

A Comparative Study Between Two Different Doses of Buprenorphine as an Adjuvant to 0.5% Levobupivacaine in Ultrasound-Guided Supraclavicular Brachial Plexus Block

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Abstract: ***Background:** Ultrasound-guided supraclavicular brachial plexus block (SCBPB) is widely used for upper limb surgeries. Adjuvants like buprenorphine improve block characteristics and prolong postoperative analgesia. **Aim:** To compare the efficacy and safety of buprenorphine 2 mcg/kg and 3 mcg/kg as an adjuvant to 0.5% levobupivacaine. **Methods:** A prospective randomized comparative study was conducted on 70 patients undergoing upper limb surgeries, divided into two groups: Group B2 (2 mcg/kg) and Group B3 (3 mcg/kg). **Results:** Onset of sensory and motor block was significantly faster and duration of block was significantly longer in Group B3. Rescue analgesia requirement was significantly lower in Group B3. Hemodynamics were comparable. **Conclusion:** Buprenorphine 3 mcg/kg provides better block characteristics and analgesia.*

Keywords: Supraclavicular block, Buprenorphine, Levobupivacaine

1. Introduction

Regional anesthesia provides better postoperative analgesia and faster recovery. Ultrasound-guided supraclavicular block improves safety and efficacy.

2. Materials and Methods

Prospective randomized study with 70 patients divided into two groups. Standard inclusion and exclusion criteria applied.

3. Results

Demographic parameters were comparable. Onset was faster and duration longer in higher dose group. Rescue analgesia was reduced.

4. Discussion

Higher dose improves analgesia without significant side effects.

5. Conclusion

3 mcg/kg buprenorphine is superior to 2 mcg/kg.

Ethical Approval

Approved by Institutional Ethics Committee.

Conflict of Interest

None.

Funding

None.