Erector Spine Plane Block Versus Para Vertebral Block In Brest Surgery

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Abstract: Background: Erector spinae plane block (ESP) and thoracic paravertebral block (PVB) are two widely used regional anesthesia techniques in breast cancer surgery. Both techniques aim to improve postoperative pain management and reduce opioid consumption. However, comparative data on their efficacy in oncologic breast surgery remains limited. Objectives: This study aims to compare the efficacy of ESP and PVB in postoperative pain control, patient satisfaction, and opioid consumption in breast cancer surgery. Methods: A randomized, double-blind trial was conducted involving 100 patients undergoing oncologic breast surgery. Patients were randomly assigned to two groups: 50 received ESP, and 50 received PVB. Postoperative pain scores (at rest and during movement), opioid consumption, patient satisfaction, and hospital length of stay were recorded and analyzed. Results: Both ESP and PVB provided effective postoperative analgesia. No significant difference in pain scores was observed between the two groups within the first 24 hours. However, ESP showed a notable advantage in managing chronic postoperative pain at the 6-month follow-up. Opioid consumption was lower in both groups compared to patients without a block. No significant differences in complication rates or hospital stay were noted between the groups. Conclusion: ESP and PVB offer comparable efficacy for immediate postoperative pain control in breast cancer surgery. Nevertheless, ESP may have a superior role in managing long-term pain. Further research is needed to explore the mechanisms behind the observed differences in chronic pain outcomes.

Keywords : pain assessment, brest surgery, bpv block, ESP block

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