Evaluation of the Treatment Outcomes of Clean Intermittent Catheterization on Acute Urinary Retention

Leung KK, Lam MK, Lau SY, So HS, Chow TL
Surgery Department, United Christian Hospital

Keywords:
Acute Urinary Retention
Trial without catheter
Clean Intermittent Catheterization

Introduction
Acute Urinary Retention (AUR) is common among elderly patients. Trial without catheter (TWOC) has become a standard practice worldwide for men with Benign Prostatic Hyperplasia and AUR. If the patients failed in TWOC, indwelling urethral catheter will be reinserted. Besides the treatment options of the surgery (e.g. TURP / Prostate stent) or Long Term Foley Catheterization (LT Foley); the option of Clean Intermittent Catheterization (CIC) for the Acute Urinary Retention is still a controversy.

Objectives
To evaluate the outcomes of Clean Intermittent Catheterization for patients with Acute Urinary Retention.

Methodology
From January to December 2016, male patients had failed TWOC in the Surgery Urology Nurse Clinic (SUNC), the urology nurse will conduct a comprehensive assessment. The treatment options TURP, LT Foley and CIC will be offered to the patients. If patients are keen for the CIC, the urology nurse will follow the CIC protocol and provide quality urological nursing intervention in SUNC.

Result
Total 411 AUR patients were recruited in the TWOC program. The mean age of the patient was 73.4 (41-98) years. Total 296 (72%) patients were successful in TWOC; while 115 (28%) were patients had failed TWOC. 49 patients opted for CIC to manage their bladder emptying. 4 patients withdrew from CIC due to pain on catheterization or urethral bleeding.
Total 45 patients were recruited into CIC group; the mean age of the patient was 70 (55-86) years. Total 70 patients were recruited into LT Foley group; the mean age of the patient was 76.9 (49-98) years. They refused to try CIC and opted to continue using indwelling Foley catheter with further investigation or surgery. For the CIC group, 37 (82.2%) patients returned their previous voiding condition within one month after CIC commenced. 8 (17.8%) patients needed to continue CIC with further investigation
or surgical intervention. The 30-day AED attendance in the successful TWOC group was 17 (5.7%), CIC group was 3 (6.7%) and LT Foley group was 18 (25.7%). The CIC was an effective management for the patients with AUR. Most of AUR patients can resume self-void after a short period of CIC. The complication rate was similar to the successful TWOC group and significantly lower than the LT Foley group. Overall 82% of AUR patients can resume self voiding after the nursing intervention in SUNC. TWOC and CIC program were successful to reduce the unnecessary hospitalization and reduce bed occupancy in surgical ward. The waiting queue of the operation TURP was shortened after the TWOC and CIC program commenced in SUNC.