

Determining the effect of intravenous magnesium on improving the quality of anesthesia for appendectomy candidates under regional anesthesia (spinal)

Abstract

Background : One of the major challenges in surgery is pain control after surgery.

Aim : The present study was conducted with the aim of investigating the role of magnesium sulfate in improving the quality of anesthesia in patients who are candidates for appendectomy surgery.

Materials and Methods : In this study, a total of 84 patients were included in the study, 42 in the control group and 42 in the intervention group. The intervention group received 50 mg/kg of magnesium sulfate and the control group received the same amount of distilled water as a placebo. After the surgery, the patients were examined in terms of pain, nausea and vomiting, anxiety, blood pressure and heart rate, and the satisfaction of the surgeon in terms of muscle relaxation during the surgery. After collecting the data, they were analyzed in SPSS software.

Results : The average age of the patients in the intervention group was 35.2 years and in the control group was 30.02 years, 54 of the patients were female and 30 of the patients were male. The intervention group was less and this difference was statistically significant. In the examination of sedation in these patients in the first, third, sixth, twelfth and eighteen hours of the study, a significant difference was observed between the two groups, and in the examination of nausea and vomiting of the patients between No significant difference was observed between the two groups. During surgery, a significant difference was observed in the blood pressure and heart rate of patients receiving magnesium sulfate in terms of surgeon satisfaction compared to the control group.

Conclusion : Magnesium sulfate is effective in controlling patients' pain and anxiety and the surgeon's satisfaction during surgery, but it is not effective in controlling patients' nausea and vomiting.

Keywords:

Magnesium sulfate, appendectomy, anesthesia