# Total Knee and Hip Replacement Protocol rev. SWA Aug 2023

# **PREMEDICATION**

- Tylenol 1G PO
- Decadron 8 mg IV prior to the blocks. This dose is held in diabetics, but is continued in Dr Panigutti patients if their diabetes is in good control
- Versed IV PRN for block. Consider ketamine in doses of 12.5 mg for low-pain threshold patients
- Scopolamine patch for females under 70 and males under 55

### **THR BLOCKS**

- PENG & Lateral Femoral Cutaneous Nerve (Note: block is omitted for anterior approach with intra-op PAI)
  - o 20 ml & 5 ml 0.25-0.5% ropivacaine + 4mg Decadron

# **TKR BLOCKS**

- Saphenous/Adductor Canal:
  - o 20-30 ml 0.5% bupivacaine w/epi with 2-4 mg Decadron
  - o Limit volume to 20 ml in outpatients
  - o If the nerve not visualized, inject some local medial to the artery
- IPACK: 8-12 ml 0.25% ropivacaine or bupivacaine ± 2 mg Decadron
  - o Alternative for redo TKR: Sciatic: 20 ml 0.125% bupivacaine plain

### ANESTHETIC MANAGEMENT

- GA-OETT with nitrous-propofol or nitrous-propofol-remifentanil see below. The latter is needed for TKRs to manage tourniquet hypertension
- Intubation facilitation: 25-50 mcg fentanyl or 20-60 mcg remifentanil (1-3 ml of the propofol-remi mixture), succinylcholine, LTA
- Muscle relaxation non-depolarizers for THRs only: partial relaxation adequate for lateral approach; full relaxation needed for anterior approach
- Slight hyperventilation to ETCO<sub>2</sub> of 25-30
- Multimodal analgesics:
  - o Ketamine 25-50 mg IV mg prior to incision for younger patients with chronic pain issues
  - o Toradol 30 mg IV at closure if creatinine < 1.2. Decrease dose to 15 mg IV if over 80 years
- Anti-emetics:
  - o Droperidol 0.625-1.25mg IV if under 80 years old
  - o Zofran 4-8mg

#### PROPOFOL-REMIFENTANIL

- Mixture: 1mg remifentanil in 50ml propofol
- Start infusion at 0.3 ml/kg/hr at induction (based on lean body mass rather than actual weight)
- Increase rate prior to incision up to a max of 0.6 ml/kg/hr
- Decrease rate after tourniquet release
- Administer another narcotic before emergence to manage PACU hyperesthesia

# **POUR PREVENTION FOR MALES OVER 55**

- Limit intake to 1 liter if possible (otherwise patients should have > 2 liters)
- Avoid alpha stimulation
  - o Treat hypotension with ephedrine instead of Neosynephrine
  - Avoid starting beta-blockers
- Avoid anticholinergics
  - o No Demerol
  - o Treat bradycardia with ephedrine
  - o If history of BPH, use Zemuron/sugammadex instead of Nimbex for THRs