

ESP BLOCK FOR ONCOLOGIC BREAST SURGERY: CAN IT BE USED AS A REGIONAL ANESTHESIA TECHNIQUE?

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Background and Aims:

The mechanisms of the Erector Spinae Block are still poorly understood.¹ Since the ESP was first described by Mauricio Forero in 2016² only a couple of case reports^{3,4} are available that describe the use of ESP without general anesthesia.^{5,6}

Our aim is to use the ESP technique with a continuous catheter (E-Cath® - Pajunk, 2018)⁷ as a regional technique in oncologic breast surgery with the patient on spontaneous ventilation without the use of orotracheal intubation or a supraglottic device.

Methods:

- Retrospective analysis
- April 2018 – April 2019
- n= 13
- Same Surgical Team every time
- Surgeries Carried Out:
 - Quadrantectomy with Axillar Lymph Node Removal (n=3)
 - Quadrantectomy w/o Axillar Lymph Node Removal (n=3)
 - Modified Radical Mastectomy with Axillar Lymph Node Removal (n=3)
 - Central Quadrantectomy (n=2)
 - Multiple Node Biopsy (n=1)
 - Lactiferous ducts Removal (n=1)
- Primary End Point: Need to convert to General Anesthesia
- Before skin incision: Sedation with IV Midazolam 2 mgr and IV Propofol 20-30 mgr.
- Surgeon Undertook intermittent tegumentary testing incision.
- Need of use of LA by surgeon ws noted.
- Discharge to ward with IV Methamizole and IV Ketorolac.

ESP Technique:

- Pre-Medication: Fentanyl 1ug/kg and Midazolam 0,03 ug/kg.
- Sitting Position.
- Ultrasound-Guided location of Transverse Process of T5
- In Plane placement of E-Cath 18Gx75mm Needle and Catheter First Shot: Lidocaine 2% 20cc.
- Latency: Between 10 and 30 mins (mean 23 mins)
- Allow latency time with awake patient and monitor sign of LA toxicity.



Please Click Over Picture to Play Video

Conclusions:

ESP block can be used as regional anesthesia technique for oncologic breast surgery using a continuous catheter.

This technique can provide good post operative analgesia and can be used as the sole strategy for post operative analgesia .

Further studies are needed to evaluate overall safety for this procedure since high doses of Local Anesthetics are required.



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Results:

Twelve women and one man with a mean age of 64 (36-87) underwent surgical interventions of the breast and axillar region. Latency time averaged 23 minutes (15-30). Lower latency times were related with use of local anesthetic by the surgeon (4 cases in superficial skin plane). Average intervention time was 70 minutes (45-120) and additional bolus of intraoperative lidocaine was administered in 7 patients.

No patient required conversion to general anesthesia nor rescue analgesia in the post operative period. The last patient in the series was a high risk patient (severe valvulopathy, high ELVDP and CKD) so she recieved analgesia through an elastomeric pump and NSAIDs were spared. All patients were discharged after 24 hours without complications.

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