

ANALYSIS OF CLINICAL FACTORS FOR RECOVERY OR NOT FROM URINARY RETENTION AFTER NON-UROLOGIC SURGERY

Hypothesis / aims of study

The urinary retention after non-urologic surgery is common complication reported 4-25%, but most of voiding failure is transient. We compared the clinical factors between transient retention group and failed group.

Study design, materials and methods

Between January, 2004 and December, 2006, we reviewed 160 patients (53 men, 107 women) with mean age 61.5 (range 46-75) years old who referred to voiding failure after non-urologic operation except spinal and pelvic surgery. Clinical factors compared between transient retention group (n=90) and refractory group (n=70) after 7 days of urethral Foley catheterization, are categorized by patient factor (sex, age by 60 years old, body mass index by 25 kg/m², pre-operation voiding symptom, hypertension, diabetes), surgical factor (operation time, intra-operative fluid volume injected (\geq 2000ml), volume of blood loss (\geq 1000ml), intra-operative catheterization), and patient controlled analgesia factor.

Results

There are no differences in operative factors, patient controlled analgesia factor between refractory group and transient group. But female gender (78.6% vs. 57.8%, p=0.007), age above 60 (80.0% vs. 43.3%, p<0.001), hypertension (51.4% vs. 26.7%, p=0.002), and diabetes (42.9% vs. 21.3%, p=0.005) of the patient factors shows distinction between groups. On logistic regression analysis, old age above 60 years (odds ratio=6.327, 95% confidence interval [CI]=1.896 to 21.118, p=0.003), pre-operative voiding difficulty (odds ratio=3.681, 95% CI=1.014 to 13.335, p=0.048), intra-operative blood loss (odds ratio=3.288, 95% CI=0.041, p=0.041), intra-operative catheterization (odds ratio=8.873, 95% CI=1.365 to 57.676, p=0.022) shows significance.

Interpretation of results

Results of our study demonstrate old age, pre-operative voiding difficulty, large amount of blood loss during operation may be risk factors of post-operative urinary retention. Urinary catheterization during operation reduced the risk of voiding failure after surgery.

Concluding message

Post-operative voiding failure is common but may be preventable, if concerning about the risk factors of patient and operation. In high risk group, long-term catheterization and preventable medication should be considered.

<i>Specify source of funding or grant</i>	none
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	this study is retrospective study by reviewing charts but followed the Declaration of Helsinki informed consent.
<i>Was the Declaration of Helsinki followed?</i>	Yes
<i>Was informed consent obtained from the patients?</i>	Yes