Randomized controlled trial of bilateral superficial cervical plexus block versus placebo in thyroid surgery

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BACKGROUND: Bilateral superficial cervical block during thyroid surgery can reduce postoperative pain but its value is unclear. This randomized clinical trial assessed the efficacy of such regional anaesthesia on postoperative pain after thyroid surgery performed under general anaesthesia. METHODS: Patients undergoing thyroid surgery were randomized to one of four groups in a double-blind fashion. Patients received a cervical block with placebo or bupivacaine at the start or end of surgery. Postoperative pain, analgesic use and length of hospital stay were assessed. RESULTS: There were 159 patients eligible for analysis. The bupivacaine group had significantly less pain than the placebo group (P = 0.016). The timing of bupivacaine administration did not significantly influence pain (preoperative versus postoperative, P = 0.723). There was no difference between groups in the amount of analgesic used. Length of hospital stay was the same in the bupivacaine and placebo groups (P = 0.925) and when bupivacaine was administered at the beginning or end of surgery (P = 0.087). CONCLUSION: Bilateral superficial cervical block with bupivacaine combined with general anaesthesia significantly reduced postoperative pain after thyroid surgery. Registration number: NCT00472446 (http://www.clinicaltrials.gov).