

## Efficacy of Erector Spinae Plane Block for Postoperative Pain Management in Coronary Artery Bypass Graft Patients

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**Abstract :** Background: Perioperative pain management plays an integral part in patients undergoing cardiac surgery. We studied the effect of Erector Spinae Plane block on acute postoperative pain reduction and 24 hours opioid consumption in adult cardiac surgical patients. Methods: Twenty-five adult cardiac surgical patients who underwent cardiac surgery with sternotomy in whom ESP catheters were placed preoperatively were kept in group E, and the other 25 patients who had undergone cardiac surgery without ESP catheter and pain management done with conventional opioid injection were placed in group C. Fentanyl was used for pain management. The primary study endpoint was to compare the consumption of fentanyl and to assess the numeric rating scale in the postoperative period in the first 24 hours in both groups. Results: The 24 hours fentanyl consumption was  $43.00 \pm 51.29$  micrograms in the Erector Spinae Plane catheter group and  $147.00 \pm 60.94$  micrograms in the control group postoperatively which was statistically significant ( $p < 0.001$ ). The numeric rating scale was also significantly reduced in the Erector Spinae Plane group compared to the control group in the first 24 hours postoperatively. Conclusion: Erector Spinae Plane block is superior to the conventional opioid injection method for postoperative pain management in CABG patients. Erector Spinae Plane block not only decreases the overall opioid consumption but also the NRS score in these patients.

**Keywords :** erector, spinae, plane, numerical rating scale

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