

# **A Clinical Comparison between 0.5% Levobupivacaine and 0.5% Levobupivacaine with Dexamethasone 8mg Combination under USG Guided Brachial Plexus Block by Supraclavicular Approach.**

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## **Abstract**

Regional anaesthesia has been preferred over general anaesthesia in many orthopaedic surgeries due to lack of associated complications in regional blocks. Increasing the duration of local anaesthetic action can obtain the desired effect of prolongation of the postoperative patient comfort. Many adjuvants to local anaesthetics such as epinephrine, clonidine, opioids, dexmedetomidine and also neostigmine have been tried. Recently, dexamethasone has been found to prolong postoperative analgesia, reducing the requirement of the local anaesthetic and also the side effect profile. Hence our study was conducted to analyse the efficacy of dexamethasone as an adjuvant drug to levobupivacaine. After institutional ethical committee approval, CTRI registration and patient consent, a double blinded randomised controlled study was conducted in 50 patients aged 18-65 years of ASA I&II undergoing upper limb surgeries distal to mid-humeral level over a period of 1 year. The mean duration of post-operative analgesia in Group D was  $1022.2 \pm 62.67$  minutes and in Group S was  $777.40 \pm 34.19$  minutes ( $p < 0.001$ ). The mean total dose of rescue analgesics required was more in Group S when compared to Group D in the first 24hrs. The onset of sensory and motor block was faster in Group D when compared to Group S. The mean duration of sensory and motor block was significantly longer in Group D than Group S. The addition of dexamethasone to levobupivacaine in SCBP blockade was associated with faster onset as well as prolonged duration of sensory and motor block, prolonged duration of post-operative analgesia and required less rescue analgesics.

## **Keywords:**

Levobupivacaine dexamethasone brachial plexus block analgesia