



▼ POST GRADUATES ABSTRACTS

PG -01 : DOUBLE BLINDED RANDOMISED STUDY OF TWO DIFFERENT LOCAL ANAESTHETIC SOLUTIONS FOR ULTRASOUND GUIDED SUPRACLAVICULAR BRACHIAL PLEXUS BLOCK: BUPIVACAINE ALONE OR EQUAL MIXTURE OF LIGNOCAINE + BUPIVACAINE.

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Introduction: Supra clavicular brachial plexus block (SCBPB) is considered the best alternative for general anaesthesia for upper limb surgeries. Mixture of local anaesthetics (LA) are commonly used to have a faster onset while also prolong the duration of action. We hypothesized that when the LA is deposited very close to neural elements using Ultra Sound Guidance (USG), the onset of action of bupivacaine will not be significantly prolonged compared to the commonly used bupivacaine-lignocaine combination.

Methodology: After getting hospital ethical committee approval, 25 - ASA 1 and 2 patients undergoing elective elbow or below elbow surgeries were recruited. In Group LB, SCBPB was performed with 10 ml of 2% lignocaine with adrenaline + 10 ml 0.5% bupivacaine and in Group B with 20 ml of 0.5% bupivacaine. Onset of complete sensory and motor blockade in all 4 major nerve distributions (Median, Ulnar, Radial

and Musculocutaneous) and duration of analgesia were noted by a blinded observer.

Result: Demographic data were comparable between the two groups. With 20 ml of LA volume, there were no failed blocks in either group. The mean time to complete sensory block was 59 (55-63) minutes in group LB and 19 (11 – 27) minutes in group B, $p = 0.000$. The mean time to complete motor block was 50 (40 – 61) minutes in group LB and 19 (12 – 27) minutes in group B, $p = 0.000$. The mean duration of analgesia was 16 (13 -18) hours in group B and 7 (6 - 9) hours in group LB, $p = 0.000$.

Conclusion: We concluded our study stating that a mixture of lignocaine - bupivacaine produced a significantly shorter onset than bupivacaine alone in US guided SCBPB (19 min vs 59 min). The duration of analgesia was significantly prolonged in the bupivacaine group (16 hrs vs 7 hrs) than the combination group.