

Continuous erector spinae plane (ESP) block in breast cancer surgery

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Background and aims

Erector spinae plane block has recently been reported for thoracic wall procedures. We describe three cases of continuous ESP block in breast cancer surgery.

Case reports

Three women (37, 42, and 47 years-old) underwent breast cancer surgery:

- ❑ 1st patient: Mastectomy and sentinel lymph node dissection
- ❑ 2nd patient: Mastectomy and lymphadenectomy
- ❑ 3rd patient: Tumorectomy and lymphadenectomy

ESP block was performed at T2 level with ropivacaine 0.35% (30 mL) plus catheter insertion (*Fig 1 and 2*).

General anesthesia was maintained with propofol (7mg/Kg/h) and low-dose remifentanyl (0.05 mcg/Kg/minute). A single dose of fentanyl (2 mcg/Kg) was used in the induction. All patients received intraoperative antiemetic prophylaxis, dexketoprofen and paracetamol.

Postoperative pain control: Continuous ESP block with ropivacaine 0.2% infusion (10mL/h), paracetamol and dexketoprofen. Pain was measured with VAS score (0-10) when patients arrived at the post-anesthesia care unit (PACU), when they left PACU and 24 hours after surgery.

Results: Patients reported VAS of 0-1 at all endpoints without requiring any additional analgesia. After ESP catheter infusion was stopped the analgesia lasted 6-8 hours.



Fig 1. ESP block: US probe placement



Fig 2. ESP block: US image LA and catheter

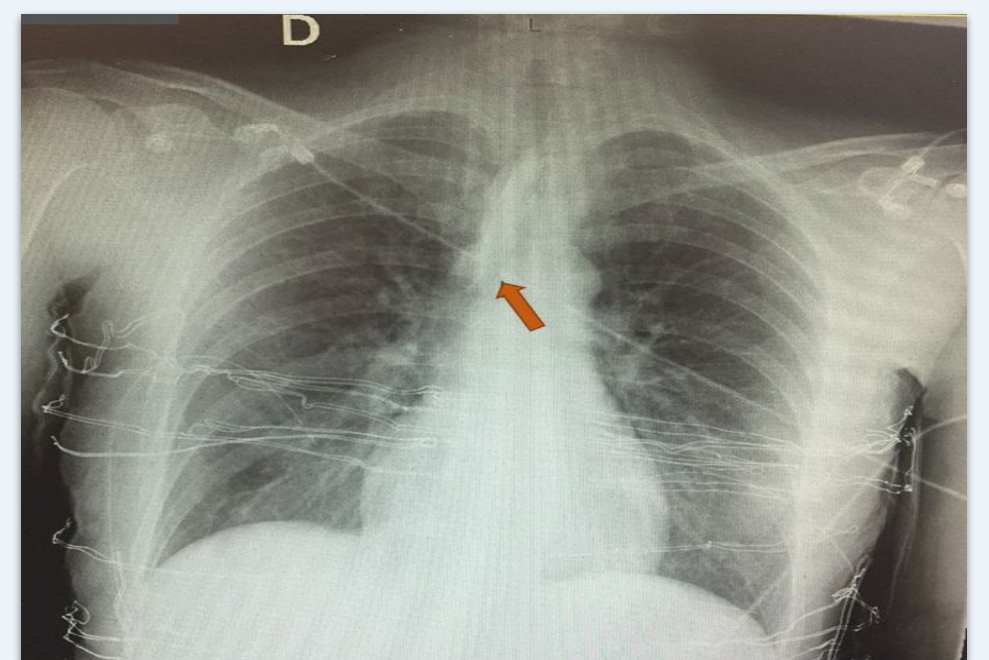


Fig 3. ESP block: Radiographic image with contrast

Conclusions

- ❑ ESP block provides anesthesia at multi-dermatomal levels across posterior, lateral and anterior thoracic wall, making this technique suitable for breast cancer surgery. The main advantage of this block is that it may cover a greater area of the breast and the axilla.
- ❑ Continuous infusion ensures optimal postoperative pain control. In conclusion, we present 3 cases of complex breast cancer surgery where continuous ESP block led to an optimal perioperative pain control with a minimum use of opioids and other analgesics.

References

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