The Incorporation of Liposome Bupivacaine Into an Opioid-Sparing Strategy for Patients Undergoing Rhytidectomy

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Purpose: Although effective, opioids are known to cause adverse events that can hinder patient recovery. To determine if we could reduce opioids following cosmetic rhytidectomy,we incorporated liposome bupivacaine (LB), which provides up to 72 hours of localized paincontrol, into our postsurgical analgesic regimen.

Methods: A retrospective chart review was conducted on a total of 15 patients undergoing cosmetic facial surgery. Ten consecutive patients received 20 mL of LB infiltrated at end of the procedure; five subjects who received IV opioids as the standard of care were used as controls. For comparator analysis, categorical data was compared using Fischer's exact test, a t test was used to compare the means of the two groups.

Results: More LB patients were opioid-free in the PACU compared to control subjects (70% vs. 0%; P=0.02), resulting in a reduction in mean IV opioid use, expressed as morphineequivalent doses (0.7 mg vs 3.0 mg; P=0.03). On the day of surgery, LB patients required numerically less opioids than control subjects (4.3 mg vs 10.7 mg), and opioid requirements continued to decline on POD1 (1.5 mg vs 11 mg; P=0.03). Overall, LB patients demonstrated a significant reduction in mean total opioids through POD3 compared to control subjects (6.3 mg vs 21.6 mg; P=0.007).

Conclusion: Infiltration of LB resulted in a reduction in opioid requirements in the PACU following rhytidectomy, as well as a 60% reduction in IV opioids the day of surgery, and a 71% reduction in mean total opioids through POD3 compared to control patients.