



PAEDIATRIC ANAESTHESIA

DR AYESHA NOOR MOHAMED

MBBCh (Wits), DA (SA), DipObs (SA), Mmed (Wits), FCA (SA)

Dearest parent, guardian or caregiver:

It can be incredibly distressing for you to bring your child in for an anaesthetic. This information leaflet serves to provide you with accurate information regarding the anaesthetic procedure, risks and general expectations peri-operatively. Please do not hesitate to ask as many questions as possible to get a full understanding of the procedure prior to signing consent. It is also important that you prepare yourself and your child as much as possible for what will happen to alleviate any distress during the peri-operative period. This information leaflet will have some information for you, but also guide you to some useful resources to prepare young children for anaesthesia.

Preparing your child

There are several things that you can do to prepare your child for coming into hospital. Unless your child is very young, you should try and explain:

- That they are going into hospital
- That they will be having an operation or investigation
- Some basic information about what will happen to them when they are in hospital.

The best time to provide this information will differ between children. Preschool children probably only need to know the day before. Older children may need more time.

Useful things to bring to hospital

- All health records, vaccination cards/books, weight charts etc. which may provide the anaesthesiologist with a holistic picture of your child
- A change of clothes
- Some nappies/underwear (where applicable)

- Books, music, or tablet to keep them entertained
- If you bring a tablet, make sure to bring a charger and some earphones
- Their favorite teddy/toy to comfort them
- **NB: A positive attitude! Remember that your child will look to you for reassurance and positive feedback. Be sure to manage your own distress to avoid causing your child to be distressed.**

Starvation guidelines:

For non-emergency surgery, it is standard practice for patients to be fasted. We require the stomach to be empty to prevent any food from the stomach spilling into the lungs (aspiration) during the anaesthetic. We therefore advise you to adhere strictly to these guidelines:

For light meals: Light meals can be eaten up to 6 hours before surgery. This means that if (for example) your child eats a light meal at 08:00, they will only be allowed to have an anaesthetic at 14:00.

For breastmilk: Breastmilk can be consumed up to 4 hours before surgery. This means that if (for example) you breastfeed your baby at 08:00, they will only be allowed to have an anaesthetic at 12:00.

For formula milk: Formula milk can be consumed up to 6 hours before surgery. This means that if (for example) you give your child formula milk at 08:00, they will only be allowed to have an anaesthetic at 14:00.

For water: Water can be consumed up to 2 hours before surgery. This means that if (for example) your child drinks some water at 08:00, they can only be allowed to have an anaesthetic at 10:00. It is also important to note that water should be given in small sips, and not in large quantities at once.

If you do not follow these guidelines, there is a chance that the procedure could be delayed or cancelled. If you are not honest about when your child last ate and drank, you will be placing them at risk of aspiration, as described above.

The procedure itself:

On the day of surgery/procedure, you will be invited to accompany your child to theatre. In the case of healthy children with no risk factors, it is preferable to have a parent or trusted individual present to keep the child calm during the anaesthetic induction (putting them to sleep). There are some scenarios in which it is preferable

not to have a parent or guardian present e.g. when anticipating difficulty, high risk procedures that require intense concentration etc.

We will usually place a pulse oximeter on their finger or toe to get an idea of their oxygen saturations and heart rate. Small children generally do not allow placement of a drip as it is sometimes scary and too painful to endure. We will generally put them to sleep with a gas mask and then place the drip once they are asleep. For certain cases, where it is deemed necessary to have a drip prior to sleeping, we will make every effort for it to be as pleasant as possible for your child.

Please bring their favorite toy or a tablet/phone with their favorite cartoon along to theatre. We will then place a mask over their face and administer some sleeping gas. The smell is generally unpleasant to most children and this tends to agitate them a little bit. Do not be alarmed if they start kicking and screaming, as the gas does not cause any pain or discomfort. Usually, their reaction is because they are afraid, and the best thing you can do is calm and reassure them. Once they are asleep, they might appear to twitch, convulse and generally flail about... this is normal and is usually because they are going through the different stages of sleep. If, at any point, the anaesthesiologist feels that there is a problem, you might be asked to leave the theatre. Please follow the staff's instructions clearly. Please keep in mind during this period that your child will be looking to you for comfort and support. Try your best to be calm and positive so that they feel safe and secure.

