Abstract:

Study Objective: The aim of this study was to evaluate the analgesic efficacy and safety of pectoralis-serratus interfascial plane block in comparison with thoracic paravertebral block for postmastectomy pain. Design: A prospective randomized controlled study. Setting: Tertiary center, university hospital. Patients: Sixty-four adult women, American Society of Anesthesiologists physical status classes I, II, and III, scheduled for unilateral modified radical mastectomy with axillary evacuation. Interventions: Patients were randomized to receive either pectoralis-serratus interfascial plane block, PS group (n = 32), or thoracic paravertebral block, PV group (n = 32). Measurements: Twenty-four-hour morphine consumption and the time to rescue analgesic were recorded. The pain intensity evaluated by visual analog scale (VAS) score at 0, 2, 4, 8, 16, and 24 hours postoperatively was also recorded. Main Results: The median (interquartile range) postoperative 24-hour morphine consumption was significantly increased in PS group in comparison to PV group (PS vs PV), 20 mg (16-23 mg) vs 12 mg (10-14 mg) (P < .001). The median postoperative time to first analgesic request was significantly shorter in PS group compared to PV group (PS, 6 hours [5-7 hours], vs PV, 11 hours [9-13 hours]) (P < .001). The intensity of pain was low in both groups in VAS 0, 2, and 4 hours postoperatively. However, there was significant reduction in VAS in PV group compared to PS group at 8, 16, and 24 hours postoperatively. Conclusions: Pectoralis-serratus interfascial plane block was safe and easy to perform and decreased intensity of postmastectomy pain, but it was inferior to thoracic paravertebral block. © 2016 Elsevier Inc. All rights reserved.

Keywords:

Pectoralis-serratus block; Paravertebral; Mastectomy pain

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