548

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CHARACTERISTICS OF PATIENTS WITH ACUTE URINARY RETENTION; RETROSPECTIVE, MULTICENTER STUDY

Hypothesis / aims of study

Acute urinary retention (AUR) is often a complication of bladder outlet obstruction, which may result from benign prostatic enlargement caused by benign prostatic hyperplasia (BPH) in men. However, it can also occur as a consequence of neurological disease, injury, infection, pharmacotherapy or surgical procedures to treat urinary incontinence, primarily in women. Ongoing research and clinical studies continue to elucidate the risks of retention, strategies for prevention, and effective management. However, many unanswered questions remain. Objective of this study was to provide available data on the patients' characteristics, cause of AUR, and current management for patients with AUR.

Study design, materials and methods

This was a retrospective multicenter study at 9 university hospitals involving 287 men and women who had visited emergency room because of AUR between January to December 2008. AUR was defined as drained urine amount via catheter of ≥ 500cc. Patients' demographics, seasonal incidence, possible cause of AUR, and further management were evaluated.

Results

Of a total of 287 subjects, woman was 21.6% (62). The mean age was higher in men than women (69.7 vs. 58.9 years, p=0.011). Seasonal incidence was highest in October (13.4%) and lowest in September (5.3%) (Figure 1). Approximately 9% of women and 58% of men had previous history of treatment for lower urinary tract symptoms. Forty one percent of patients had previous history of AUR (43.0% of men, 32.2% of women) (Figure 2). Of those, 57% had 4 or more than 4 times of previous history of AUR. About 47% of cases were precipitated AUR (45.4% of men, 43.4% of women). Most common cause of AUR was discontinuation of medication for BPH (21.1%) followed by alcohol intake (14%) and cold medicine (13%) in men. In women, alcohol intake (26.9%) was the most common cause of AUR followed by cystitis (15%) and clot retention (7%). At discharge from emergency room, 19.5% were catheter free and could void spontaneously. Whereas, 52.7% had indwelling catheter and 27.7% was doing clean intermittent catheterization. One man had suprapubic cystostomy catheter. About 55% were prescribed alpha-blockers. At first trial without catheter (TWOC), 68.6% could void after a mean duration of 8.9 ± 7.6 days of catheter indwelling. Of 16 men who failed in TWOC, 6 had suprapubic cystostomy catheter, 4 had indwelling urethral catheter, 4 had transurethral resection of prostate, and 1 had open prostatectomy.

Interpretation of results

Approximately 61% of patients had a history of treatment for LUTS. Forty one percent had more than one episode of AUR previously. About 47% of cases were precipitated AUR.

Most common causes of the precipitated AUR might be preventable.

Concluding message

It is needed to enhance education and warning about the AUR for the patients with risks.

Also more attention should be taken by physicians for the patients.

Fig 1. Seasonal incidence of acute urinary retention (n=287)

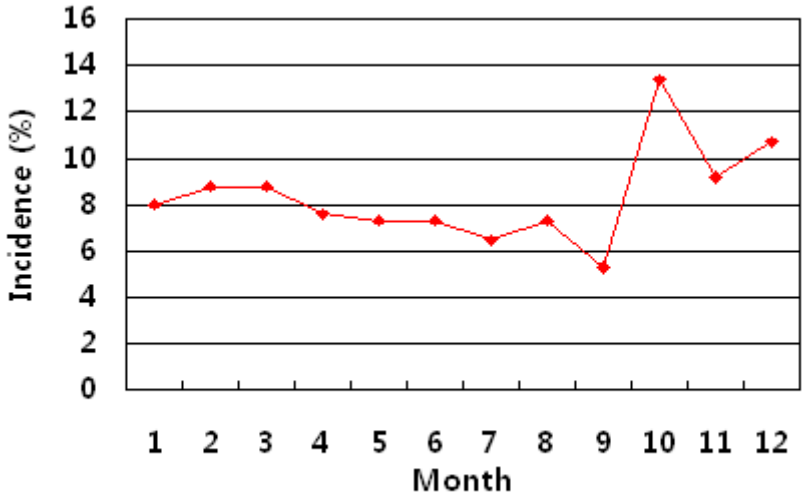
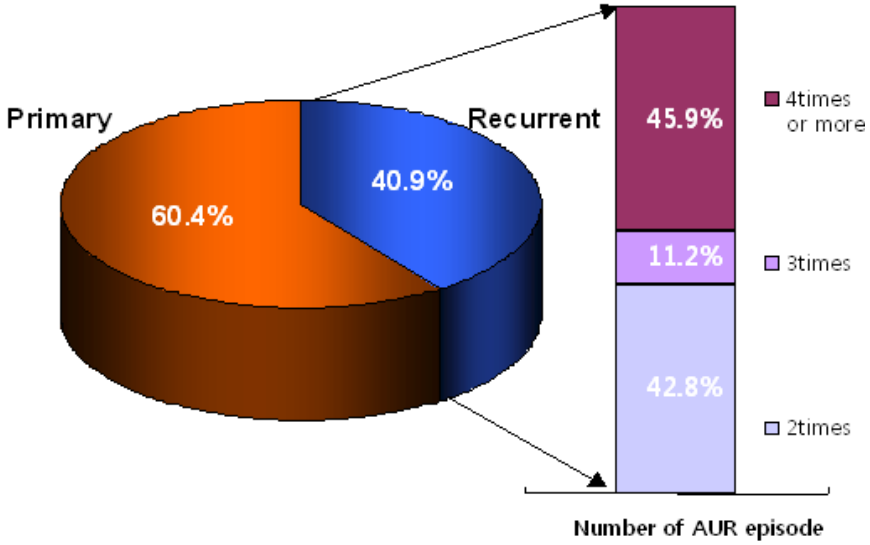


Fig 2. Primary and recurrent acute urinary retention (n=283)



Specify source of funding or grant	**None**
Is this a clinical trial?	**No**
What were the subjects in the study?	**HUMAN**
Was this study approved by an ethics committee?	**No**
This study did not require ethics committee approval because	**This was a retrospective chart review study and the study subjects were anonymously evaluated using study code.**
Was the Declaration of Helsinki followed?	**Yes**
Was informed consent obtained from the patients?	**No**