

THE VOIDING PATTERN AND THE PREVALENCE OF OVERACTIVE BLADDER SYNDROME IN PATIENTS WITH RECURRENT CYSTITIS

Hypothesis / aims of study

Chronic inflammation, whether triggered by urinary tract infection or otherwise, has been considered a possible underlying mechanism for OAB¹. The findings of bladder biopsy based on clinical investigations in OAB subjects have implied that inflammation is associated with the pathophysiology of OAB^{2,3}. The aim of this study was to compare voiding patterns between patients with recurrent cystitis (RC) and normal population and to investigate the prevalence of overactive bladder syndrome (OAB) in patients with RC.

Study design, materials and methods

This was a case-control study including adult women seen in urology clinic. A total of 79 women who treated with RC more than three times in previous 12months were included from January 2008 to December 2011. Controls were 79 women with stress urinary incontinence and without history of recurrent infection or voiding problem. Three-day bladder diaries, uroflowmetry and residual volume were evaluated in absence of an active infection. Voiding patterns between RC and control group were compared and the prevalence of OAB in patients with RC was evaluated. The OAB was defined at total score of the overactive bladder symptom score (OABSS) ≥ 3 and the urgency score of OABSS ≥ 2 and treated with anticholinergics more than 3 months.

Results

The mean age was 59.6 ± 10.8 years old. The mean 24-hour frequency was greater in women with recurrent cystitis than controls in the bladder diaries (7.2 ± 1.9 vs 6.4 ± 1.4 voids/day, $p=0.007$). The voided volume was lower in women with RC than controls (215.2 ± 81.2 vs 244.5 ± 95.1 ml, $p=0.042$). There was no difference of 24-hour voided volume in women with RC than controls (1492.6 ± 567.5 vs 1522.8 ± 530.9 cc, $p=0.066$). In uroflowmetry, the maximum flow rate was lower in women with recurrent cystitis than controls (24.3 ± 10.9 vs 28.5 ± 10.9 m/s, $p=0.023$). The voided volume and post-void residual volume were not different between two groups ($p=0.066$, $p=0.389$). The prevalence of OAB in patients with RC was 40% (32/79).

Interpretation of results

The mean 24-hour frequency was higher and the voided volume was lower in patients with RC than control group and the prevalence of OAB in patient with RC was high.

Concluding message

In the patients with RC, the frequency was higher, the voided volume was lower and the prevalence of OAB was relatively higher. Therefore, we should observe voiding pattern carefully when we treat patients with RC.

References

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Disclosures

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