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Thesis Title: INTER-SEMISPINAL PLANE (ISP) BLOCK FOR POSTOPERATIVE ANALGESIA FOLLOWING CERVICAL SPINE SURGERY : A PROSPECTIVE RANDOMIZED CONTROLLED TRIAL .

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ABSTRACT

Background

We evaluated the perioperative analgesic effects of the inter-semispinal plane (ISP) block in patients undergoing posterior cervical spine surgery.

Methods

A Fifty Adult patients (18–60 years old), of either gender, with American Society of Anesthesiologists (ASA) physical status I-II undergoing elective posterior cervical spine surgery were enrolled in the study . Half of them undergoing general anesthesia only (controlled group) and the other half received intersemispinal plane block with general anesthesia.

Results

For postoperative rescue analgesia, the need for pethidine was significantly lower in ISP group than the control (20% vs 64% respectively, $P=0.002$) first and total doses were not different between the two groups.

ISP group consumed significantly lower doses of fentanyl intraoperatively in comparison to the control ($P=0.022$).

ISP group showed significantly lower VAS compared to the control at 1, 8, 12 and 48 hours postoperatively ($P= 0.016, 0.009, 0.005, 0.016$ respectively).

Conclusion

The ISPB block is an effective analgesic technique in posterior cervical spine surgery, reducing opioid consumption, providing better pain control, and improving surgeon satisfaction without increasing complications. This approach can enhance postoperative care and patient outcomes in this surgical population.