INTRAOPERATIVE PECTORALIS NERVE BLOCK (PEC) I AND II IN MODIFIED RADICAL MASTECTOMY

Fendy Dwimartyono[1], Faisal Sommeng[2], Andi Husni Tanra[3]
[1]Department of Anesthesiology, Intensive Care and Pain Management, University of Muslim Indonesia, Indonesia (fendy.dwimartyono@umi.ac.id)
[2]Department of Anesthesiology, Intensive Care and Pain Management, University of Muslim Indonesia, Indonesia (faisal.sommeng@umi.ac.id)
[2]Faculty of Medicine, University of Muslim Indonesia, Indonesia (ahusni_tanra@yahoo.co.id)

BACKGROUND :
In most developing countries, breast carcinoma is the leading cause of cancer-related deaths in women. Treatment for some patients require more extensive surgery, such as modified radical mastectomy with axillary lymph node dissection (MRM). A research article conducted by Karamarie et al regarding Acute and Persistent Pain after breast surgery describes that almost 60% of post-breast surgery patients experience severe pain, and there is persistent pain for 6 – 12 months in 10% of patients. Blanco and colleagues described two ultrasound-guided thoracic wall block techniques. First technique is involves injecting a local anesthetic agent between the pectoralis major and minor which is known as Pectoralis Nerve Block (PEC) I, and modified version of this technique also injected a local anesthetic agent between the pectoralis minor and the serratus anterior muscle or PEC II. However, we want to carry out this block technique (PEC I and II) visually immediately after the breast is lifted and then observe post-surgical pain for 1 x 24 hours.

METHOD : We report 1 case of patient undergoing MRM with PECs block that we performed after the breast is lifted. PEC I is injected 10 ml of Bupivacain 0.25% between pectoralis major and pectoralis minor muscles. PEC II is injected 20 ml of Bupivacain 0.25% between pectoralis minor and serratus anterior muscles. After the operation was complete, we evaluated post-surgical 24 hour in the recovery room and ward.
RESULTS & DISCUSSION: We evaluated post-surgical pain every hour in the recovery room and obtained a pain scale with a Numeric Rating Scale (NRS) of 0/10 for 2 hours. Then it was re-evaluated every 6 hours during the treatment room and an NRS was obtained between 0-1/10 with the use of analgesics given by the surgeon, namely ketorolac every 8 hours intravenously (IV). During the pain evaluation the patient did not receive the rescue analgesic Fentanyl and no side effects such as nausea and vomiting were found.
CONCLUSION : Intraoperative Pectoralis I and II blocks can be a good alternative choice for managing acute pain after Modified Radical Mastectomy (MRM) surgery because it can reduce the need for post-surgical opioids if the hospital does not have supporting instruments such as ultrasound (USG).

KEYWORDS : Breast cancer, Modified Radical Mastectomy, Intraoperative PECs block