SURGICAL PAIN CONSORTIUM

The Best Practices for the Management of Surgical Pain

TOTAL KNEE ARTHROPLASTY

ADULT MULTIMODAL PAIN MANAGEMENT RECOMMENDATION

THE 2015 SPC KNEE WORKING GROUP

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Preoperative

- Patients who are on chronic opioid medications should be left on their medications, yet the exact dosing strategy is controversial.
- Gabapentin 600 mg, PO or pregabalin 50-75 mg, PO 2-3 hours preoperatively
  - o Consider giving 300mg, PO gabapentin the night prior to surgery in addition to 600mg. PO gabapentin day of surgery.
- Celecoxib 400 mg, PO 2-3 hours preoperatively (if on celecoxib regimen, continue same dose)
- For patients who are on non-specific NSAIDs, recommend changing patient to a COX-2 specific inhibitor prior to surgery.
- Consider oxycodone CR 10mg, PO, if no contraindications [alternatively Tramadol ER 200 mg, PO]
- Adductor canal block by the pain team, as an adjunct to surgeon infiltration; peripheral periarticular infiltration performed by the surgeon is the technique of choice.

Intraoperative

General or Spinal anesthesia

- Dexamethasone 8 mg IV after induction of anesthesia
- Acetaminophen 1 g IV
- Ondansetron 4 mg IV at the end of case
- Intravenous NSAID (only if an NSAID or celecoxib was not given preoperatively)
- Tranexamic Acid (TXA) 1 g at induction of anesthesia and 1 gm at the end of surgery
- At the end of surgery, surgeon should perform periarticular infiltration, please refer to Joshi GP, et al. Techniques for periarticular infiltration with liposomal bupivacaine for the management of pain after hip and knee arthroplasty: a consensus recommendation. *J Surg Ortho Adv* 2015; 24: 27-35.

Postoperative

Immediate Postoperative:

- Acetaminophen 1 gm IV q 8 hours (until able to take PO), IV may be repeated after 4 h, if necessary
- Celecoxib 200 mg, PO BID OR a traditional NSAID (i.e., ibuprofen, naproxen or meloxicam)
- Gabapentin 300 mg PO TID / pregabalin 50-75 mg BID until discharge
  - o Doses should be modified according to creatinine clearance]
- IV bolus opioids or oral opioids for breakthrough (rescue) pain relief

Postoperative in Hospital and Post-discharge (one-two weeks):

- Acetaminophen 1 gm, PO q 8 hours
- Celecoxib 200 mg, PO BID OR a traditional NSAID (i.e., ibuprofen, naproxen or meloxicam)
- Tramadol or Opioids (hydrocodone/acetaminophen) for rescue (caution acetaminophen dose should not exceed 4 gm/day

These recommendations should be utilized as a foundational resource for perioperative pain management. The attending physician should make appropriate modifications based on their expertise on a patient-to-patient basis.