ABSTRACT

In this study we evaluated the analgesic efficacy of combined deep and superficial cervical plexus block in patients undergoing thyroidectomy under general anesthesia. For this purpose, 60 patients undergoing elective thyroid surgery were randomized to receive a bilateral combined deep and superficial cervical block (14 mL per side) with saline (Group 1; n_20), ropivacaine 0.2% (Group 2; n_20), or ropivacaine 0.2% plus clonidine 2 mcg/kg (Group 3; n = 20). Deep cervical plexus block was performed with a single injection (8 mL) at the C3 level with ultrasound guidance. Superficial cervical plexus block consisted of a subcutaneous injection (6 mL) behind the lateral border of the sternocleidomastoid muscle. During surgery, the number of additional fentanil boluses was significantly reduced in Groups 2 and 3 compared with Group 1 (mean –A[133mcg], B-[100mcg], C-[100mcg]; P < 0.05). After surgery, the duration of analgesia were also significantly more in Groups 2 and 3 (P < 0.05) during the first 24 h. Adverse reactions status is considered to be statistically not significant since p > 0.05 between the groups. We conclude that combined deep and superficial cervical plexus block is an effective technique to alleviate pain during and immediately after thyroidectomy.

Key words: General anaesthesia, Cervical plexus block, Total thyroidectomy.