EFFEICT OF HOLMIUM LASER ENUCLEATION OF PROSTATE ON NOCTURIA

Hypothesis / aims of study

Nocturia is one of the most bothersome symptoms and the main predictors of symptoms in benign prostatic hyperplasia (BPH) patients with lower urinary tract symptoms (LUTS). We evaluated the change of nocturia and predictive factors for improvement after Holmium laser enucleation of Prostate (HoLEP) as the treatment of BPH.

Study design, materials and methods

A total 102 patients who underwent HoLEP for BPH between April 2010 and July 2013 were included in this retrospective study. All of them had the baseline and postoperative (6 weeks after HoLEP) International Prostate Symptom Score (IPSS), 3-day frequency-volume chart (FVC), and flowmetry. The efficacy of HoLEP was evaluated at 6 weeks postoperatively by use of IPSS and FVC. Improvement in nocturia was defined as a reduction of ≥50% in nocturia frequency compared with baseline.

Results

The median of total prostate volume, Prostate specific antigen (PSA), enucleation weight and enucleation ratio (enucleation weight/transitional zone volume) were 56.6ml (transitional zone: 33ml), 4.0ng/ml, 27gm, and 0.82gm/ml, respectively. All of them had at least 1 episode of nocturia and 88 men (86.3%) had 2 or more nocturia episode at baseline. Nocturia was significantly decreased from a baseline median of 4 to 2 episode at 6 weeks after HoLEP and improvement of nocturia was shown in 84 (82.4%) men. Of the baseline parameters, including age, total prostate volume, baseline IPSS and nocturia frequency and enucleation ratio, higher baseline nocturia frequency was associated with improvement of nocturia.

Interpretation of results

Baseline nocturia frequency was associated with postoperative improvement of nocturia.

Concluding message

HoLEP for BPH significantly reduced nocturia in early postoperative period. The baseline nocturia frequency influenced improvement in nocturia.

Disclosures

Funding: none Clinical Trial: Yes Public Registry: No RCT: No Subjects: HUMAN Ethics not Req’d: this study is a process for treatment of BPH, which is not harmful. Helsinki: Yes Informed Consent: Yes