## **Opioid-free anesthesia for bariatric surgery**

#### **Anesthesia induction**

Add the following medication to 1 syringe (for syringe pump)

- Dexmedetomidine 400 μg (4ml)
- S-Ketamine 50 mg (2ml-10ml depending on the concentration)
- Lidocaine 400 mg (20ml)
- Add NaCl 0.9% to achieve a volume of 40 ml in total

The mixture contains the following concentrations

- Dexmedetomidine 10 μg/ml
- S-Ketamine 1.25 mg/ml
- Lidocaine 10 mg/ml

Start infusion when patient is on the OR table at 20ml/h (s-ketamine: 25 mg/h; dexmedetomidine: 200  $\mu$ g/h; lidocaine: 200 mg/h)

Induce anesthesia with 200-250 mg Propofol and 100 mg Rocuronium

## Maintenance of anesthesia and intraoperative medication

- Reduce infusion (dexmedetomidine/s-ketamine/lidocaine) to 5-10ml/h depending on hemodynamics (s-ketamine: 6.25-12.5 mg/h; dexmedetomidine 50-100 μg/h; lidocaine 50-100 mg/h)
- Adjust Desflurane/Sevoflurane to achieve a MAC of approximately 05. to 1
- Maintain deep paralysis with rocuronium (aim for PTC <8)</li>
- 2-4 g Magnesium sulfate as short infusion
- 2 g Metamizole iv
- 40 mg Parecoxib oder 75 mg Diclofenac iv
- 8 mg Ondansetron iv
- · 8 mg Dexamethason iv
- Consider 2.5g mg Droperidol iv

#### **End of anesthesia**

- Stop infusion (Dexmedetomidine/s-ketamine/lidocaine) when gastroscopy is performed
- Stop Desflurane/Sevoflurane and wash out a high flow when gastroscopy is performed
- Antagonize muscle paralysis with sugammadex (based on total body weight) at skin suture

# **Recovery area**

- Re-start infusion (dexmedetomidine/s-ketamine/lidocaine) at 5ml/h if necessary for pain control
- Piritramide iv rescue pain therapy
- Mobilize after 1h