World Academy of Science, Engineering and Technology International Journal of Biomedical and Biological Engineering Vol:16, No:05, 2022

Intraoperative Inter Pectoral and Sub Serratus Nerve Blocks Reduce Post Operative Opiate Requirements in Breast Augmentation Surgery

Authors: Conor Mccartney, Mark Lee

Abstract : Background: An essential component in ambulatory breast augmentation surgery is good analgesia. The demographic undergoing this operation is usually fit, low risk with few comorbidities. These patients do not require long-term hospitalization and do not want to spend excessive time in the hospital for financial reasons. Opiate analgesia can have significant side effects such as nausea, vomiting and sedation. Reducing volumes of postoperative opiates allows faster ambulation and discharge from day surgery. We have developed two targeted nerve blocks that can be applied by the operating surgeon in a matter of seconds under direct vision, not requiring imaging. Anecdotally we found that these targeted nerve blocks reduced opiate requirements and allowed accelerated discharge and faster return to normal activities. This was then tested in a prospective randomized, double-blind trial. Methods: 20 patients were randomized into saline (n = 10) or Ropivicaine adrenaline solution (n = 10). The operating surgeon and anesthetist were blinded to the solution. All patients were closely followed up and morphine equivalents were accurately recorded. Follow-up pain scores were recorded using the Overall Benefit of Analgesia pain questionnaire. Findings: The Ropivicaine nerve blocks significantly reduced opiate requirements postoperatively (p<0.05). Pain scores were significantly decreased in the study group (p<0.05). There were no side effects attributable to the nerve blocks. Conclusions: Intraoperative targeted nerve blocks significantly reduce postoperative opiate requirements in breast augmentation surgery. This results in faster recovery and higher patient satisfaction.

Keywords: breast augmentation, nerve block, postoperative recovery, opiate analgesia, inter pectoral block, sub serratus block

Conference Title: ICPRCAS 2022: International Conference on Plastic, Reconstructive, Cosmetic and Aesthetic Surgery

Conference Location : Sydney, Australia **Conference Dates :** May 16-17, 2022