

**COMPARATIVE STUDY OF INTRATHECAL
BUPIVACAINE AND LEVOBUPIVACAINE
WITH FENTANYL
FOR CESAREAN SECTION**

Abstract:

AIM: The aim of our study was to compare the effects of intrathecal administration of 0.5 % hyperbaric bupivacaine and 12.5 mcg of fentanyl with 8.75 mg of 0.5 % isobaric levobupivacaine and 12.5 mcg of fentanyl in parturients posted for elective cesarean section.

They were randomly allotted into two groups of 30 each namely , group L and group B.

Parturients in **Group B** received 0.5 % Hyperbaric Bupivacaine 8.75 mg and fentanyl 12.5 mcg , making a total volume of 2 mL and it was given intrathecally

Parturients in **Group L** received 0.5 % Isobaric Levobupivacaine 8.75 mg and Fentanyl 12.5 mcg ,making a total volume of 2 mL and it was given intrathecally.

In our study we observed the efficacy of sensory blockade, efficacy of motor blockade , hemodynamic parameters , APGAR score for neonatal out come and time to request for rescue analgesia.

The collected data was analysed using chi square test and p value of < 0.05 was considered significant.

Group L showed a better hemodynamic stability in terms of pulse rate, mean arterial pressure (MAP), absence of adverse effect such as hypotension, nausea and vomiting, prolonged sensory blockade, lesser duration of motor blockade.

Group B showed a significant fall in MAP, and had significant adverse effects, longer duration of motor blockade.

Conclusion: we conclude that 8.75 mg of 0.5 % Isobaric Levobupivacaine with 12.5 mcg fentanyl when given intrathecally in elective caesarean section had prolonged sensory blockade, with earlier regression of motor blockade, stable hemodynamic parameters and decreased incidence of adverse effects such as hypotension, nausea and vomiting than 8.75 mg of 0.5 % Hyperbaric Bupivacaine with 12.5 mcg fentanyl. APGAR score at 5 minutes was more than 7 in both the groups and it showed that study drugs had no adverse effect in neonates

So we conclude that 0.5 % Isobaric Levobupivacaine with fentanyl is a better alternative to 0.5 % Hyperbaric Bupivacaine with fentanyl in elective caesarean section.

Keywords:

Spinal anaesthesia, Fentanyl, Hyperbaric Bupivacaine, Isobaric Levobupivacaine, Cesarean section.