

## STUDY ON THE EFFECTS OF ALPHA-1 BLOCKER DISCONTINUATION IN PATIENTS WITH LUTS/BPH RECEIVING COMBINATION THERAPY OF DUTASTERIDE AND ALPHA-1 BLOCKER.

### Hypothesis / aims of study

Combination therapy of dutasteride and alpha-1 blocker for patients with lower urinary tract symptoms suggestive of benign prostatic hyperplasia (LUTS/BPH) has been recommended as a standard therapy, especially for those with a large prostate. However, the feasibility of discontinuation of either dutasteride or alpha-1 blocker in patients receiving combination therapy has not been fully explored. The purpose of the present study was to investigate the effects of alpha-1 blocker discontinuation in patients with LUTS/BPH receiving combination therapy.

### Study design, materials and methods

This study was a retrospective study. Among the LUTS/BPH patients who had been receiving combination therapy at our outpatient clinic, 25 desired to discontinue alpha-1 blocker and thus comprised the study patients. The international prostate symptom score (IPSS total score, voiding sub-score, storage sub-score and QOL), overactive bladder symptom score (OABSS), voided volume, maximum flow rate (Qmax), post-void residual urine (PVR) volume and prostate volume (PV) were evaluated before and 3-9 months after discontinuation of alpha-1 blocker.

### Results

The average age in the 25 patients was 75.4 years (56 ~ 88 years) and the mean PV was 49.9 ml (16 ~ 125 ml) at the time of alpha-1 blocker discontinuation. The mean duration of combination therapy was 39.4 months (9 ~ 60 months). Of the 25 patients, 12 (48%) was maintained on dutasteride monotherapy for a mean of 9 months after alpha-1 blocker discontinuation (Non-resumption group). The other 13 patients (52%) resumed alpha-1 blocker because of the patients' desire (Resumption group). Compared with Non-resumption group, IPSS total score, voiding sub-score of IPSS and OABSS at the time of  $\alpha$ 1 blocker discontinuation were significantly higher in Resumption group (Table 1). There was no significant difference in PV, Qmax, or PVR at the time of alpha-1 blocker discontinuation between the 2 groups.

### Interpretation of results

Among the patients with LUTS/BPH who had been receiving combination therapy of dutasteride and alpha-1 blocker, discontinuation of  $\alpha$ 1-blockers was possible with no deterioration of LUTS in about a half of the patients. Lower IPSS score and OABSS score at the time of alpha-1 blocker discontinuation might be predictive factors for successful discontinuation of alpha-1 blocker.

### Conclusions

Discontinuation of alpha-1 blocker is possible in about a half of the patients with LUTS/BPH receiving combination therapy of dutasteride and alpha-1 blocker. Lower symptom score under combination therapy seems to be a possible indicator of successful discontinuation of alpha-1 blocker. Discriminative cut-off points in subjective and objective parameters to predict successful discontinuation of alpha-1 blocker will be presented.

Table 1

	non-resumption group (n=12)	resumption group (n=13)
age	78.3±2.7	72.4±2.8
the period of combination therapy(mo)	39.5±4.5	39.3±4.8
prostate volume(ml)	57.9±8.9	43±8.1
IPSS total score	5.8±1.0	11.5±1.9*
voiding sub-score	2.3±0.7	5±1*
storage sub-score	2.8±0.3	4.9±0.8
QOL index	1.9±0.3	2.5±0.2
OABSS	2.8±0.6	5.2±0.8*
maximum urinary flow rate (ml/sec)	13.8±2.2	13.5±2.1
post-void residual urine volume (ml)	76±16.8	101±21.5

Data indicated as Mean ± SEM

\* P<0.05 univariate analysis

### Disclosures

**Funding:** No **Clinical Trial:** No **Subjects:** HUMAN **Ethics not Req'd:** there is no intervention in this study. **Helsinki:** Yes **Informed Consent:** No