operative ward. Sometimes he or she may be busy in the operating room and will ask another anaesthetist to see your child and report back.

  The anaesthetist will examine your child and ask a number of questions to help plan appropriate and safe anaesthesia care. The anaesthetist will discuss the best plan and any options for your child’s operation.

  This is the time to bring up any of your own concerns or anxieties. It is very important to mention any previous traumatic or bad medical experiences, or specific fears your child may have (e.g., fear of needles or masks).
• **Local anaesthetic**
A nurse will apply local anaesthetic “numbing” cream to your child’s hands. This makes insertion of an intravenous drip at the start of the anaesthetic painless for most children.

• **Pre-operative medication**
An oral sedative medicine is sometimes used to help children relax before surgery. This is most useful in children who are afraid, anxious or uncooperative, and those who have had unpleasant medical experiences or repeated stays in hospital. Occasionally this “premed” can have the opposite effect and make a child more active and agitated.

**In the operating theatre**

• **Anaesthetic room**
Your child’s anaesthetic will usually begin in an anaesthetic room, next to the operating theatre.

• **Parent attendance**
Many children stay relaxed if a parent comes with them into the anaesthetic room, so we usually allow a parent to be present right until the child is asleep. Babies younger than six months and many older children separate easily from parents and do not benefit from having a parent present. The final decision on permitting the parent to be present at the start of the anaesthetic rests with the anaesthetist.

• **When your child goes to sleep**
Watching your child go to sleep may be upsetting and stressful. Children often roll their eyes, twitch, snore, and go limp very quickly. This is all perfectly normal. Occasionally, for both the safety of your child and the staff, you child may need to be briefly restrained while going to sleep. You must leave as soon as your child is asleep so that the anaesthetist can concentrate on looking after your child. A hospital volunteer will accompany you out of the operating suite.

• **Anaesthetic care during the operation**
The anaesthetist is with your child for the entire time, monitoring and adjusting the amount of anaesthesia to suit the surgery. A mix of special intravenous medications, anaesthetic gases and other techniques are used to produce a state of unconsciousness and insensitivity to pain. Other medications are used to give pain relief after surgery and to reduce nausea.

• **Recovery area**
At the end of the procedure the anaesthetist takes your child to the recovery area where a specially trained nurse continuously monitors your child as consciousness returns. One parent can come to the recovery area once your child is awake.

• **Waiting time**
Your child will usually be away from you for longer than you might expect, even with short operations. This is because of the time taken at the beginning of anaesthesia preparing your child for surgery and the time in recovery as your child awakens.

• **When your child awakens**
Some children awake distressed even when they have been calm at the beginning of anaesthesia. This is most common in preschool children, those who have had multiple previous operations, and where the child or parent is very anxious. Most distress is due to awakening in an unfamiliar place and will settle with parental reassurance.

• **Returning to the ward**
Your child will return to the ward once recovery is satisfactory.

**Pain relief**
It is common for your child’s anaesthetist to start pain relief during surgery.

• **Minor surgery**
Pain from minor procedures usually responds well to paracetamol, paracetamol/codeine mixture or oral anti-inflammatory drugs (like “Nurofen”). These are given either orally before surgery or by rectal suppository during theatre and can be continued post-operatively as needed.

• **Major surgery**
Pain after major surgery is treated with morphine or similar drugs. These are administered by continuous intravenous infusion controlled by a nurse. Older children can self-administer these drugs using a special pump and hand piece. This is called “patient controlled analgesia” or PCA. Both methods are very safe and do not result in drug addiction.
About one in twenty children in Australia are anaesthetised each year. Reliable figures show that Australia is one of the safest countries in the world for children’s anaesthesia.

**Local anaesthetics**

Local anaesthetics are frequently used to reduce post-operative pain, either by injection around the surgical site or by injection around nerves transmitting pain from the operative area.

Epidural injections are frequently used in children, usually as a single injection of local anaesthetic at the base of the spine. This is called a “caudal” injection. It generally produces excellent pain relief and has an excellent safety record.

