Ketamine versus magnesium sulfate with caudal bupivacaine block in pediatric inguinoscrotal surgery: A prospective randomized observer-blinded study

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Abstract:

Introduction: Possible approaches for postoperative analgesia after pediatric inguinoscrotal surgery are caudal block by bupivacaine/ketamine (BK) and bupivacaine/magnesium sulfate (BM). Aim: The purpose of the following study is to compare the analgesic efficacy and safety of ketamine and magnesium sulfate in combination with bupivacaine for caudal blockade in pediatric patients after inguinoscrotal operations. Materials and Methods: Patients randomly received one of the two solutions for caudal epidural injection after induction of general anesthesia. Group-BK: Were given a mixture of 0.25% bupivacaine and 0.5 mg/kg of ketamine. Group-BM: Were given a mixture of 0.25% bupivacaine and 50 mg magnesium sulfate. Postoperatively, a blinded post-anesthesia care unit nurse assessed the quality of analgesia with a visual pain analog scale (VPAS). Significant pain is defined as one that has a VAPS of ≥3. Results: Forty American Society of Anesthesiologists I-II children (20 in each group) completed the study. The two groups were comparable regards age, sex, body mass index, anesthesia and surgery durations, recovery time and sevoflurane concentration. The mean duration of caudal analgesia ± standard deviation was 462 ± 17.2 min versus 398.05 ± 12.9 min for BK and BM groups, receptively (P

Keywords:

Ingunoscratal surgery, ketamine, magnesium sulphate, pediatric caudal block

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