

MANAGEMENT OF LOWER URINARY TRACT DYSFUNCTION IN ACUTE CARE: WHAT IS IMPORTANT FOR MEDICAL STAFFS TO GET MORE APPROPRIATE BEHAVIOR ?

Hypothesis / aims of study

Indwelling urinary catheters (IUCs) initially placed in acute care frequently. Inappropriate use of IUCs or continued overuse of IUCs in acute care leads to both infectious and non-infectious complications. On another front, many of the patients in acute care have increasing post voiding residual bladder volume (PVR). If abnormal PVR increasing is missed, that may lead to complications for upper urinary tract. Every medical staff should have correct understanding and solid skills for urinary tract management. This study aimed to evaluate the results of improvement effort to reduce inappropriate urinary catheter use and improve the management for urinary tract dysfunction of patients in acute care.

Study design, materials and methods

We started educational programs for medical staffs (nurses, young doctors, physiotherapists) how to manage admitted patients with lower urinary tract dysfunction since 2010. At the same period we surveyed patients with IUCs annually, background of patients, indication of IUCs. Also we prepared ultrasonic bladder scanner in each ward so that medicals be able to assess (PVR) at the bedside of inpatient, and we also educated medical staff how to assess voiding function of the patients on the job.

Results

440-481 (mean 461.17) patients were admitted to our hospital on the day of the survey. The median age of the patients was 72.3 (13-98) and 46.6% were female. 69 (14.4%) patients had IUCs in 2010. Through educational program the rate of IUCs decreased to 48 (10.6%) in 2016. Nurses reported the indications of IUCs (Table 1). Inappropriated use of IUCs also decreased. The number of assessment of PVR with bladder scanner increased 782 (in 2010) to 2178 (in 2016) in total, 353 (in 2010) to 1669 (in 2016) in non-urological unit, respectively

Interpretation of results

Constant education and environmental arrangement for assessment of lower urinary tract dysfunction, such as equipment of bladder scanner, led to more appropriate management of IUCs or assessment for urinary tract function.

Concluding message

It is important for medical staffs working in any unit, whether in urological or in non-urological, to have adequate knowledge and skills to assess the urinary tract problems of patients in acute care. It is also important for manager of the medical institute to set up education program regularly, and prepare necessary equipment actively.

Table 1: Indications for IUCs reported by nurses

Indication of IUCs	2010 (%)	2016 (%)
Post-operative use with a duration conform protocols	17 (24.64)	20 (41.66)
Close monitoring of urine output (non-operative condition)	6 (8.96)	2 (4.17)
Palliative care for terminal ill patients	4 (5.8)	3 (6.25)
Urinary retention or bladder outlet obstruction	10 (14.49)	3 (6.25)
Bladder flush during bleeding	5 (7.25)	8 (16.67)
Patient is not mobile	19 (27.54)	10 (20.83)
For bed rest after examination (no need for monitoring of urine output)	4 (5.8)	0 (0)

Disclosures

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