ASSESSMENT OF THE QUALITY OF RECOVERY OF PATIENTS RECEIVING ERECTOR SPINAE PLANE BLOCK COMPARED TO LOCAL INFILTRATION IN PATIENTS UNDERGOING MAJOR ONCOLOGICAL BREAST SURGERY.

M. Asif, AW. Khan, H. Saleem, S. Raza.
Shaukat Khanum Memorial Cancer Hospital and Research Centre, Anesthesia department, Lahore, Pakistan.

OBJECTIVE

Breast cancer is the most common malignancy among women worldwide and in Pakistan, with more than 185,000 new cases annually. At Shaukat Khanum Memorial Cancer Hospital, nearly 700 breast surgeries are performed each year. Surgery is essential for cure but often causes severe postoperative pain. Effective perioperative pain management is vital to prevent long-term suffering. The **Erector Spinae Plane (ESP) block and local infiltration** offer simpler, safer alternatives. This study compared **ESP block** with **local infiltration (LI)** in improving postoperative quality of recovery using the validated **QoR-15** questionnaire.

METHODS

A **prospective randomized controlled trial** was conducted at Shaukat Khanum Hospital (Feb 2023–Dec 2024).

Participants: 70 female patients, 18–65 years, ASA I–II, undergoing major oncological breast surgery.

Groups:

ESP Block (n = 35) – bupivacaine 0.375% (30 ml) at T2–T6(pre incision).

Local Infiltration (n = 35) – bupivacaine 0.375% (30 ml) at incision site(pre incision).

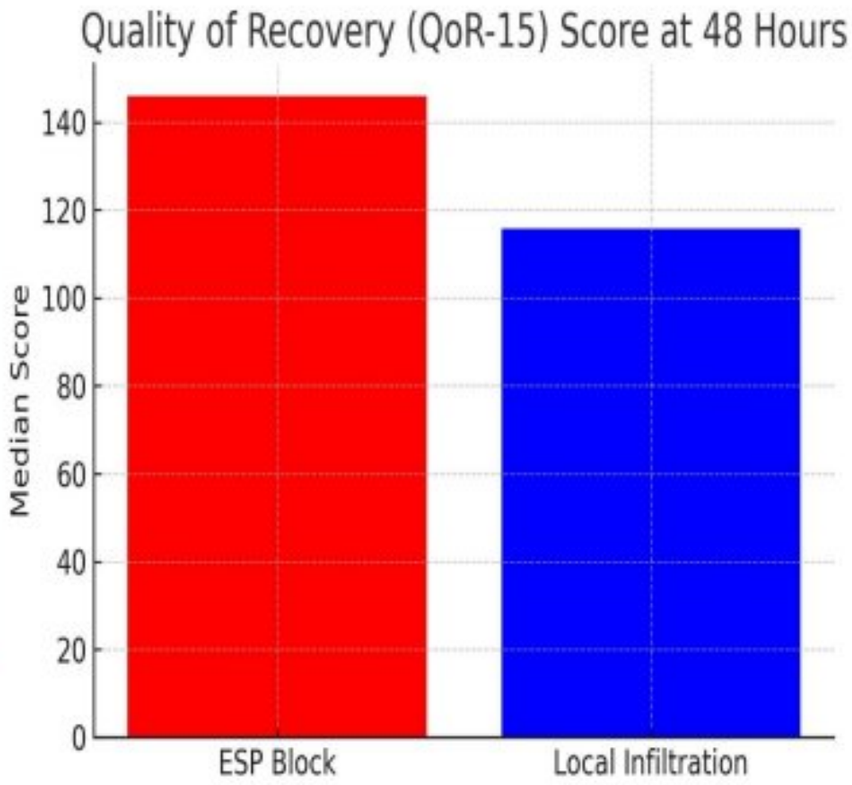
Anesthesia: Standardized general anesthesia with propofol, atracurium, sevoflurane.

Analysis: Independent t-test/Mann-Whitney U, $p < 0.05$ significant.

CONCLUSION

The **Erector Spinae Plane Block** significantly improves quality of recovery and decreases opioid consumption compared with local infiltration in major oncological breast surgery.

It should be considered a preferred regional anesthesia technique for promoting pain-free and patient-centered recovery.



RESULTS

QoR-15 Score (48 h): ESP 145.9 [144.3–149.0] vs LI 115.8 [112.9–118.0]; $p < 0.0001$

→ ESP improved overall recovery by ≈ 30 points (clinically and statistically significant).

Morphine Use (24 h): ESP 1.7 ± 0.8 mg vs LI 3.3 ± 0.7 mg; $p < 0.001$

→ ESP reduced opioid requirement by ~50%.

LIMITATIONS

- Single center study→ cannot generalized to different population
- Limited comparison scope → comparison with other regional technique would better establish ESPB advantages.
- Sample size and power → most sample may not detect uncommon complications.
- Lack of binding for block type

SHAUKAT KHANUM MEMORIAL
CANCER HOSPITAL & RESEARCH CENTRE

7-A Block R III, Johar Town, Lahore, Pakistan
www.shaukatkhanum.org.pk