Once your child is asleep, you will be asked to leave. We will then proceed to place a drip on their arm or leg. Thereafter, we will place a plastic tube in their mouth which will either go into the windpipe, or directly above the windpipe. This plastic tube will be connected to a ventilator to assist your child with breathing during the operation. We will administer medication for pain into the drip as well. Once the operation is over, we will wake your child up and remove the plastic pipe just as they wake up. It is unlikely that they will remember anything after they fall asleep. When they wake up, they are often agitated. This is usually due to a combination of pain, fear, residual anaesthetic drugs and hunger from the starvation period. We will try our best to treat these, however, they are often best consoled by a parent or loved one. Your child will remain in the recovery room until they are fully awake.

The risk of general anaesthesia to young healthy children:

Anaesthesia is generally very safe, however, is not entirely devoid of risk. Fortunately, most serious risks and adverse outcomes are very rare. The infographic below has been borrowed from the Royal College of Anaesthesiologists in the United Kingdom. A link to their website can be found at the end of this document. When reading this document, bear in mind that your lifetime risk of getting struck by lightning is about 1 in 15 000. Therefore, the very rare risks stated below are less common than getting struck by lightning. Many things we do in everyday life are far riskier than anaesthesia



Common events and risks for children and young people having a general anaesthetic

This summary card shows some of the common events and risks that healthy children and young people of normal weight face when having a general anaesthetic (GA) for routine surgery (specialist operations may carry different risks).

Modern anaesthetics are very safe. There are some common side effects which are usually not serious or long lasting. Risk will vary between individuals, and will depend on the procedure and the anaesthetic technique used. Your anaesthetist will discuss with you the risks they believe to be most significant. You should also discuss with them anything you feel is important to you.

Very common

More than 1 in 10
Equivalent to one person in your family



Sore throat



Agitation on waking from GA

Mainly ages 1–6 years



Sickness



Temporary changes in behaviour

eg, anxiety, sleep problems, bedwetting

Common

Between 1 in 10 and 1 in 100
Equivalent to one person in a street



Minor lip or tongue injury



Discomfort at injection site

More information

Our website has more on these risks as well as short videos to help children prepare for surgery.



Scan to find out more:



rcoa.ac.uk/childrensinfo

Uncommon

Between 1 in 100 and 1 in 1,000
Equivalent to one person in a village



Breathing problems

Needing treatment



Skin damage

Mainly longer procedures

Rare

Between 1 in 1,000 and 1 in 10,000
Equivalent to one person in a small town



Need for Intensive Care (unplanned)

1 in 2,400
Risk is higher for children under 1 year



Injury to eye

eg, scratch on eye



Damage to teeth

Very Rare

1 in 10,000 to 1 in 100,000 or more
Equivalent to one person in a large town



Anaphylaxis

1 in 40,000
Severe allergic reaction to a drug



Awareness during an anaesthetic

1 in 60,000



Death as a direct result of anaesthesia

1 in 100,000 to 1 in a million



Long-term disability

Less than 1 in 100,000

Things we all do in normal life, such as road travel, involve higher risks than the **Very Rare** risks above.



Leave your feedback on this resource at: surveymonkey.co.uk/r/testrisk or by scanning this QR code:

What to do if your child is not well the day of surgery:

Respiratory tract infections are common in children. They do, unfortunately, place your child at a higher risk of breathing complications during anaesthesia. Please call the hospital, doctor's rooms or contact your anaesthetist if your child has a new cough, fever, sore throat, diarrhea, vomiting, green/yellow secretions in nose and a change in behavior.

For elective procedures, we generally will decide on a case-by-case basis whether to proceed or cancel. Should the case be cancelled, you will be advised on how best to prepare/optimize your child and a new date will be booked for surgery. For emergency procedures, we will try our best to optimize your child and proceed with caution.

Useful links and references:

The contents of this pamphlet have been adapted from the pamphlets given to patients by the [Royal College of Anaesthetists](#) in the United Kingdom. This is a useful site for patient information prior to anaesthesia. Some resources include storybook cartoons and pamphlets for older children who are having anaesthesia. While the information regarding informed consent might differ in the United Kingdom, the contents are generally quite accurate and useful to prepare children for anaesthesia.

[Storybook for small children](#)

[Comic book for bigger children](#)

[Information leaflet for older teens](#)

Thank you for reading this document! Good luck!