If pain is likely to be prolonged, the anaesthetist may leave a fine tube in the epidural space for continuous administration of painkillers for several days (similar to the epidural used for women in labour).

You should discuss these more advanced methods of pain relief with your child’s anaesthetist before surgery. All these methods are usually very effective with a low risk of side effects.

**Discharge from hospital**

- **Day surgery**
  Discharge from hospital after day stay surgery usually occurs 1 - 4 hours after leaving the recovery room, depending on the type of operation.

- **Food and drink**
  Your child should be tolerating oral fluids. Eating and drinking too quickly can cause nausea and vomiting, often on the way home.

- **Pain**
  Your child should not be in excessive pain.

**What can go wrong?**

All medical procedures including anaesthesia have a small risk of complications and side effects. Many of these risks cannot be predicted beforehand and can occur with skilled anaesthetists without any error or mistake in judgement or technique.

**Risk of serious complications**

Fortunately the risk of major disability or death in a child after anaesthesia is extremely low in Australia. The risk of a disastrous outcome in an otherwise healthy child having routine elective anaesthesia in Australia is extremely low. Death due to a complication of anaesthesia occurs very, very rarely.

- **Pneumonia**
  Pneumonia caused by food or fluid from the stomach entering the lungs is the most common major complication during anesthesia in children. This occurs about once every 5,000 anaesthetics and can require intensive care treatment, usually with no long-term problems. This is the reason that fasting your child is so important. Infants and children having emergency surgery are at most risk.

- **Allergic reactions**
  Allergic reactions to anaesthetic agents are extremely rare in children and most are reversible.

- **What about serious health conditions?**
  Major medical or surgical conditions in a child can increase risks, but this effect is usually small.

**Minor side effects**

Minor side effects from anaesthesia are quite common. Some of these are listed below. We don’t routinely list every possible side effect or complication of anaesthesia but aim to give you enough information to ask questions and make an informed choice about anaesthesia for your child.

- **Child distress**
  Some children can become uncooperative or combative, requiring restraint, as they are anaesthetised with a mask. Distress at the start of anaesthesia can be very upsetting for a parent. Parental assistance can be very useful in this situation.

- **IV insertion difficulties**
  Inserting an intravenous drip into children’s veins can be difficult even for experienced paediatric anaesthetists. Several attempts may be required, particularly in babies and toddlers. Bruising at the sites of injection may occur but will fade quickly.
• **Nausea and vomiting**
  This can occur in about one in ten children but generally stops within a day. The risk is much greater if the child has a history of vomiting with anaesthesia or motion sickness, or there is a strong family history of vomiting with anaesthesia. You should tell the anaesthetist about any of these. Some operations are more likely to cause your child to vomit after surgery.

• **Sore throat**
  Sore throat sometimes occurs after anaesthesia, most commonly due to a tube placed in the throat to allow breathing during surgery. This settles quickly after 24 hours.

• **Behavioral changes**
  Some children may develop transient postoperative sleep disturbances and behaviour changes such as difficulty/anxiety going to sleep, night terrors or vivid dreams. Bed-wetting has also been described. Occasionally these can take a few weeks to settle.

• **Pain after surgery**
  Pain after surgery varies greatly from child to child. Pain relief techniques need to be adjusted for each child to provide analgesia with safety. Occasionally the routine methods of pain relief will not provide complete analgesia.

• **Local anaesthetic block effects**
  Side effects from local anaesthetic blocks are uncommon. Some children dislike the numbness or weakness that happens with the block. If the block is unsuccessful another method of pain relief may be needed.

• **Major complications due to spinal or epidural block** are extremely rare but include permanent nerve damage, epidural infection and convulsions due to local anaesthetic. You may wish to discuss these with your child’s anaesthetist.

**Unknown risks**

There is some evidence that anesthetic agents may affect the developing brain in newborn animals. The significance of this in human babies is unclear. There are currently multicentre trials looking at the long term effects of anaesthetic agents on babies and the results will be available in a few years. Due to the theoretical risk, as a general rule, only essential or urgent surgery is performed on small babies. More information can be found at [http://www.smarttots.org/index.html](http://www.smarttots.org/index.html)