Training items katalogue

Basics of general anesthesia

- Definition of anesthesia
- Subjects of general anesthesia
- Differences between general anesthesia and regional anesthesia/blocks
- Differentiation of sedation, hypnotism and anesthesia
- Difference between analgesia and anesthesia
- Importance / meaning of inhalative anesthesia, intravenousl anesthesia (incl. total intravenous anesthesia) and balanced anesthesia
- Criteria for the advantages of a combination of different anesthesia techniques
- Pharmacokinetics of total intravenous anesthesia (TIVA)
- Parameters of basic monitoring (ECG, noninvasive bloodpressure, pulse oximetry, capnography, respiratory therapy)
- Sequence of action of an intravenous anesthesia induction
- Intravenous vs. inhalational anesthesia induction
- Causes and symptoms of the phases of excitation
- Clinical signs and tools for measuring the depth of anesthesia
- Reasons for blood pressure decline after anesthesia induction

Pharmacology of general anesthesia

Characteristics of substances used for general anesthesia:
- Barbiturates
- Propofol
- Etomidate
- Opiates
- Muscle relaxants (depolarising, non-depolarising)
- Inhalational anesthetics (gaseous, vaporous)

Respiration during general anesthesia

- Influence of general anesthesia on respiration
- Tools for retaining the upper airways (masks, guedel tube, endotracheal tube)
- Mask-ventilation (indications, practice, rsks, contraindicatons)
- Endotracheal intubation
  - Advantages
  - Indications
  - Structure of the tube
  - Techniques
  - Positioning of the tube, position monitoring
• Anesthesia ventilation
  Ventilation modes (assisted, manual, controlled)
  Principle of pressure controlled ventilation vs. spontaneous breathing

**Basics of post-operative pain therapy**

• Dangers and intensity of postoperative pain
• Principles of post-operative pain therapy (application routes, balanced analgesia, pre-emptive analgesia)
• Characteristics of substances used for postoperative pain therapy:
  Opiates
  NSAID
  Paracetamol
  Metamizol
  Local anesthetics

**Intensive Care Medicine**

• Blood pressure stability
  Influencing physiological variables
  Diagnostic tools
  Therapeutic tools
• Respiratory Insufficiency
  Clinical signs
  Ethiology
  Difference between oxygenation and ventilation, partial and global insufficiency
  Therapeutic tools