Opioid free anaesthesia protocol for laparoscopic bariatric surgery

Premedication
• No sedation unless when anxious
• Omeprazole 40 mg 1 hr. before surgery po (or 40 mg iv before induction)

Anaesthesia induction and maintenance
• Beach chair position with pillow under thorax.
• Measure oxygen saturation before and after deep inspiration without oxygen mask.
• Apply CPAP mask with PEEP +5 and FIO2 0.8.
• Dehydrobenzperidol 0.6 mg to prevent nausea and vomiting.
• Multimodal pain therapy peroperative using
  o Dexametomidine 0.5 to 1 ug/kg IBW over 5 to 10 minutes followed by infusion of 0.5 to 1 ug/kg IBW/h.
  o Ketamine 0.125 to 0.25 mg/kg followed by infusion of 0.125 to 0.25 mg/kg IBW/h.
  o Lidocaine 1.5 mg/kg IBW followed by infusion of 1.5 to 3 mg/kg IBW/h.
  o Mgsulfate 40 mg/kg IBW followed by 10 mg/kg IBW/h.
  o Paracetamol 2 gr loading (3 GR if TBW > 100 KG)
  o Diclofenac (if surgeon agree otherwise wait till 6 h post operative and no significant blood loss) 150 mg loading followed by 75 mg every 12 h.
• Hypnosis using
  o Propofol 2.5 mg/kg IBW with additional bolus until loss of consciousness and followed by inhalation anaesthesia at 1 MAC in O2/air and based on BIS values.
• Neuromuscular block using
  o Rocuronium 0.6 or 0.9 mg/kg IBW when mask ventilation is possible or in a dose of 1.2 mg/kg IBW when rapid sequence induction is needed.
  o Measure depth of muscle relaxation. Followed by rocuronium infusion at 1 mg/kg IBW/h and increase when one TOF answer appears or lower when PTC is less than 5.
• Antibiotics
  o One dose Cefazoline of 1 gr before incision ( 2 gr if TBW > 100 kg)
• If hypotensive (or staple bleeding test) first allow permissive hypercapnia then provide sufficient circulating volume and use ephedrine (or phenylpehrine if tachycard.)

Anaesthesia exduction and postoperative pain treatment
• Local wound infiltration of the trocar sites helps but does not block all pain stimuli.
• PSV can be started even before decurarisation to use the respiratory frequency as a guide of sufficient analgesia before awakening.
• No aspiration through ETT, good aspiration of gastric content and extubation under CPAP that should be continued if OSAS.
• TOF is measured and according to its value sugammadex 2 mg/kg IBW + 40% or neostigmine is chosen to achieve a measured TOF 90 %.
• Multimodal postoperative pain therapy is given using diclofenac, paracetamol and one dose of 75 ug clonidine. If possible a continuous infusion of low dose ketamine and very low dose (0.1 mg/kg/h) dexmedetomidine can be continued to avoid all opioids.
• Otherwise a low dose of piritramide (5 mg) or morphine (5 mg) is given or kept as an escape analgesic.
• Hypertension without pain is treated with one dose of 75 ug clonidine if not bradycard otherwise Rydene is used.
• PCIA and PCEA are not indicated for laparoscopic procedures.
• Omeprazole 20 mg is continued one dose a day.