MANAGEMENT OF PAIN FOR SHOULDER SURGERY

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Preoperative

- Acetaminophen 1 gm, PO ~2 hours, preoperatively
- Celecoxib 400 mg, PO ~2 hours, preoperatively (OPTIONAL)
- Regional anesthesia: Brachial plexus block through the Interscalene approach

Intraoperative

- Minimize intraoperative opioid dose
  - Fentanyl 50 mcg boluses as necessary, preferably, a total of less than ~1 mcg/kg [IBW]/h
    - Preferably, no long-acting opioid until end of surgery
    - If necessary, control hyperdynamic response with vasoactive drugs (e.g., esmolol, metoprolol, OR labetalol)
- Dexamethasone 8 mg IV after induction of anesthesia
- Acetaminophen 1 g IV, if not given preoperatively. May be repeated after 4 h, if necessary
- Ketorolac 15-30 mg, IV at the end of surgery, if no contraindication AND celecoxib not given preoperatively
- At the end of surgery, surgeon performs periarticular local anesthetic infiltration, if the patient has not received brachial plexus block
  - Solution: Ropivacaine 300 mg + saline OR liposomal bupivacaine (20 mL) + 0.25% bupivacaine (30 mL) + saline. Total volume: 40-60 mL (based upon the size of the surgical incision).
  - Technique of Injection: Infiltration should be meticulous and extensive, using direct visualization using a 20 mL syringe with a 1.5-inch 22G needle. Inject as the needle is withdrawn. Deep injections (humeral insertion), Mid layer injections (muscles) and Superficial injections (subdermal tissues and around the drain)
Postoperative Day 0 – Until Discharge

- Recovery room: Hydromorphone 0.2 – 0.4 mg, IV bolus, until comfortable
- Acetaminophen 1 gm PO q 8 hours
- Conventional non-steroidal anti-inflammatory drug OR Celecoxib 200 mg, PO q 12 hours
- Opioids for breakthrough (rescue) pain relief
  - Oxycodone IR 5-10 mg, PO, q 6 hours, PRN OR Tramadol 50-100 mg, PO, q 6 hours, PRN

Post-Discharge

- Acetaminophen 650 mg – 1 gm, PO q 6-8 hours
- Conventional non-steroidal anti-inflammatory drug OR Celecoxib 200 mg, PO q 12 hours
- Oxycodone IR 5-10 mg, PO, q 8 hours, PRN OR Tramadol 50-100 mg, PO, q 6 hours, PRN
  - Caution acetaminophen dose should not exceed 4 gm/day

These recommendations should be utilized as a foundational resource for perioperative pain management. They are not intended to supersede clinical judgment or individual patient choices or values. Ultimately, clinical decision-making must always be customized to the individual situation. The attending physician should make appropriate modifications based on their expertise on a patient-to-patient basis.