MANAGEMENT OF PAIN FOR SHOULDER SURGERY

STRATEGIC ADVISORY GROUP

Girish P. Joshi, MBBS, MD, FFARCSI
Professor of Anesthesiology and Pain Management,
University of Texas Southwestern Medical Center,
Dallas, TX

Richard J. Hawkins, MD
Professor of Clinical Orthopedic Surgery,
University of South Carolina, School of Medicine,
Co-Founder of the Steadman Hawkins Clinic,
Columbia, SC

Mark A. Frankle, MD
Director of the Biomechanical Shoulder and Elbow Research Lab,
University of South Florida College of Engineering,
Tampa, FL

Jeffrey Abrams, MD
Clinical Professor, Seton Hall University, School of Graduate Medicine,
Attending Surgeon, University Medical Center at Princeton
Princeton, NJ

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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 Inject as the needle is withdrawn.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.