



General anaesthesia

in adults and adolescents

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Dear Patient, Dear Parents,

This patient information sheet is intended to prepare you for the **pre-operation discussion**. Please read it carefully and answer the questions regarding your health as precisely as possible. The planned procedure is to be performed under general anaesthesia. If different anaesthetic procedures are suitable, we will explain the advantages and disadvantages of the individual procedures to you separately.

The general anaesthesia

results in a loss of consciousness and sensation of pain. The following procedures can be distinguished:

1. Intravenous general anaesthesia:

Via a cannula or a thin tube (catheter), a fast-acting anaesthetic is injected into a vein. During longer procedures, it is repeatedly or continuously administered (**intravenous general anaesthesia**), or the intravenous general anaesthesia is combined with one of the following procedures (**combined general anaesthesia**).

2. Anaesthesia via face mask:

Anaesthetic gases and oxygen are administered via a respiratory mask which tightly covers the patient's mouth and nose.

3. General anaesthesia with laryngeal mask and intubation general anaesthesia:

After the induction of anaesthesia by means of intravenous general anaesthesia, that is, while you are already sleeping, the physician,

- for **general anaesthesia with laryngeal mask**, introduces a respiratory tube through the mouth until it covers the laryngeal inlet and subsequently secures the airway using an inflatable cuff.
- for **intubation general anaesthesia**, introduces a respiratory tube via the mouth or nose into the windpipe. An inflatable cuff near the tip of the tube seals the windpipe.

Both procedures keep the airway free for the administration of oxygen and anaesthetic gases and facilitate artificial respiration. Intubation general anaesthesia in particular reduces the risk of saliva or stomach contents flowing into the lungs (**aspiration**). For intubation general anaesthesia, **drugs for muscle relaxation (muscle relaxants)** are administered in almost all cases. One reason for this is that it enables the respiratory tube to be introduced gently. When using a laryngeal mask, such drugs are administered only in individual cases.

Risks and possible complications

Despite all care taken in the planning and performance of the general anaesthesia and in the monitoring of the vital bodily functions, a complete elimination of risks and complications is impossible. This also applies to the rare cases of **awareness** and the even rarer cases of **sensations of pain** during general anaesthesia.

Heavy bleeding and bruises as a result of injections; **infections** in the area of the injection site or of a catheter (e.g. syringe abscess, dying off of tissue, vein irritation/inflammation) and vascular lesions requiring treatment, and temporary or permanent minor **nerve damage** (e.g. paraesthesia, sensitivity to touch, sensations of numbness, motor

disturbances, pain) rarely occur. Infections resulting in life-threatening **blood poisoning (sepsis)**, and **chronic pain** or **permanent paralysis** following nerve injury, bruises or inflammation very rarely occur.

Skin and tissue damage due to **positioning** on the operating table as well as **nerve damage and paralysis of the arms/legs** as a result of pressure, strain or overextension during anaesthesia cannot be ruled out with complete certainty; in most cases, they will disappear within a few months, however may in very rare cases become permanent.

Allergic reactions and hypersensitivities may be caused by anaesthetics, pain killers, contrast media, disinfectants, antibiotics or latex, as well as by pre-existing conditions or a predisposition, which we enquire about during anamnesis. Possible reactions range from temporary mild discomfort (e.g. itching, skin rashes, nausea) and respiratory and circulatory problems, which are generally easily treatable, to the very rare **life-threatening allergic shock** including cardiac, circulatory, respiratory and organ failure, which necessitates intensive care treatment.

The occurrence of **nausea and vomiting** has been reduced. **Life-threatening incidents** due to the **influx of saliva or stomach contents into the lungs (aspiration)**, which necessitate intensive care monitoring/treatment, very rarely occur. In rare cases, a **spasmodic closure of the airways (laryngospasm/bronchospasm)** may occur; this can, however, be managed with drugs. In extremely rare cases, as the result of a massive, life-threatening **metabolic imbalance**, the body temperature may increase to an extreme extent (**malignant hyperthermia**). In such cases, immediate medication and intensive care treatment is necessary.

Other life-threatening complications, e.g. cardiac, circulatory or respiratory arrest, organ damage, the formation of blood clots (thrombosis), which may be transported via the bloodstream and may occlude a blood vessel (embolism, e.g. life-threatening pulmonary embolism, stroke), are very rare occurrences in **all anaesthetic procedures**, even in patients of advanced age, in poor general condition and with accompanying diseases.

In elderly people, separation from their usual environment as well as the stress caused by the surgery and general anaesthesia may lead to – in most cases, temporary – **disorientation**.

The intubation/application of the laryngeal mask may temporarily cause **difficulties in swallowing** and **hoarseness**. Very rarely, **injuries** to the pharynx, jaw, larynx and windpipe, as well as damage to the vocal chords with **permanent dysphonia** (hoarseness) and **shortness of breath** may occur. **Damage**, in particular to loose or carious teeth, to implants and fixed dentures (e.g. crowns, bridges, prosthesis), as well as **loss of teeth** may occur.

