SURGICAL PAIN CONSORTIUM

The Best Practices for the Management of Surgical Pain

ADULT MULTIMODAL PAIN MANAGEMENT RECOMMENDATION

THE 2015 SPC COLORECTAL 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

Intraoperative

General Anesthesia

- Minimize intraoperative opioid dose [e.g., maximum fentanyl ~1-2mcg/kg/h + hydromorphone at the end of surgery (NOT during) 5-10 mcg/kg for laparoscopic cases and ~10-15 mcg/kg for open cases titrated approximately 20 min prior to expected time of extubation
- Dexamethasone 8 mg IV after induction of anesthesia
- Acetaminophen 1 gm IV
- Ondansetron 4 mg IV at end of case
- Ketorolac at end of surgery: 30 mg IV for healthy patients and 15 mg, IV for elderly > 65 years or if renal dysfunction [avoid ketorolac in patients with creatinine clearance < 30 mL/min]

Local/Regional Anesthesia

- For laparoscopic procedures: wound infiltration
- For open procedures: TAP block at the end of the case or in the recovery room or wound infiltration by the surgeon
- Wound infiltration performed as described above is superior to TAP block. All layers of the surgical incision (peritoneal, myofascial, and subdermal tissue planes) should be infiltrated under direct visualization in a controlled and meticulous manner.
  - o Just before closure of the surgical wound, the peritoneum is infiltrated with local anesthetic followed by peritoneal closure, which is followed by infiltration of the musculofascial plane, and finally, the subdermal tissue is infiltrated.
  - o The local anesthetic solutions include bupivacaine (maximum dose ~150 mg), ropivacaine (maximum dose ~300 mg), or liposomal bupivacaine (maximum dose = 266 mg). The recommended injection solution for liposomal bupivacaine is 20 mL (266 mg) combined with 30 mL, 0.25% bupivacaine HCl (75 mg) with epinephrine and saline to achieve the total volume as described above.
  - o The volume of local anesthetic would depend on the size of the incision. The typical volume for surgical site infiltration would be 1 mL every 1-1.5 cm of surgical incision per layer. Thus, the maximum local anesthetic dose is diluted to the required volume.
  - o The needle is inserted approximately 0.5-1 cm into the tissue plane and local anesthetic solution is injected while slowly withdrawing the needle.

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 PCA opioids or 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.