Comparison of single dose of bupernorphine versus morphine administered during induction of Anesthesia for pain relief and sedation after lumber laminectomies

Abstract

Background&Objective: Post operative pain is a common phenomenon that it is one of the important problems in surgery. Different methods have been used to control post operative pain. Morphine and Buprenorphine are classified as narcotics, and their effect on post operative pain relief has been evaluated in this study.

Materials&Methods: This randomized clinical trial (RCT) was done on 40 patients with lumbar disk herniation that randomly classified in morphine and buprenorphine group. During induction of anaesthesia 0.2 mg/kg morphine and 4.5μ/kg buprenorphine were injected intravenously to the corresponding groups, respectively. At the end of anaesthesia, heart rate, systolic and diastolic blood pressure were evaluated as well as severity of pain. Then, collected achieved data were analysed.

Results: The severity of pain in buprenorphine group was less than morphine at all the times except the time of discharge from recovery (p<0.05). With respect to sedation there was a meaningful difference between the two groups at the time of entering recovery and 15 minutes later. The sedation was more in buprenorphine group, (p<0.05) There was no meaningful statistical difference in relation to heart rate between the two groups. Systolic blood pressure, between two groups was significant except at the time of entering recovery. Also, systolic blood pressure was not significant between two groups.

Conclusion: This study showed the bupernorphine has long anaesthesia and sedation.

Key Words: Morphine- Buprenorphine- Post operative pain

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