Background: The identified risk factors for acute urinary retention after spinal anesthesia are the dose and duration of anesthesia, old age and anorectal surgical procedures. Aim: To assess the prevalence and risk factors of acute urinary retention in the program of ambulatory surgery with spinal anesthesia. Material and methods: Descriptive case control study. The medical records of 859 patients operated with spinal anesthesia between 2003 and 2006 were reviewed, and 18 patients aged 52 ± 16 years, that had an acute urinary retention, were identified. Forty vive randomly chosen patients aged 46 ± 14 years, without urinary retention were analyzed as controls. Results: The calculated prevalence of acute urinary retention was 2.8%. Male sex, an age over 50 years and hernia surgery were identified as risk factors for urinary retention with odds ratios of 5.8 (95% confidence interval (CI) 17-28), 3.1 (95%CI 1.-9.9) and 7.6 (95%CI 1.7-33.6), respectively. All cases were managed with intermittent catheterization. Hospital stay was one day in 91% and two days in the rest. Conclusions: in this series, acute urinary retention occurred in 2.8% of patients after spinal surgery. Male sex, age over 50 years and hernia repair procedures were identified as risk factors for the complication.

Keywords
Urinary retention, spinal anesthesia, ambulatory surgery