Suprazygomatic Maxillary Nerve Blocking Reduces Postoperative Pain and Opioid Use Following Bimaxillary Osteotomy

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INTRODUCTION: The ultrasound-guided suprazygomatic approach to blocking the maxillary branch of the trigeminal nerve is a regional anesthesia technique to decrease postoperative facial pain. Studies have shown their effectiveness with Le Fort osteotomies and cleft repairs. This study aimed to evaluate the effectiveness of V2 nerve blocking with bupivacaine and dexmedetomidine in decreasing postoperative pain following bimaxillary osteotomy.

METHODS: A retrospective chart review was conducted on patients undergoing bimaxillary osteotomy with or without preoperative suprazygomatic maxillary nerve blocking from 2019-2020. Outcomes of interest included self-reported pain scores (0-10) as well as oral morphine milligram equivalents (MME) as a proxy for pain control.

RESULTS: 10 patients received a suprazygomatic maxillary nerve block and 11 patients did not prior to undergoing surgery. Mean pain scores recorded over 48h were lower in the nerve block group compared to the control group (2.50 vs 3.30, p=0.02396). Nerve blocking decreased opioid usage, demonstrated by a lower mean MME (6.07 vs 16.12, p=0.04956) over the first 24h postop. Mean 48h and Total MME trends also favored the nerve block group, however, these did not reach statistical significance (48h mean MME: 15.84 vs 31.22, p=0.1402; Total mean MME: 43.64 vs 52.13, p=0.7504).

CONCLUSION: Patients who undergo double-jaw surgery may experience significant facial pain in the immediate postoperative setting. Our study revealed that ultrasound-guided suprazygomatic nerve blocking decreases patient-reported pain scores, as well as decreases opioid use in the recovery setting.

The Patient Drain Experience: Perspectives after Breast Cancer Reconstruction

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