

Paediatric Anaesthesia Leaflet for Parents or Guardians

If you have received this leaflet from a healthcare professional, it is likely that the child is about to undergo a medical procedure (such as an operation or an examination) that requires anaesthesia. The aim of this leaflet is to introduce the different types of anaesthesia, their possible side effects, and the risks associated with them.

Please read the leaflet carefully before arriving for the procedure. If you do not understand the contents of the leaflet or if you have any questions, please contact your doctor for clarification.

What is anaesthesia and who administers it?

The word 'anaesthesia' comes from the Greek word *anaisthetos*, meaning 'without sensation'. Anaesthesia enables procedures and examinations to be performed without pain. Anaesthesia is administered by a specially trained doctor called an anaesthetist. The aim of anaesthesia is to ensure the child's well-being and safety during surgery. Anaesthesia can be local, regional, or general. Most operations performed on children are carried out under general anaesthesia.

General anaesthesia is a carefully controlled state of unconsciousness achieved through a combination of drugs. Before the operation, a soft plastic tube (cannula) is inserted into a vein. To ensure that the cannulation is as painless as possible, a pain-relieving patch is applied to the area beforehand. Anaesthetic drugs are administered intravenously or through a mask covering the mouth and nose, allowing the child to inhale oxygen and anaesthetic gases. For most operations involving anaesthesia, a laryngeal mask (a tube-like mask placed deep in the pharynx) or a tracheal tube (a tube that passes via the mouth or nose through the vocal cords into the trachea) is required to maintain and protect the airways once the child is unconscious. Therefore, it is important to inform an anaesthetist if the child has any loose teeth.

If necessary, the anaesthetist will prescribe a mild sedative orally or as a nasal spray before surgery.

After surgery, the child will be taken either to a special recovery room, directly to the ward, or to the intensive care unit if necessary.

When the child wakes up from general anaesthesia, they may experience feeling cold and shivering, dizziness, short-term memory loss, and, less commonly, nausea and vomiting. The site where the intravenous cannula was inserted may be painful. In most cases, these symptoms resolve on their own within a few hours, or medication will be used to relieve them. Sometimes, after using a breathing tube or a laryngeal mask, the throat may be sore, but this usually goes away within a few days. Muscle soreness may occur, but this will also pass within a few days. Painkillers are used to prevent and treat possible pain in the wound area after surgery.

Potential risks associated with anaesthesia

Although anaesthesia is safer than ever today, all medical procedures carry a certain degree of risk. Nevertheless, life-threatening complications, such as cardiac or respiratory arrest or

brain damage, are very uncommon. In rare cases (1 in 50,000 cases) the child might experience a rapid and uncontrolled increase in body temperature, known as malignant hyperthermia. Allergic reactions may occur in rare cases with all types of anaesthesia.

In the case of general anaesthesia, it is possible for teeth to be injured when the breathing tube or throat mask is inserted or removed.

- Very rarely, mostly at the beginning or end of general anaesthesia, the child may experience a state of wakefulness, during which they are briefly conscious but unable to move.
- During general anaesthesia, there is no muscle tone, so positional nerve compression may occur in rare cases, causing numbness for weeks in some parts of the body.
- As the body's normal protective functions are impaired when a person is unconscious (including during general anaesthesia), there is a risk that stomach contents could enter the airways and cause life-threatening complications. It is therefore important to follow the doctor's instructions about eating and drinking before anaesthesia.

The fasting rules are generally as follows:

- Eating and drinking non-clear liquids (e.g. milk, kefir, yoghurt, juice with pulp) should be stopped **six (6) hours before** the administration of anaesthesia;
- infant formula can be fed to a baby up to **four (4) hours** and breast milk up to **three (3) hours before** the administration of anaesthesia;
- we recommend offering the child clear liquids on the day of surgery. Clear liquids should be stopped **one (1) hour before** the administration of anaesthesia.

The surgeon or anaesthetist will inform you of the expected duration of the operation and the necessary anaesthesia. If the fasting rules are not followed, it may be necessary to postpone or cancel the operation for safety reasons. However, if the above rules are followed, we encourage you to provide the child with something to drink on the day of surgery, as not drinking for too long can lead to discomfort, anxiety, and restlessness.

In emergency situations, risk assessments are carried out on an individual basis, and the necessary respiratory protection measures are implemented. However, there is always a risk that the contents of the stomach may enter the airways and cause potentially life-threatening complications.

The risks associated with anaesthesia are higher if the child has a chronic disease such as asthma, diabetes, heart disease, etc. Most children do not experience any anaesthesia-related complications.

ITK1278

Approved by the decision of the Medical and Nursing Care Quality Commission of *Aktsiaselts Ida-Tallinna Keskhaigla* on 27. August 2025 (Protocol No. 2.2-8/3-25)