Case Report

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Segmental Thoracic Spinal for Modified Radical Mastectomy in Carcinoma of Breast

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Abstract

Segmental Thoracic spinal anaesthesia for modified Radical Mastectomy in patients with compromised Pulmonary Function Test provides good hemodynamic stability, adequate intraoperative and postoperative analgesia, with patient satisfaction. Here, we present a 60 years old patient with carcinoma of breast posted for Modified Radical Mastectomy under Segmental Thoracic Spinal Anaesthesia.

Keywords: Segmental; Levobupivacaine; Mastectomy; Spinal; Thoracic.

Introduction

General anesthesia is currently the conventional technique used for surgical treatment of breast cancer. The drawbacks of general anesthesia include inadequate pain control due to lack of residual analgesia, high incidence of nausea and vomiting, and prolonged hospital stay. Breast surgery is associated with a high incidence of postoperative pain, it is estimated that over more than 50 % of women suffer chronic pain after surgery. Regional anesthesia is a good alternative to general anesthesia for breast cancer surgery, providing superior analgesia and fewer side effects related to a standard opioid-based analgesia. Regional anesthesia decreases operative stress, provides beneficial hemodynamic effects especially for critically ill patients and decreases postoperative morbidity and mortality. It also reduces post-operative nausea and vomiting and provides prolonged post-operative sensory block, minimizing narcotic requirements.

Case Report

A 60 years old female came to our institute with chief complaints of lump in the right breast gradually increasing in size since 6 months. On examination, a lump of size 9×6cms with irregular surfaces, fixed to skin, with enlarged axillary lymph nodes were noticed. FNAC report revealed presence of malignant cells. In the Preoperative assessment, she has history of smoking since 20 yrs with 3 pack years stopped 1 month back. On examination,

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vitals are stable with SpO2-96% at room air, Chest was clear with equal bilateral air entry, Chest x-ray showed hyperlucent lung fields, PFT's revealed severe obstruction with poor reversibility, 2D Echo revealed EF-60% with no abnormalities. All investigations were within normal limits. The patient was scheduled for surgery under ASA-II.

On the day of surgery, high risk consent was taken and patient shifted to OR. Standard ASA monitors connected and baseline monitoring done. IV line secured with 18G cannula. In sitting position, under strict aseptic precautions, Spinal anaesthesia was performed via para-median approach, at T5-T6 space with 27G spinal needle, 1 ml of levobupivacaine 0.5% with 50µg fentanyl was given. Spinal level assessed and fixed at C6. Oxygen mask with 4l/min was kept, Emergency cart with airway access was kept ready, surgery lasted for 2hrs uneventfully and patient was shifted to the postoperative care unit.

Discussion

Segmental thoracic spinal anesthesia have introduced for cardiac surgery in adults and children in the early 1990's. Spinal anaesthesia decreases operative stress, provides beneficial hemodynamic effects with lower incidence of nausea and vomiting, minimizing opioid requirements and decreases postoperative morbidity and mortality. The dose of the anaesthetic is very low, compared to lumbar spinal anaesthesia, given the highly specific block to only certain nerve segments. Successful use of this technique, avoids tracheal intubation minimising postoperative pulmonary complications.

Conclusion

Segmental Thoracic Spinal anaesthesia provides a better option in high risk cases of Modified Radical Mastectomy in providing good analgesia, maintaining hemodynamic stability and faster recovery and early discharge from hospital.

References

1. Elakany MH, Abdelhamid SA. Segmental thoracic spinal has advantages over general anesthesia for breast cancer surgery. Anesth Essays Res. 2013;7(3):390-395. doi:10.4103/0259-1162.123263.
2. Kejriwal AK, Begum S, Krishan G, Agrawal R. Laparoscopic Cholecystectomy under Segmental Thoracic Spinal Anesthesia: A Feasible Economical Alternative. Anesth Essays Res. 2017;11(3):781-783. doi:10.4103/0259-1162.174467.
3. Mahmoud AA, Hussein HA, Girgis K, Kamal AM, Nafady HA. The novel use of spinal anesthesia at the mid-thoracic level: a feasibility study. Egypt J Cardiothorac Anesth 2014;8:21-6.
4. Shatri G, Singh A. Thoracic Segmental Spinal Anesthesia. [Updated 2021 Jul 23]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021 Jan-. Available from: https://www.ncbi.nlm.nih.gov/books/NBK572087/.