

Is Early Surgical Intervention Good to the Patients with Benign Prostate Hyperplasia with History of Acute Urinary Retention? A Population-Based Study

Introduction and Objective: Benign prostate hyperplasia (BPH) patients with acute urinary retention (AUR) history are a special group. This study aims to investigate whether early transurethral resection of prostate (TURP) to this group of patient results in better prognosis.

Materials and Methods: This is a retrospective population-based study. All the data was extracted from Taiwan National Health Insurance Research Database. Men over 50 years old diagnosed with BPH who had AUR history and underwent TURP between 2002 and 2004 were included. The patients were classified into 2 groups- early and late. Patients in early group received TURP less than 1 month after AUR, while in late group longer than 1 month. Patients who had prostate cancer, Parkinsonism, and multiple sclerosis were excluded. Postoperative complications of 2 groups were compared. Crude odds ratio (OR), 95% confidence intervals (CI) and a χ^2 test were used.

Results: There were 2373 patients (71.8%) in early group, while 932 patients (28.2%) in late group. In early group, significant less blood transfusion rate during hospitalization (2.5% vs. 5.2 %, OR: 0.47, 95% CI: 0.32-0.69) was noted. Within fourteen days after TURP, fewer patients in early group, especially age between 50 to 70 year-old, needed to be recatheterized (9.6% vs. 16.3 %, OR: 0.54, 95% CI: 0.37-0.80). The frequency of postoperative urinary tract infection (20% vs. 16.2%, OR: 1.29, 95% CI: 1.06-1.58), and lower urinary tract stricture (6.6% vs. 4.4 %, OR: 1.54, 95% CI: 1.08- 2.19) in early group were increased. Both occurred in age elder than 70 year-old. There were no significant differences in sepsis, shock, hematuria, re-surgical intervention of the prostate, second-line antibiotic use, medical expense and hospitalization stay.

Conclusions: There were no significant perioperative complications when the BPH patients with AUR history given early TURP. Early TRUP less than 1 month after AUR episode was associated with lower blood-transfusion and recatheterization risk.