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Choi D[1], Shin J H[1], Kim A[2], Kim H G[2], Choo M[1]

1. *Department of Urology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea,* ***2.*** *Department of Urology, Konkuk University Medical Center, Konkuk University School of Medicine, Seoul, Korea*

ADDITIONAL LOW-DOSE ANTIMUSCARINICS CAN IMPROVE OVERACTIVE BLADDER SYMPTOMS IN PATIENTS WITH SUBOPTIMAL RESPONSE TO BETA 3 AGONIST MONOTHERAPY

Hypothesis / aims of study

We aimed to assess the patient reported outcome (PRO) and efficacy of add-on low-dose antimuscarinic therapy in overactive bladder (OAB) patients with suboptimal response to 4-week treatment with beta 3 agonist monotherapy (mirabegron, 50 mg).

Study design, materials and methods

We enrolled OAB patients with 4-week mirabegron (50 mg) treatment if the patients' symptoms improved, but not to a satisfactory extent (patient perception of bladder condition [PPBC]≥4). Enrolled patients had 8-week low-dose antimuscarinics add-on therapy. (propiverine HCl, 10 mg) Patients recorded 3-day voiding diary at screening, enrollment (after 4 weeks of mirabegron monotherapy) and after 8 weeks of add-on therapy. We assessed the change of PRO (PPBC) as a primary end point and the efficacy of add-on therapy (change of frequency, urgency, urinary urgency incontinence (UUI) based on voiding diary) as a secondary end point.

Results

Thirty patients (mean age, 62.3±12.8 years; mean symptom duration, 16.0±12.3 months) were finally enrolled in the study. The mean PPBC value was 4.3±0.4 after mirabegron monotherapy, and decreased to 3.2±1.0 after 8-week add-on therapy. The mean urinary frequency decreased from 10.1±3.1 to 8.8±3.0, the mean number of urgency episodes decreased from 3.6±1.6 to 1.8±1.2, and the number of urgency incontinence episodes decreased from 0.7±1.0 to 0.2±0.5 after add-on therapy. No patients had event of acute urinary retention and three patients complained of mild dry mouth after add-on therapy.

Interpretation of results

The mean PPBC value decreased after add-on therapy. The mean number of urinary frequency, urgency episodes, and urgency incontinence episodes decreased after add-on therapy.

Concluding message

Add-on therapy of low-dose antimuscarinics exhibits good efficacy and safety in patients with suboptimal response after 4-week of mirabegron (50 mg) monotherapy.

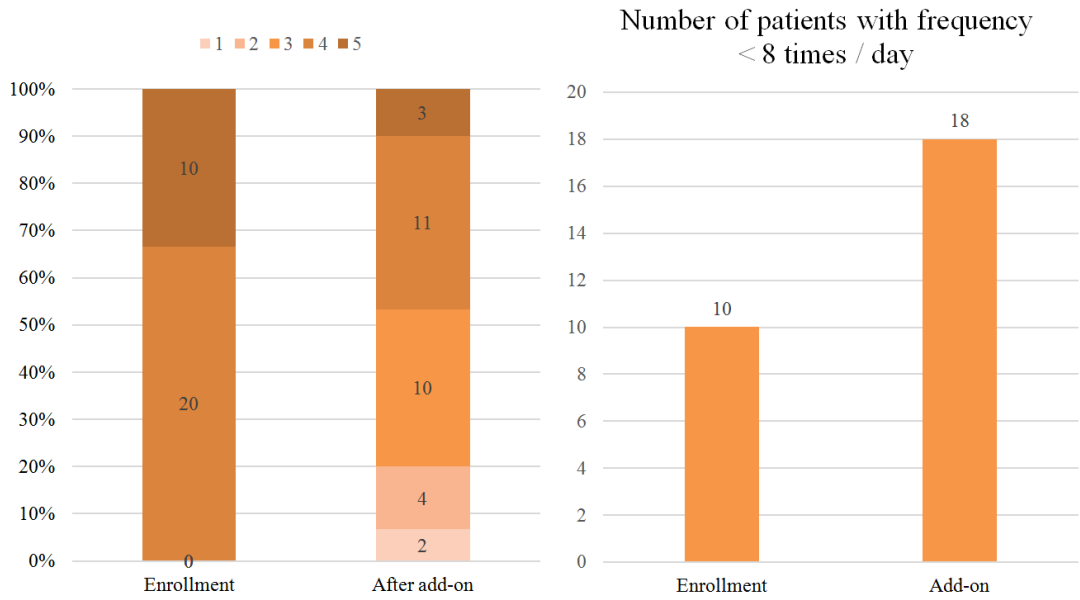
Table 1. Patient demographics and baseline characteristics

Total	30
Age (years)	62.3±12.8
Sex	
Male	7 (23.3%)
Female	23 (76.6%)
Symptom duration (months), mean (SD)	16.0±12.3
Previous OAB medication, n (%)	22 (77.3%)
Previous OAB medication discontinued, n (%)	12 (40.0%)
Insufficient effect	8 (26.6%)
Poor tolerability	4 (13.3%)
Uroflowmetry	
Voided volume (ml)	125.7±56.8
Maximum flow rate (m/sec)	19.7±5.6
Post-void residual urine volume (ml)	28.2±26.3
Voiding diary	
Frequency/24 h, mean (SD)	12.1±5.6
Urgency episodes (grade 3 or 4)/24 h, mean (SD)	5.1±2.3
Urinary urgency incontinence episodes/24 h, mean (SD)	1.3±0.4

Table 2. Baseline difference between patients with improved and stationary symptom

	Improved (n=20)	Stationary (n=10)	p-value
Age (years)	63.8±13.4	59.6±11.7	0.412
Symptom duration (months), mean (SD)	15.9±11.9	16.5±14.0	0.895
No. of OAB wet	12 (60%)	6 (60%)	
Baseline symptom			
Frequency/24 h, mean (SD)	11.1±3.0	14.2±3.6	0.017
Urgency (grade 3 or 4)/24 h, mean (SD)	4.5±1.5	6.2±1.5	0.007
UUI episodes/24 h, mean (SD)	1.3±1.4	1.5±2.4	0.719

Figure. Change of PPBC and frequency after treatments



* 10 patients showed no change in PPBC.

Disclosures
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