

**A PROSPECTIVE DOUBLE BLIND RANDOMISED CONTROL STUDY ON  
COMPARISON OF DEXAMETHASONE AND NALBUPHINE AS ADDITIVES TO  
0.5% ROPIVACAINE FOR SUPRACLAVICULAR BRACHIAL PLEXUS BLOCK  
UNDER ULTRASOUND GUIDANCE**

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## ABSTRACT

**Title** A prospective double blind randomised control study on comparison of dexamethasone and nalbuphine as additives to 0.5% ropivacaine for supraclavicular brachial plexus block under ultrasound guidance.

**Background and objectives :** There are number of studies performed using combination of ropivacaine with adjuvants like dexamethasone or nalbuphine individually in supraclavicular brachial plexus block. Thus we are comparing both dexamethasone and nalbuphine with ropivacaine on the various objectives .

Primary objectives

- Onset and duration of sensory blockade.
- Onset and duration of motor blockade.
- Duration of analgesia.

Secondary objectives

- Adverse effects.
- Analgesics consumption in post operative period.

**Materials and methods:** The study was conducted after ethical committee clearance prospectively in 90 patients of 18 to 60 years of age undergoing upper limb surgeries. The patient selected as per the criteria for the study were randomly placed into either of the 3 groups and block was performed using the following drugs.

**Group RD:** using 30ml of 0.5% ropivacaine and 1ml of dexamethasone .

**Group RN:** using 30ml of 0.5% ropivacaine and 1ml of nalbuphine.

**Group RS:** using 30ml of 0.5% ropivacaine and 1ml of normal saline.

**Results and conclusion:** Perineural dexamethasone or nalbuphine added to ropivacaine in supraclavicular brachial plexus block is extremely effective in reducing the time of motor block onset and prolonging the duration of sensory and motor blockade. It is also effective in providing prolonged postoperative analgesia. No side effects were evidenced.

**Keywords :** Nalbuphine and dexamethasone

**Ropivacaine 0.5%**

**USG guided supraclavicular brachial plexus block**