

CHANGES IN SLEEP QUALITY, DEPRESSION, AND ANXIETY AFTER TREATMENT OF NOCTURIA IN MALE PATIENTS WITH LOWER URINARY TRACT SYMPTOMS

Hypothesis / aims of study

This study aims to examine the changes in sleep quality, depression and anxiety after treatment of nocturia in the male patients with lower urinary tract symptoms (LUTS).

Study design, materials and methods

58 male patients with one or more nocturia, who had treated at our department from January 2008 to October 2011, were retrospectively studied. The International Prostate Symptom Score (IPSS), serum prostate specific antigen (PSA) level, volume of prostate, maximum urinary flow rate and residual urine volume were evaluated. Pittsburgh Sleep Quality Index (PSQI) before treatment were completed to assess the sleep quality. Hospital Anxiety and Depression Scale (HADS) before treatment were made to investigate to psychological state. After the three-month treatment of nocturia, each survey was re-run. Depending on reduced number of nocturia, patients were classified into group I (No reduction), group II (1 time) and group III (more than 2 times). The sleep quality and psychological state before and after treatment were compared in each group. All data were analyzed with Wilcoxon matched-pairs signed-ranks test.

Results

There was no significant difference comparing age between each group (Group I: 63±8.3 (50-78), Group II: 63±5.8 (55-74), Group III: 66±4.6 (58-76)). Total PSQI score after treatment was significantly higher than that before treatment in Group I (5.32±1.67 vs 6.14±1.96, p=0.039). Group II also showed coherent trends of decreased total PSQI score after treatment compared with before treatment, but did not reach a statistically significance (7.00±3.40 vs 6.18±3.53, p>0.05). Group III demonstrated significantly decreased total PSQI score after treatment compared with before treatment (6.86±1.88 vs 4.36±1.74, p=0.002). HADS score of each group before and after treatment had no significant difference.

Interpretation of results

After treatment of nocturia in male LUTS patients, sleep quality was improved only if there was improvement of nocturia and there was no difference in psychological state such as depression and anxiety.

Concluding message

It is considered that the treatment of nocturia can improve sleep quality.

Disclosures

Funding: None **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** IRB of St.Paul's Hospital **Helsinki:** Yes **Informed Consent:** No