Comparison of Antiemetic Efficacy of Dexamethasone and Metoclopramide During Spinal Anaesthesia for Caesarean Section

Abstract Type: Original Research
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Background: Despite the popularity of spinal anaesthesia (SA) in obstetric practice, this method is often associated with such complications as intraoperative nausea and vomiting (IONV). Some published articles have suggested the use of dexamethasone to prevent postoperative nausea and vomiting but the optimal choice of antiemetic prophylaxis for IONV in parturients undergoing caesarean section still remains unclear.

Objective: The goal of the present study is to compare the efficacy of dexamethasone and metoclopramide in prevention of IONV during caesarean section under SA.

Method: After local ethics committee approval, 104 patients undergoing caesarean section under SA were recruited to this randomized study. Patients were allocated into three groups using a computer-generated random number table. Two mL of normal saline were administered intravenously in the first group (Group A, placebo, n = 35), 10 mg of metoclopramide were used for the second group (Group B, n = 33) and 8 mg of dexamethasone were used for the third group (Group C, n = 36). We used 0.5% bupivacaine (2.68 ± 0.02 mL) for spinal block. The Results were analyzed by calculating frequencies of IONV in the sample and Student's t test.

Results and Conclusion: No statistically significant difference was detected between groups in mean anthropometrical, physiological and obstetric characteristics. No patients had surgical or anaesthesia complications. The rate of IONV was 17.1% in group A, 18.2% in group B and 11.1% in group C. The study Results suggest that the use of dexamethasone provides less risk of IONV and may be better choice for IONV prevention than metoclopramide.