



▼ POST GRADUATES ABSTRACTS

PG -05 : COMPARISON OF EPIDURAL BOLUSES OF 0.08% LEVOBUPIVACAINE AND 0.1% ROPIVACAINE USING FENTANYL AS AN ADJUVANT FOR LABOUR ANALGESIA

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Introduction: Epidural analgesia is the most effective technique of labour analgesia. However increase in instrumental delivery is one of the hindrance factor in practise of epidural labour analgesia. Our previous study on labour analgesia with 0.1% Levobupivacaine showed 32% instrumental delivery and none in 0.1% Ropivacaine group. We hypothesized that 0.08% Levobupivacaine with fentanyl may reduce the incidence of instrumental delivery similar to 0.1% Ropivacaine with fentanyl and provide better maternal outcome. Hence, we decided to compare the effectiveness of 0.1% Ropivacaine and 0.08% Levobupivacaine with fentanyl 2 g/ml as an adjuvant for epidural labor analgesia in terms of mode of delivery, onset, duration and quality of analgesia.

Methods: 70 nulliparous parturient with singleton uncomplicated pregnancy, who requested labour analgesia were recruited by convenient sampling. They were randomized into two groups to receive 0.08% of Levobupivacaine (n=35) in Group L or 0.1% of ropivacaine (n=35) in Group R with 2 g/ml fentanyl as intermittent epidural bolus. The epidural analgesia was initiated with 12 ml of study drug solution in active stage of labour (cervical dilation > or = 3cm). Further analgesia was maintained by repeated demand bolus (12ml of the same study drug solution) whenever the VAS score was > 3. Onset, duration and quality of analgesia, degree of motor blockade was analysed.

Maternal outcome was evaluated in terms of mode of delivery, duration of labour and assisted vaginal delivery and the neonatal outcome by APGAR score.

Results: Demographic characteristics were comparable between the two groups. In Group L, out of the 31 vaginal deliveries, two had instrumentation (6.45%) whereas in Group R, out of the 22 vaginal deliveries, one underwent instrumentation (4.54%) which was statistically not significant (p=0.739). When comparing the mode of delivery, in Group L (n=35), 4 parturients underwent caesarean section (11.4%) and in Group R (n=35), 13 underwent caesarean section (37.1%) which was statistically significant (p=0.012**). Mean onset of analgesia in Group L was 22.43 ± 2.6 min and in Group R was 21.00 ± 2.5 min which was clinically and statistically not significant (P=0.37). Duration of analgesia in Group L was 67.2 ± 9.7 min and in Group R was 66.09 ± 12 min which was clinically and statistically not significant (P=0.66). More than 80% of parturients had excellent pain relief in both the groups.

Conclusion: We conclude that 12ml of intermittent epidural boluses of 0.08% Levobupivacaine and 0.1% Ropivacaine with 2 g/ml fentanyl provided equal and effective analgesia during labour without any motor blockade in nulliparous women and had similar incidence of instrumental vaginal delivery which is not related to epidural analgesia.