ASO Author Reflections: We No Longer Give Ketorolac During Mastectomy. Should You?

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PAST

Ketorolac is a potent nonsteroidal antiinflammatory analgesic that has become an integral part of opioid-sparing enhanced recovery after surgery pathways for mastectomy.¹ Ketorolac is associated with increased risk of bleeding, but metaanalysis of trials involving other kinds of surgery does not support that association.² A recent retrospective study of lumpectomy and mastectomy patients also found no association of ketorolac with perioperative bleeding.³

PRESENT

Our surgical center was conceived around standardized surgical pathways updated based on patient outcomes.⁴ We became concerned about anecdotal reports of perioperative bleeding requiring a return trip to the operating room. We found that ketorolac administration was associated with more than double the odds of reoperation for bleeding after mastectomy (odds ratio 2.43; 95% confidence interval 1.60, 3.70; $P < 0.0001$).⁵ We also found that use of ketorolac led to only a small reduction in the need for opioid analgesics. The magnitude of the result led us to remove ketorolac from our mastectomy pathway.

FUTURE

Despite the single-center and retrospective nature of our study, our large sample and effect size provide persuasive evidence that holding ketorolac will improve patient outcome. Other mastectomy centers should evaluate these data and strongly consider discontinuing intraoperative ketorolac. Reoperation for bleeding is an outcome that other mastectomy ERAS programs should track, as it is less subjective than postoperative hematoma and associated with defined costs.

DISCLOSURES Dr. McCormick's spouse holds stock in Johnson & Johnson.

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