**Original article:**

**A comparative study of Ropivacaine and Bupivacaine in combined spinal epidural anaesthesia and Post- operative analgesia**

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**Abstract:**

**Objective:** To compare the efficacy and safety of Ropivacaine with Bupivacaine in providing anaesthesia and post operative analgesia in lower abdominal and lower limb surgeries in terms of, onset & duration of anaesthesia, hemodynamic stability & post operative analgesia.

**Study Design:** Prospective observational study.

**Materials and Methods:** Present study was conducted in 60 patients undergoing lower abdominal and lower limb surgeries. They were randomly allocated into two groups of 30 each. Combined spinal epidural anaesthesia was standardized. Haemodynamic parameters, onset and duration of sensory and motor blockade, level achieved, regression and side effects & post operative analgesia were compared between the two groups. Data was analysed statistically using student unpaired t test.

**Results:** The two segment regression time, mean duration of sensory blockade & motor blockade was decreased in ropivacaine group which was statistically significant p<0.5. Duration of motor blockade was significantly shorter in ropivacaine group.Excellent analgesia, with minor side effects and stable haemodynamics was noted in ropivacaine group.

**Conclusion:** We conclude that use of ropivacaine for Combined spinal epidural anesthesia in the lower abdominal and lower limb surgeries provided an adequate level of block for the surgery with faster onset of sensory and motor blockade, lesser duration of motor blockade with good analgesia and stable hemodynamics. There is no distinct advantage of ropivacaine over bupivacaine in postoperative analgesia.

**Keywords:** Bupivacaine , Combined spinal epidural anaesthesia, Post- operative analgesia, Ropivacaine