



Management of Pain After Shoulder Surgery

STRATEGIC ADVISORY GROUP

The Advisory Group members of the Surgical Pain Consortium are key thought leaders that represent the specialties of anesthesiology, surgery, pharmacy, nurses, and management. Members are added as the scope of The Surgical Pain Consortium's efforts grow.



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PREOPERATIVE

- Celecoxib 400 mg, po 2 hours, preoperatively alternately use IV NSAID intraoperatively)
- Regional anesthesia:
 - Brachial plexus block through the Interscalene approach performed by the anesthesiologist preoperatively OR
 - Surgical site infiltration performed by the surgeon intraoperatively

INTRAOPERATIVE

- Dexamethasone 8 mg, IV at the start of surgery
- Acetaminophen 1 gm, IV at the start of surgery (if not available use oral acetaminophen 1.5 gm, 2 h prior to surgery)
- Non-steroidal anti-inflammatory drug (NSAID) intravenously, if celecoxib or NSAID not administered preoperatively
- At the end of surgery, if the patient has not received a brachial plexus block via interscalene approach, surgeon should perform periarticular infiltration [Joshi GP, Hawkins RJ, Frankle MA, Abrams JS. Best practices for periarticular infiltration with liposomal bupivacaine for the management of pain after shoulder surgery: a consensus recommendation. *J Surg Orthop Adv* 2016; 25: 204-8].
 - Ropivacaine (200–400 mg) or bupivacaine HCl (150–200 mg) with epinephrine (0.5 mg) or liposomal bupivacaine 20 mL (266 mg) combined with bupivacaine HCl 0.25%, 30 mL (75 mg) with epinephrine and 40 mL saline
 - Infiltration should be meticulous and extensive, using direct visualization to perform deep (humeral insertion), mid-layer (muscles) and superficial (subcutaneous [SC] tissue, fat, skin) injections.
 - Infiltration is performed using a 22-gauge, 1.5- or 2-inch needle. The solution is injected while withdrawing the needle to reduce the risk of intravascular injection.

POSTOPERATIVE: PACU

- Fentanyl 25-50 mcg, IV boluses OR Hydromorphone 0.2-0.4 mg, IV boluses, prn

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

- Acetaminophen 1 gm, PO q 8 hours □
- Traditional NSAID (i.e., ibuprofen, naproxen, or meloxicam) or Celecoxib 200 mg, PO BID



SURGICAL PAIN CONSORTIUM

The Best Practices for the Management of Surgical Pain

- 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.

References

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7. Joshi GP, Hawkins RJ, Frankle MA, Abrams JS. Best practices for periarticular infiltration with liposomal bupivacaine for the management of pain after shoulder surgery: a consensus recommendation. *J Surg Orthop Adv* 2016; 25: 204-8