

EVALUATION OF BUPRENORPHINE AS AN ADJUNCT TO LIGNOCAINE AND BUPIVACAINE MIXTURE IN AXILLARY PERIVASCULAR BLOCK

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ABSTRACT

Introduction: The alleviation of pain is the main concern of anaesthesiologists and has received tremendous focus in this evolving field of medicine. The limitations of local anaesthetics are: slower onset and shorter duration of action. Different adjuncts have been tried to fill the lacunae created by the local anaesthetics. The existence of opioid receptors in peripheral nerve tissue has led to investigation of incorporating small doses of opioids in peripheral nerve blocks, hoping to achieve analgesia with minimal central side effects. Studies have shown that buprenorphine is superior to morphine in postoperative analgesia.

Materials & Methods: A prospective randomised double blind study was conducted on 60 healthy consenting adult patients scheduled for upper extremity surgery. The patients were assigned randomly to either of two groups based on the drugs used for the blocks: Control group (Local Anaesthesia alone) and Intervention group (Local Anaesthesia + buprenorphine). Post operative pain was assessed by Visual Analogue scale and any complication was duly noted. Collected Data was analysed by SPSS ver. 19 using appropriate statistical tests.

Results: Mean age of the study subjects was 42.2 ± 6.1 years. No statistical difference was noted in onset of sensory and motor block. The mean latency of block was 22.96 ± 4.4 and 18.7 ± 3.84 minutes in group I and II and the difference was statistically significant. The duration of post op analgesia was also significantly higher in Intervention group (6 ± 0.9 vs. 15.5 ± 3.4 hours). Mean VAS scores in both groups were compared at 4, 8, 12, 24, 36 and 48 hours. The mean VAS scores were significantly higher in control group till 36 hours.

Conclusions: Addition of buprenorphine decreases the latency of block with early establishment of surgical anaesthesia, improves the quality and duration of post-op analgesia, and also reduces the number of doses required for postoperative analgesia without affecting the duration of motor block and hemodynamic stability.

KEYWORDS: Adjunct, Brachial Plexus Block, Buprenorphine, Local Anaesthesia