

## CLINICAL EFFECTS OF SILODOSIN IN IMPROVING SLEEP DISTURBANCE AND NOCTURIA ASSOCIATED WITH LOWER URINARY TRACT SYMPTOMS/BENIGN PROSTATIC HYPERPLASIA: PRELIMINARY REPORT

### Hypothesis / aims of study

This study is aimed to evaluate effects of silodosin in improving nocturia and sleep disturbance in patients with Lower Urinary Tract Symptoms/Benign Prostatic Hyperplasia

### Study design, materials and methods

A total of 20 patients with lower urinary tract symptoms/Benign Prostatic Hyperplasia with nocturia (above 2 times per night) were enrolled prospectively, but 18 patients were evaluated completely. All patients were evaluated PSA, prostate volume, IPSS, voiding diary for three days, uroflowmetry(Qmax) and post-voided residual(PVR) before and after administration of 8mg dose of silodosin for 8 weeks. Quality of sleep was also evaluated using Pittsburgh sleep quality index (PSQI), the hours of undisturbed sleep (HUS), the interval between the time of sleeping and the first instance of nocturnal voiding, and Epworth sleeping scale.

### Results

Qmax, total IPSS, QoL of IPSS, voiding and storage symptoms of IPSS were improved, but not PVR after silodosin was administrated for 8 weeks. Nocturia was improved significantly (from 3.4 times to 2 times per night;  $p < 0.05$ ). Total mean score of PSQI in response group was not improved significantly after administration of silodosin (from 18.12 to 16.29;  $P > 0.05$ ). Also sleeping scale was not improved significantly. But HUS was improved significantly (from 176.7 min to 243.1 min;  $p < 0.05$ ) (table 1, 2)

### Interpretation of results

These results suggest that silodosin improved nocturia and LUTS after administration of silodosin. However silodosin does not improved sleep disturbance although nocturia is improved.

### Concluding message

This means that sleep disturbance may be caused by others rather than LUTS/BPH

Table 1. Improvement of nocturia after administration of silodosin.

	visit 1 (4 week)	visit 2 (8 week)
nocturia	3.4±0.9	2.0±0.7
p value vs visit 1		0.001

Table 2. Improvement of the hours of undisturbed sleep (HUS) after administration of silodosin

	visit 1 (4 week)	visit 2 (8 week)
HUS (min)	176.7±41.6	243.1±42.1
p value vs visit 1		0.001

### Disclosures

**Funding:** none **Clinical Trial:** Yes **Public Registry:** No **RCT:** No **Subjects:** HUMAN **Ethics Committee:** Dankook University IRB **Helsinki:** Yes **Informed Consent:** Yes