



An-Najah National
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Research proposal

**Dexmedetomidine as an adjuvant to local anesthesia in
Supraclavicular Plexus Block: A *Randomized Controlled Trial*.**

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Abstract

Introduction: The field of medicine in general and anesthesia in specific are developing rapidly, in parallel nowadays, intending to decrease pain and increase patient's satisfaction. Dexmedetomidine is a highly selective α_2 -adrenoceptor agonist. Its sedative, anxiolytic, analgesic, sympatholytic, and hemodynamic stabilizing properties have been a focus of attention after its approval by the FDA; in this study, we will investigate the effect of Dexmedetomidine as an adjuvant to local anesthesia in Supraclavicular Plexus Block.

Methodology: The participants in this study were randomized into two groups, both groups were given Bupivacaine as a local anesthetic, and Dexmedetomidine was added to one group. During the operation patients were evaluated for the onset of the sensory and motor block, as well as blood pressure, After the surgery patients were evaluated for pain, somnolence nausea and vomiting, and their blood pressure was measured again.

Results: A total of 53 participants were enrolled in the study, with 28 in the intervention group and 25 in the control group, this study demonstrate that Dexmedetomidine significant increase the duration of sensory and motor block, it also accelerates the onset of anaesthesia and prolongs the onset of analgesia.

Conclusion: Dexmedetomidine has favorable effect on anesthesia and analgesia with no effect of the hemodynamics of the patients.

Key words: Dexmedetomidine, Bupivacaine, Supraclavicular Plexus Block.