

RISK FACTOR AFFECTING RECURRENCE OF CYSTITIS AFTER URO-VAXOM TREATMENT FOR FEMALE PATIENTS WITH RECURRENT CYSTITIS

Hypothesis / aims of study

In recurrent acute cystitis in women, low dose antibiotic prophylaxis can be recommended¹. However, antibiotics can lead to resistance of the causative microorganisms. The increasing prevalence of E.coli isolates that are resistant to antimicrobial agents has stimulated interest in nonantibiotic methods such as the oral immunostimulant OM-89 (Uro-Vaxom®) for the prevention of recurrent acute cystitis. In the meta-analysis the risk ratio for the development of at least 1 urinary tract infection (UTI) was significantly lower in the Uro-Vaxom® group and mean number of UTI was about half compared to placebo². In clinical perspective, however, the recurrence of acute cystitis is not uncommon after Uro-Vaxom® treatment for several months. Therefore, we evaluated the risk factors affecting recurrence of cystitis after Uro-vaxom treatment for female patients with recurrent cystitis.

Study design, materials and methods

We retrospectively reviewed and analyzed the medical records of patients who received Uro-vaxom treatment for at least 6 months. We excluded the patients with post-voided residual urine volume ≥ 200 ml, a history of urological condition such as cancer, urinary tract abnormality, indwelling catheter in urinary tract or urologic surgery. Patients were categorized into two groups: (1) no recurrent cystitis and (2) recurrent cystitis after Uro-vaxom treatment for female patients with recurrent cystitis. We compared the risk factors between two groups. The recurrent cystitis was defined as two more infections in six months or three or more in one year.

Results

A total 52 of women were included. Group 1 had 35 (67.3%) patients and group 2 had 17 (32.7%). Before and after Uro-vaxom treatment, the mean cystitis episodes for 6 months of patients was 4.19 ± 4.6 (2-24) and 1.17 ± 1.79 (0-6), which were significantly decreased ($p < 0.001$). For the recurrence of cystitis after Uro-vaxom treatment, only risk factor was uncontrolled diabetes (fasting plasma glucose level >120 mg/dL \pm casual plasma glucose >180 mg/dL) ($p=0.002$). There were no significant differences in the age, menopause, daily water intake, hormone replacement therapy or history of ESBL-producing E.coli.

Interpretation of results

Uro-vaxom treatment was effective for management of recurrent cystitis in women. However, the uncontrolled diabetes was a risk factor for failure of Uro-vaxom treatment.

Concluding message

Uro-vaxom treatment was effective for management of recurrent cystitis in women. However, the uncontrolled diabetes was a risk factor for failure of Uro-vaxom treatment.

Table 1. The clinical characteristics of the patients

| Variables | Recurrent cystitis after Uro-Vaxom treatment | | p-value |
|--|--|-------------------|---------|
| | No (n=35) | Yes (n=17) | |
| Age, years | 52.34 ± 12.42 | 58.53 ± 12.24 | 0.105 |
| Frequency of cystitis before treatment in past 6 month | 3.74 ± 4.14 | 5.12 ± 5.53 | 0.102 |
| Menopausal, n (%) | 23 (65.7) | 13 (76.5) | 0.435 |
| Hormone replacement therapy, n (%) | 0 | 1 (5.9) | 0.361 |
| Daily water intake, n (%) | | | 0.801 |
| < 1L | 3 (8.6) | 2 (11.8) | |
| 1-2L | 31 (88.6) | 14 (82.4) | |
| >2L | 1 (2.9) | 1 (5.9) | |
| ESBL, n (%) | 4 (11.4) | 1 (5.9) | 1.000 |
| Diabetes, n (%) | | | 0.002 |
| No | 33 | 12 | |
| Controlled diabetes | 2 | 0 | |
| Uncontrolled diabetes | 0 | 5 | |

References

1. Albert X et al. Cochrane Database Syst Rev 2004;3:CD001209
2. Beerepoot MA et al. J Urol. 2013;190:1981-9

Disclosures

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