#### The kinds of anaesthesia



Surgical procedures involving significant pain or unpleasant feelings are performed under anaesthesia. There are various kinds of anaesthesia which can be used depending on the kind of surgery, patient's condition and age. Every kind of anaesthesia has advantages as well as disadvantages. The anaesthesiologist recommends the most effective anaesthesia, which will best suit the patient and the procedure.

## GENERAL ANAESTHESIA

It induces sleep, numbs and abolishes patient's udesirable reflexes. If the procedure is short (lasts a few or over a dozen minutes) it's enough to administer drugs intravenously. If the procedure is longer or requires muscle relaxation, the patient needs to have a tracheal intubation done. The doctor places a special pipe or a larynx mask, which protects patient's respiratory tract. During the surgery we administer hypnotic drugs, painkillers, muscle relaxing drugs and patient's breathing function is sustained by an anaesthetic machine. After the surgery, when the muscles regain their correct function, the intubation pipe is removed. Having had the general anaesthesia, the patient needs to stay in a postoperative room for a few hours. There the heart function, blood pressure and blood oxygen level are monitored.

## **DUCTAL ANAESTHESIA**

It numbs separate body regions. The anaesthetic drug is administered in the nerve area. This kind of anaesthesia burdens the body the least. The most common are the subarachnoideal and the epidural anaesthesiae – the anaesthetic drug is administered in the spine area. The pain connected with the puncture is small, because the needles used are exceptionally thin. You can have ductal anaesthesia if there's a technical possibility of performing the surgery without general anaesthesia (numbing and muscle relaxing drugs). The patient is conscious during the surgery. If however the patient wishes to sleep, they'll get mild drugs inducing sleep. The greatest advantage of this kind of anaesthesia is analgesia – no pain, also in the postoperative stage. The risk of nausea and vomitting or intra operative bleeding, lung complications and of thromboembolic complications is smaller.

### REGIONAL ANAESTHESIA

It blocks structures of a few nerves. The most common is the parascalene block, recommended for upper limb surgeries. It numbs for a long time, it's of little risk for patients with heart or lung diseases or diabetes. The risk of damaging the nerves is minimal due to the use of peripheral nerves stimulators.

# **BIER BLOCK**

#### The kinds of anaesthesia



It's usually used in blocking nerves of the upper limb. It's a safe method: the regional anaesthetic is administered into the vein of the operated limb after the arm was tightened with a special band. It's recommended for surgeries lasting less than one hour, where pain ailments are moderate. The patient may go home immediately after the surgery, because the effects of medicines don't last long.

# THE RISK

Any medical procedure may evoke undesirable effects that are independent of doctor's knowlegde, abilities and their commitment. These effects are connected to patient's health, coexisting diseases and the scope of surgical intervention. Also, they may be a result of an individual, unforseeable reaction to anaesthetic drugs. It must be stressed that anaesthesia is a safe procedure and complications are very rare but the risk of complications can't be eliminated completely. Proper qualification and care are the reason for minimal health damage risk. In many cases, where there's a choice between general and ductal anaesthesia, it's safer to choose the latter, as its advantages outbalance the risk of potential complications. It's always the doctor's decision.



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