

THE BENEFIT OF PRE-INCISION ROPIVACAIN INFILTRATION IN REDUCING POSTOPERATIVE PAIN AFTER ROBOTIC THYROIDECTOMY

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Background/Purpose: This study investigated effect of pre-incisional local anesthetic infiltration in reducing postoperative pain after robotic thyroidectomy using bilateral axillo-breast approach.

Methods: In a randomized double-blinded study, 24 consecutive patients were assigned. Control group (n = 13) received pre-incisional infiltration with normal saline and study group (n=11) received with 0.1% diluted ropivacaine with normal saline. Postoperative maximal pain area, C-reactive protein (CRP) levels, visual analogue scores (VAS), immediate postoperative mean blood pressure (BP) and heart rate (HR) were assessed at 2hr, 6hr, 18hr, 30hr, 42hr and 66hr.

Results: The study group showed lower pain score compared with the control group at postoperative 2hr and 6hr (mean VAS : 68 vs. 41 and 50 vs. 30, respectively). This difference disappeared after postoperative 18hr. The push number of patient controlled analgesia (PCA) button was less in study group than control group (p=0.025). There was no significant difference between two groups in the CRP level, BP and HR. Most patients (80%) felt upper anterior chest pain as a maximal pain area and the other patients (20%) complained more sore throat postoperatively rather than anterior chest pain. When the VAS analysis was individually performed according to pain site, the effect of ropivacain for sore throat was not statistically significant.

Discussion & Conclusion: Pre-incisional ropivacain infiltration was effective in reducing postoperative pain, especially in anterior chest skin flap area.