Preparatory, accompanying or follow-up measures (e.g. for monitoring and maintaining vital bodily functions, the administration of drugs) are also not free from risks. Despite all the care taken in the production of **donor blood banks, plasma derivatives** and other **blood products**, risks cannot definitively be excluded during their transfusion/application, in particular the risk of **infections**, e.g. very rarely with hepatitis viruses (liver inflammation) and extremely rarely with HIV (AIDS), as well as possibly also with BSE pathogens or the new variant of Creutzfeldt-Jakob disease or with previously unknown pathogens. In certain cases, a follow-up examination for the purpose of excluding transmitted infections may therefore be recommended. Please consult your doctor to learn if and when this is the case. A retransfusion of the blood the patient loses during the operation, and/or an autologous donation (donation of patient's own blood) prior to the operation may prevent these risks. However, these methods are suitable only for some patients and only for specific operations.

Please remember: Our list also includes very rare risks and complications. Overall, in tens of thousands of anaesthetic procedures, only one anaesthetic incident with serious consequences occurs.

Please be sure to note for your own safety! – Unless otherwise prescribed by the physician!

Before anaesthesia:

- **Up to 6 hours before anaesthesia**, you may still enjoy a light meal (e.g. a slice of white bread with jam, a glass of milk). From this point onwards, **you must not eat anything else** (not even candy, chewing gum or the like) and **must refrain from smoking!**
- **6 to 2 hours before anaesthesia**, you must not drink more than 1–2 glasses/cups of **clear fluid without fat and free from solid ingredients** (e.g. mineral water, tea), but **no milk** and **no alcohol!**
Be sure to let us know if you have eaten or drunk anything contrary to these instructions!
- Ask us which **medication** you may continue to take or may have to discontinue. Until shortly before the procedure, required medication may be taken with a sip of water.
- Please remove contact lenses, removable dental prostheses, rings, jewellery (including piercing jewellery!) and artificial hairpieces and store them in a safe place. Do not use any facial creams or cosmetics (makeup, nail polish, etc.)!

As **premedication**, a tranquilizer is frequently administered on the evening before and/or shortly before the procedure.

After the procedure:

The vital bodily functions are closely monitored, usually in the recovery room. **Admission to the intensive care unit** may be required in some cases. In order to prevent injuries, a restriction of the freedom of movement (e.g. by bed rails) may be necessary after premedication or after the procedure until the anaesthetic effect has worn off.

Notify the doctors immediately if nausea, vomiting, fever, chills, breathing difficulties, chest pain, signs of paralysis, sore throat, hoarseness or speech disturbances occur.

Following an **outpatient procedure**, you must arrange to be **picked up by an adult** and **be supervised** by an adult during the first 24 hours or for the period of time indicated by the doctor. Due to the lingering effects of the medication, unless the doctor orders otherwise, you must not actively participate in road traffic, must not perform any dangerous activities, must neither drink any alcohol nor smoke and should not take any important decisions within the first **24 hours**.

Place, date, time

Doctor

QUESTIONNAIRE regarding the case history of the patient (anamnesis)

Please bring along any passports, such as an anaesthesia passport, a cardiac pacemaker, Marcumar®, allergy, diabetic or blood donor passport, and inform the physician if you are wearing any foreign objects (e.g. stent, coil, piercing).

TO BE COMPLETED BY THE PHYSICIAN:	Proposed procedure: _____
	Anaesthesia: _____
	Date: _____
	<input type="checkbox"/> outpatient <input type="checkbox"/> inpatient

The following questions are to be carefully answered by the patient. Please tick the appropriate boxes, underline as applicable and complete the fields where applicable.

Age: _____ (in years) Height: _____ cm Weight: _____ kg
n = no y = yes

- Are you currently suffering from an **infection** (e.g. cold)? n y
If yes, please indicate: _____
- Have you been under **medical care** recently? n y
Why? _____
- Have you taken any **blood-thinning (anticoagulant) medication** (e.g. aspirin®, ASS, Marcumar®, Heparin, Tyklid®, Plavix®, Iscover®) within the past 4 weeks? n y
If yes, please indicate: _____
- Have you recently taken any **other medication** (e.g. medication for blood pressure, heart medication, painkillers, sleeping pills, tranquilizers, psychiatric drugs, antidiabetics containing metformin, laxatives, birth control pills) either regularly or occasionally? n y
If yes, please indicate: _____
- Have you ever undergone **surgery**? n y
If yes, please state the types of surgery and when they were performed (year): _____
- Has **general anaesthesia, regional anaesthesia or local anaesthesia** ever caused any **problems** (e.g. fever) for you or a blood relative? n y
Please specify: _____
Do you have a disposition to **nausea and vomiting** (e.g. while travelling)? n y
- Have there been any **complications** from the transfer/application of **blood/blood components** (transfusion)? n y
Did you donate your **own blood** for the planned procedure? n y

