Investigating the results of using Dexamethasone injected preoperatively and postoperatively on complications after spinal anesthesia in patients operated for TUL surgery in 2022 and 2023

Abstract

Background: Despite the many advantages of spinal anesthesia, this method is not without complications and it causes complications such as chills, nausea and vomiting, and headaches. Lack of proper control of these complications causes discomfort to the patient and affects the patient's satisfaction with the operation, quality of life, and his individual performance.

Aim: To evaluate the effect of dexamethasone on complications after spinal anesthesia in patients operated for TUL surgery

Materials and methods: This descriptive-analytical study aimed to investigate the results of pre- and post-operative injection of dexamethasone on complications after spinal anesthesia in patients undergoing TUL. The study included 135 patients in the form of three groups of 45 cases: the first group receiving dexamethasone 8 mg before the operation, the second group receiving dexamethasone 8 mg after the operation, and the third group that did not receive dexamethasone (control group). Patients were asked about headache, chills, nausea and vomiting during recovery and headache at 2 hours after surgery, 24 hours after surgery, and 48 hours after surgery. After completing the information, the data of all patients were entered into the computer and analyzed in SPSS version 25 software environment and according to the study goals.

Results: The patients of the three groups had no significant differences in terms of age (P=0.456), sex (P=0.746), weight (P=0.303), smoking (P=0.407), and ASA class (P=0.557). while there was a statistically significant difference between the three groups in terms of postoperative shivering (P=0.027), postoperative nausea and vomiting (P=0.034), and postoperative headache severity (P=0.038).

Conclusion: The results of the present study showed that in the patients undergoing transurethral lithotripsy under spinal anesthesia, administration of dexamethasone 8 mg in both methods before or after the operation is

associated with a significant reduction in postoperative complications including shivering, nausea/vomiting, and headache compared to the control group. In addition, it was observed that, in general, the administration of dexamethasone before or after the operation did not have a significant difference with each other in terms of the effect on postoperative shivering, nausea/vomiting, and headache, and the effect of these two methods on reducing the above complications was almost similar to each other.

Keywords: Spinal anesthesia, dexamethasone, transluminal lithotripsy.