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**Comparison of intrathecal Bupivacaine hydrochloride with Fentanyl citrate and Bupivacaine hydrochloride with Butorphanol hydrochloride for postoperative analgesia in patients undergoing lower abdominal surgery: A prospective observational cohort study**

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**ABSTRACT**

The study was performed to compare the efficacy of intrathecal Bupivacaine hydrochloride with Fentanyl citrate and Bupivacaine hydrochloride with Butorphanol hydrochloride in providing post op analgesia after lower abdominal surgery. This single blinded randomized prospective cohort study was done on 80 patients of either sex aged between 18 to 55 years, of ASA status class 1 undergoing elective surgery under spinal anaesthesia. Patients were randomly allocated to two groups: Group B and Group F.

Group B received 0.5 percent hyperbaric Bupivacaine 3 ml + 0.5 ml (50 micrograms) of Butorphanol. Group F received 0.5 percent hyperbaric Bupivacaine 3 ml + 0.5 ml (25 micrograms) Fentanyl. HR, SBP, DBP, MAP, Pulse rate, Spo<sub>2</sub> were recorded before giving spinal anaesthesia and after giving it. Any adverse effects, if observed, were treated accordingly. Statistically Bupivacaine plus Butorphanol group was significantly superior in respect to post-operative analgesia compared to Bupivacaine plus Fentanyl group when confounding factors were eliminated. [1,2]

**Keywords:** Spinal anaesthesia, Bupivacaine, Butorphanol, Fentanyl, post-operative analgesia.

This study was carried out to evaluate the efficacy of opioid analogue like Butorphanol versus Fentanyl with respect to the onset of sensory and motor block pre-operatively and then time duration till return of pain at surgical site and requirement of rescue analgesics postoperatively. [1, 18]

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