

## COMPARISON OF TAMSULOSIN WITH OR WITHOUT SOLIFENACIN IN MEN WITH BENIGN PROSTATIC HYPERPLASIA AND OVERACTIVE BLADDER: SHORT-TERM RESULTS ON EFFICACY AND SAFETY

### Hypothesis / aims of study

Benign prostatic hyperplasia (BPH) is a common condition among elderly men and is often associated with a constellation of lower urinary tract symptoms (LUTS).  $\alpha$ 1-adrenoceptor antagonists are the most widely used pharmacological agents for LUTS in men with BPH. However, it is not uncommon that storage symptoms, or OAB symptoms persist after treatment with  $\alpha$ 1-adrenoceptor antagonist. For those patients with persisting OAB symptoms, combination therapy of  $\alpha$ 1-adrenoceptor antagonist and anticholinergics is a reasonable choice. There are several reports that showed the efficacy and safety of propiverine and tolterodine as anticholinergics in men with BPH. In the present study, we compared the short-term efficacy and safety of tamsulosin alone and combination of tamsulosin and low dose solifenacin in men with BPH and OAB symptoms.

### Study design, materials and methods

Men with BPH and OAB symptoms after treatment with  $\alpha$ 1-adrenoceptor antagonist for at least 4 weeks were alternately allocated to 4-week treatment with either tamsulosin (0.2 mg/day, regulatory max dose in Japan) alone (26 patients, Group 1) or tamsulosin with solifenacin (2.5 mg/day) (25 patients, Group 2). Primary endpoint was improvement of I-PSS and QOL score after the 4-week treatment. Secondary endpoint included improvement of Overactive Bladder Symptom Score (OABSS<sup>1)</sup>) and changes in maximum flow rate and postvoid residual urine (PVR). Wilcoxon rank sum test and Wilcoxon signed-rank test were used for statistical analysis.  $P < 0.05$  was considered to be significant.

### Results

There was no significant difference in patients backgrounds in Group 1 vs Group 2, including age ( $73.3 \pm 27.8$  vs  $75.1 \pm 16.4$ ), I-PSS total score ( $11.6 \pm 5.7$  vs  $13.9 \pm 6.0$ ), QOL score ( $3.7 \pm 1.1$  vs  $4.0 \pm 0.8$ ), OABSS total score ( $6.4 \pm 2.0$  vs  $7.3 \pm 2.6$ ), maximum flow rate ( $13.5 \pm 7.3$  vs  $13.0 \pm 8.5$  mL/s) and PVR ( $33.5 \pm 31.7$  vs  $41.4 \pm 24.9$  mL). In Group 2, I-PSS total score (from  $13.9 \pm 6.0$  to  $11.2 \pm 7.6$ ), I-PSS storage symptom score (from  $7.2 \pm 2.5$  to  $5.5 \pm 3.2$ ), and QOL score (from  $4.0 \pm 0.8$  to  $3.3 \pm 1.2$ ) were significantly improved, but not in Group 1. I-PSS voiding symptom score did not change significantly in either group (from  $4.2 \pm 3.0$  to  $4.2 \pm 3.0$  in Group 1 and from  $5.3 \pm 3.5$  to  $4.6 \pm 4.0$  in Group 2). Of 4 items of OABSS, scores for nocturia, urgency, and urgency incontinence were improved in Group 2, while in Group 1 only urgency score was improved. Maximum flow rate or PVR did not change significantly in either group. There was no significant side effect in either group.

### Interpretation of results

Treatment with tamsulosin plus low dose solifenacin improved I-PSS total score, I-PSS storage score and QOL score, whereas treatment with tamsulosin alone did not. Improvement of OABSS was also better in treatment group by tamsulosin plus solifenacin. Short-term safety was confirmed in both treatment groups.

### Concluding message

In men with BPH and OAB, tamsulosin plus low dose solifenacin is more effective treatment than tamsulosin alone.

### References

- 1) Urology 68: 318-323, 2006

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| <b>Specify source of funding or grant</b>                             | none   |
| <b>Is this a clinical trial?</b>                                      | Yes  |
| <b>Is this study registered in a public clinical trials registry?</b> | No   |
| <b>What were the subjects in the study?</b>                           | HUMAN  |
| <b>Was this study approved by an ethics committee?</b>                | Yes  |
| <b>Specify Name of Ethics Committee</b>                               | Asahikawa Medical College Institutional Review Board |
| <b>Was the Declaration of Helsinki followed?</b>                      | Yes  |
| <b>Was informed consent obtained from the patients?</b>               | Yes  |