8. Please underline and add all diseases or signs of diseases you have or have had:

Heart/Circulation: e.g. arrhythmia, cardiac anomaly, angina pectoris, heart attack, myocardial inflammation, high/low blood pressure, breathlessness upon exertion n y
or: _____

Vessels: e.g. varicose veins, thrombosis/embolism, circulatory disorders, stroke n y
or: _____

Blood/Coagulation: e.g. coagulation disorder, including in blood relations, frequent nosebleeds/gum bleeding, disposition for bruises, secondary haemorrhage following operations/injuries n y
or: _____

Airways/Lungs: e.g. chronic bronchitis, asthma, pneumonia, silicosis, tuberculosis, hyperinflation, sleep apnoea, vocal chord/diaphragm paralysis n y
or: _____

Liver/Gall bladder: e.g. jaundice, liver inflammation, liver cirrhosis, fatty liver, gallstones n y
or: _____

Kidneys/Bladder: e.g. increased creatinine values, dialysis dependency, kidney inflammation, kidney/bladder stones n y
or: _____

Oesophagus/Stomach/Bowel: e.g. ulcer, constriction, indigestion, heartburn, gastro-oesophageal reflux disease n y
or: _____

Metabolism: e.g. diabetes, gout n y
or: _____

Thyroid: e.g. hypo- or hyperthyroidism, struma n y
or: _____

Skeletal system: e.g. joint diseases, back/intervertebral disc problems, shoulder-arm syndrome n y
or: _____

Muscles: e.g. muscle weakness, muscle diseases, including in blood relations, predisposition to malignant hyperthermia, myasthenia gravis n y
or: _____

Nerves/Mind: z.B. seizures (epilepsy), paralysis, restless legs syndrome, chronic pain, frequent headaches, depression n y
or: _____

Eyes: e.g. glaucoma, cataract, contact lenses n y
or: _____

Ears: e.g. impairment of hearing, hearing aid n y
or: _____

Allergy: e.g. hayfever or intolerance reactions to food, drugs, anaesthetics/painkillers/disinfectants, iodine, plaster, latex n y

15. If you have taken specific precautionary measures, please tick:
 Patient's provision Health care proxy
 Enduring power of attorney

or: _____

9. Other diseases/impairments/immunodeficiency? n y
 If yes, please indicate: _____

ADDITIONAL QUESTIONS FOR OUTPATIENT PROCEDURES

10. Loose teeth, caries, parodontosis? n y
 Dentures (dental prosthesis, bridge, crown, implant)? n y
 Physician's comments: _____

1. Where can you be reached at any time during the first 24 hours following the procedure (street address, place, telephone number)? _____

11. Do you smoke? n y
 12. Do you drink alcohol? n y
 If yes, please state what and how much per day: _____

2. Who is your permanent carer during these 24 hours (name and age)? _____

13. Are you addicted to pills or are you taking/have you taken drugs? n y

3. How far is the nearest hospital/the nearest emergency practice from the place you are staying at? _____ km, Journey time: _____

14. For female patients: Could you possibly be pregnant? n y
 Do you breastfeed? n y

4. Could you be taken there quickly? n y

Documentation of the pre-operation discussion and the declaration of consent

Note for the physician: Please underline the applicable passages, be sure to tick the scheduled anaesthetic procedure and document individual content of the pre-operation discussion (above all, risks due to specific pre-existing/accompanying conditions or specific personal circumstances, objection to specific procedures/measures if applicable and the potential adverse consequences of this, minors' capacity to judge if applicable, legal representation, legal disability, authorised representative, and possible changes/additions to the information part).

Physician's notes _____ regarding the pre-operation discussion:
 Name _____

The points discussed in detail included the following: the scheduled anaesthetic procedure, advantages and disadvantages compared to other procedures, risks and possible complications of the anaesthetic procedures, risk-increasing circumstances, possible transition to another anaesthetic procedure, possible secondary and follow-up procedures (e.g. placing of catheters, blood transfusion, autologous donation), patient instructions. The individual pre-operation discussion primarily covered the following points:

Scheduled general anaesthesia:

Intravenous general anaesthesia Anaesthesia via face mask Laryngeal mask Intubation general anaesthesia

Patient's declaration regarding the pre-operation discussion and patient's declaration of consent

I have read and understood the patient information sheet. During the pre-operation discussion, I was given the opportunity to ask any questions of interest to me. These questions were fully answered and I understood the answers. I am sufficiently informed, have thoroughly considered my decision and do not require any additional time for consideration.

I consent to the anaesthetic procedure(s) ticked above.

I also agree to any changes or additions to the anaesthetic procedure which may be medically necessary, as well as to any secondary and follow-up procedures which may be medically necessary.

I have completed the questionnaire (anamnesis) to the best of my knowledge. I shall observe the patient instructions.

Place, date, time _____ Patient/parents* _____ Doctor _____

* If only one parent signs, he/she simultaneously declares by his/her signature that he/she has sole custody of the child or that he/she is acting in agreement with the other parent. As a rule, both parents should sign for more difficult procedures.