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Kim S J[1], Lee H J[1], Kim S W[1], Hwang T K[1], Son H[2], Kwak C[2], Chung B H[3], Lee J Y[1]
***1.*** *Department of Urology, Seoul St. Mary's Hospital, The Catholic University of Korea,* ***2.*** *Department of Urology, Seoul National University,* ***3.*** *Department of Urology, Yonsei University*

# IS LOW-DOSE ANTIMUSCARINIC BETTER OPTION IN MEN WITH BPH/OAB? BALANCE BETWEEN EFFICACY AND SAFETY.

Hypothesis / aims of study

Anticholinergics in men with Overactive bladder (OAB) symptoms and other Lower urinary tract symptoms (LUTS) appears to be effective and safe in several randomized controlled study. Although urinary retention requiring catheterization is uncommon, we often encounter patients with subsequent mild to moderate voiding difficulty when treated with α-blocker and anticholinergics in real life practice. Herein, we investigated whether combination treatment using α-blocker and 2mg of tolterodine can improve storage sub-score of International prostate symptom score (IPSS) as much as 4mg of tolterodine without voiding difficulty in men with BPH/OAB symptoms in real life practice.

Study design, materials and methods

Patients were retrospectively recruited at 4 urology clinics between January 2006 and May 2008 and a total of 1094 men with OAB/BPH were categorized to 2 groups: α-blocker plus tolterodine 2 mg (group I, n=520) and α-blocker plus 4 mg (group II, n=574). Eligible patients were men 50 years or older who had a total IPSS of 8 or higher and IPss storage subscore of 6 or higher who were able to be followed up to week 12. Total IPSS, IPSS sub-score (voiding & storage), IPSS Q4 (Urgency) and IPSS quality-of-life (QOL) were assessed at baseline and week 12.

Results

Total IPSS and IPSS voiding &storage sub-scores were significantly improved at week 12 in both groups. However, among the 520 patients in group II who started with 2mg of tolterodine, 27.1% (141/520) had their dose escalated to 4 mg of tolterodine. Moreover, IPSS Q4 (urgency) & IPSS QOL were more significantly improved in group II than in group I. The incidence of voiding difficulty and urinary retention were as follows respectively: 2.1% (11/520) and 0.3% (2/520) in group I, 10.8% (62/574) and 0.5% (3/574) in group II.

Interpretation of results

The incidence of acute urinary retention is similar in both groups, but voiding difficulty was much less in alpha-blocker with tolterodine 2 mg group (2.1%) compared with 4 mg (10.8%) in real life practice. Dose escalation was needed in 27% in alpha-blocker with tolterodine 2 mg group.

Concluding message

These results suggest that treatment with α-blocker plus tolterodine 2 mg also effective in OAB/BPH patients. However, in regards to Urgency and IPSS QOL, tolterodine 4 mg in combination with α-blocker offer greater improvement. Considering the lower incidence of voiding difficulty in low-dose anticholinergics group, individualized choice for dose strength is needed for the balance between efficacy and safety.

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| ***Specify source of funding or grant*** | **This study was funded by Pfizer Korea Ltd.** |
| ***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 eithics committee approval because*** | **retrospective study** |
| ***Was the Declaration of Helsinki followed?*** | **Yes** |
| ***Was informed consent obtained from the patients?*** | **No** |