

Comparative Evaluation of Postoperative Epidural Analgesia In Patients Posted For Lower Abdominal And Lower Limb Surgeries With 0.3% Ropivacaine And 0.2% Bupivacaine

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Abstract--- *postoperative epidural analgesia comparison between ropivacaine and bupivacaine*

Keywords-- *Lower abdominal, lower limb, ropivacaine, bupivacaine*

I INTRODUCTION:

I.I. Objectives: Onset and duration of analgesia and hemodynamic changes

For reducing post operative pains after lower limbs and abdominal surgeries epidural analgesia is considered as gold standard method. It also helps in reducing stress response .amongst various drugs used for the post operative pain relief lignocaine, bupivacaine and ropivacaine most commonly used⁽¹⁻⁶⁾. There are many studies conducted in AVBRH, Sawangi Meghe Wardha⁽⁹⁻¹⁷⁾ . Evidence suggest that ropivacaine a new amide developed as there is life threatening cardiotoxicity of bupivacaine. Patients controlled epidural analgesia has several advantages over intravenous patient controlled analgesia, including superior analgesia, suppression of stress response to surgery and safety.

II METHODS:

Study design: Comparative experimental prospective study

Setting: JNMC, sawangi meghe wardha

Participants: Patients between the age group of 18-65 years and ASA grade 1 and 2

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Bias: The patients will be randomly allocated into two groups, one group of 40 patients will be receiving 0.2% bupivacaine & second group of 40 patients will be receiving 0.3% ropivacaine

Study size: The study will be conducted on 80 adult patients. The study size calculated by using openepi app

Statistical methods: Chi square test, Two tail Fishers Exact Test, Anova & Bonferroni's correction for multiple comparison

III EXPECTED OUTCOMES/RESULTS:

Bupivacaine has faster onset and longer duration of action while ropivacaine is hemodynamically more stable as compared to bupivacaine.

IV DISCUSSION:

For reducing postoperative physiological response epidural anaesthesia needed. In present study the patients receiving bupivacaine have faster and longer duration of onset while ropivacaine is hemodynamically more stable. The mean time for complete motor recovery is compared between two groups shows that duration of motor block is significantly longer in patients receiving bupivacaine as compared to ropivacaine. A number of studies from this area will be reviewed for further details ⁽¹⁸⁻⁷²⁾.

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