



ISSN NO. 2320-5407

Journal Homepage: - www.journalijar.com

INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI: 10.21474/IJAR01/14454
DOI URL: <http://dx.doi.org/10.21474/IJAR01/14454>



INTERNATIONAL JOURNAL OF
ADVANCED RESEARCH (IJAR)
ISSN 2320-5407
Journal Homepage: <http://www.journalijar.com>
Journal DOI: 10.21474/IJAR01

RESEARCH ARTICLE

COMPARISON OF ANALGESIC EFFICACY OF ULTRASOUND GUIDED PARAVERTEBRAL BLOCK WITH ROPIVACAINE 0.2% WITH/WITHOUT DEXAMETHASONE WITH GENERAL ANAESTHESIA IN MRM

Dr. Seema Karhade¹ and Dr. Himani Sanjeev Chavan²

1. Professor.
2. Junior Resident Smt. Kashibai Navale Medical College And General Hospital, Narhe Pune- 411041.

Manuscript Info

Manuscript History

Received: 22 January 2022

Final Accepted: 24 February 2022

Published: March 2022

Key words:-

Analgesia, Mastectomy, Pain,
Ropivacaine, Dexamethasone

Abstract

Background: Modified radical mastectomy (MRM) may be associated with severe post-operative pain, leading to chronic pain syndrome. We evaluated whether dexamethasone 0.1mg/kg as an adjuvant to ropivacaine improves analgesic efficacy of Paravertebral block (PVB) in MRM.

Method: This double-blind, randomised study was conducted on 60 adult females, scheduled for MRM with axillary dissection. They were allotted into two groups – group R(ropivacaine) (n=30) and group D (ropivacaine + dexamethasone) (n=30). After inducing general anaesthesia, patients were administered ultrasound-guided thoracic PVB at T4 with 20 ml of 0.2% ropivacaine with and without dexamethasone 0.1mg/kg, both as a single level injection. Time to first rescue analgesia, number of rescue analgesia required in 24 hrs and any adverse effects were recorded. Quantitative variables were compared using the unpaired *t*-test between the two groups. Qualitative variables were compared using the Chi-square test.

Results: The duration of analgesia (mean \pm Standard deviation [SD]) was significantly longer in the PVB group with dexamethasone (p value- <0.05). Number of rescue analgesic requirement was significantly reduced in dexamethasone group as compare to without dexamethasone. (p value- 0.001)

Conclusion: Paravertebral block with ropivacaine and dexamethasone has a longer duration of analgesia than with plain ropivacaine.

Copy Right, IJAR, 2022.. All rights reserved.

References:-

- 1) Gupta K, Srikanth K, Girdhar KK, Chan V. Analgesic efficacy of ultrasound-guided paravertebral block versus serratus plane block for modified radical mastectomy: A randomised, controlled trial. Indian J Anaesth. 2017 May;61(5):381-386. doi: 10.4103/ija.IJA_62_17. PMID: 28584346; PMCID: PMC5444215.
- 2) Marret E, Vigneau A, Salengro A, Noirot A, Bonnet F. Effectiveness of analgesic techniques after breast surgery: A meta-analysis. Ann Fr Anesth Reanim. 2006;25:947-54. – PubMed
- 3) Bansal P, Saxena KN, Taneja B, Sareen B. A comparative randomized study of paravertebral block versus wound infiltration of bupivacaine in modified radical mastectomy. J Anaesthesiol Clin Pharmacol. 2012;28:76-80. - PMC – PubMed

- 4) Kairaluoma PM, Bachmann MS, Rosenberg PH, Pere PJ. Preincisional paravertebral block reduces the prevalence of chronic pain after breast surgery. *AnesthAnalg.* 2006;103:703-8. [PubMed] [Google Scholar].