

## EFFECTS OF DOSE ESCALATION OF TAMSULOSIN HYDROCHLORIDE IN IMPROVING NOCTURIA ASSOCIATED WITH LOWER URINARY TRACT SYMPTOMS/BENIGN PROSTATIC HYPERPLASIA

### Hypothesis / aims of study

This study is aimed to evaluate effects of low dose and dose escalation of tamsulosin hydrochloride in improving nocturia and sleep disturbance in patients with Lower Urinary Tract Symptoms/Benign Prostatic Hyperplasia.

### Study design, materials and methods

A total of 30 patients with lower urinary tract symptoms/benign prostatic hyperplasia were enrolled prospectively, but 17 patients were evaluated completely. Responder of nocturia was defined as a decrease of one time or more voiding at night. Patients received 0.2 mg (low dose) of tamsulosin once daily for 8 weeks, and non-responders received 0.4 mg (regular dose) for another 8 weeks. All patients were evaluated PSA, prostate volume, IPSS, voiding diary for three days before and after administration of low and regular dose of tamsulosin. Quality of sleep was also evaluated using Pittsburgh sleep quality index (PSQI).

### Results

In all patients, total IPSS, QoL of IPSS, voiding symptoms of IPSS and storage symptoms of IPSS were improved although low dose (0.2 mg) tamsulosin was administrated for 16 weeks. Nocturia was responded in 10 patients after administration of low dose (0.2 mg) of tamsulosin. Nocturia of other 7 patient were improved after administration of the regular dose (0.4 mg) of tamsulosin. (Table 1 and 2) Total mean score of PSQI in response group was not improved significantly after administration of any dose of tamsulosin (from 16.06 to 15.27; P > 0.05).

### Interpretation of results

These results suggest that tamsulosin improved nocturia especially after dose escalation of tamsulosin. However tamsulosin dose not improve sleep disturbance although nocturia is improved.

### Concluding message

This means that sleep disturbance is not caused only by LUTS/BPH.

Table 1. Improvement of nocturia after administration of low dose of Tamsulosin in response group.

	visit 1 (4 week)	visit 2 (8 week)	visit 3 (12 week)	visit 4 (16 week)
nocturia	3.10±0.99	2.10±0.74	1.90±0.74	1.60±0.84
p value vs visit 1		0.004	0.0004	0.0004
p value vs visit 2			0.1717	0.089
p value vs visit 3				0.096

Table 2. Improvement of noctura after administration of regular dose of Tamsulosin in non-respose group after administration of low dose of Tamsulosin

	visit 1 (4 week)	visit 2 (8 week)	visit 3 (12 week)	visit 4 (16 week)
nocturia	3.43±0.79	3.00±1.15	3.00±0.58	2.00±1.00
p value vs visit 1		0.1447	0.051	0.007
p value vs visit 2			0.500	0.008
p value vs visit 3				0.008

### Disclosures

**Funding:** none **Clinical Trial:** Yes **Public Registry:** No **RCT:** Yes **Subjects:** HUMAN **Ethics Committee:** Dankook University Hospital IRB, DKUH 1105-058 **Helsinki:** Yes **Informed Consent:** Yes