**Original article**

**A comparative analysis of the use of Clonidine Vis a Vis Fentanyl when used as an adjunct to Bupivacaine for Postoperative analgesia**

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**Abstract**

The use of adjuncts to local anaesthetics to provide analgesia during surgery is a fairly common procedure. However, not many analytical studies have been done to evaluate their postoperative efficacy. It was attempted to compare the quality of analgesia and the requirement of sedation during the postoperative period while using Clonidine with that of Fentanyl when used as adjuncts to 0.125% Bupivacaine via an epidural catheter placed at the L2- L3 intervertbral space.

60 patients undergoing lower abdominal and lower extremity surgeries under spinal anaesthesia with epidural analgesia for post operative pain relief were selected. The effects of the addition of 1µg/kg of Clonidine and 2µg/ml of Fentanyl on the efficacy and duration of epidural analgesia produced by 10 ml of 0.125% Bupivacaine for post operative analgesia were compared. The verbal numerical scale of pain assessment was explained to the patient during preoperative assessment. A bolus of 3mg of Morphine was given when the patient demanded pain relief for the first time in the post operative period and for subsequent requirements. Pain assessment in the postoperative period was done every two hours with verbal numerical scale (0-10) for 12 hours and then at 24 hours. Ramsay Sedation Scale was used for assessment of sedation. Adverse effects if any were noted. Postoperative Pain score on Verbal numerical scale and sedation scores were analyzed using non-parametric analysis (Mann-Whitney U test).

**Result:** The Pain score was significantly less in the Clonidine group as compared to the Fentanyl group. There was similarly a significant difference in the requirement of Morphine to be supplemented. This difference however was significant only for the first four hours postoperatively.

**Key words:** Epidural analgesia, Sedation, Postoperative Analgesia