

Evaluation of the effect of fluid intake before and during surgery on urinary retention after open hernia surgery

Abstract

Background: Hernia is one of the most common diseases during the surgery of a surgeon and the most common type is indirect inguinal hernia and inguinal hernia on the right is more common than the left. Postoperative urinary retention is the most common complication of surgery with an overall prevalence of 10-20%.

Aim: Due to the importance of urinary retention in the study of the effect of intravenous fluid intake before and during surgery on urinary retention after open hernia surgery, we decided to conduct a study in this field.

Materials and methods: This study was performed on patients with elective open inguinal hernia surgery without past medical disease at random with a questionnaire and checklist from 2018 to 2020 in two centers affiliated to Ardabil University of Medical Sciences (Fatemi Hospital and Imam Khomeini Hospital). Patients were divided into 3 groups based on serum intravenously before and during surgery and evaluated for urinary retention.

Results: Out of 400 candidates for open hernia surgery, the majority of the study population was male (63%). The mean age of patients was 35.5 ± 12.9 years and ranged from 15 to 55 years. The type of hernia in most inguinal patients was right (50.8%). In most patients, the duration of operation was more than 1 hours (66.2%) and most patients received baseline serum (37%). Postoperative urinary retention was higher in patients receiving more than one liter of serum (65.9%). Postoperative urinary retention was higher in patients over 35 years of age with serum intake of more than one liter. Postoperative urinary retention was higher in male patients, low / normal BMI, right inguinal hernia.

Conclusion: The incidence of retention is associated with old age, low / normal BMI, serum therapy of more than one liter. By preventing and treating predisposing factors and modifying the volume of fluid therapy during and before surgery, the possibility of postoperative urinary retention can be reduced.

Keywords: fluid intake, urinary retention, hernia