

CLINICAL FEATURES OF SUPERVOIDERS WHO SUFFER FROM LOWER URINARY TRACT SYMPTOMS: A PROPENSITY SCORE-MATCHING STUDY

Hypothesis / aims of study

To evaluate the clinical characteristics of patients with maximal urine flow rate (Q_{max}) ≥25 ml/sec complaining of lower urinary tract symptoms (LUTS), using propensity score-matching analysis to compare with the control group.

Study design, materials and methods

Medical records from a prospectively maintained database for first-visit male patients with LUTS/benign prostatic hyperplasia between 2010 and 2012 were used to select 818 patients. Of these patients, 68 men with Q_{max}≥25 ml/sec were defined as the supervoider group and 68 patients were selected for the control group using propensity scores, which were calculated for each patient using multivariable logistic regression model based on the following covariates: age, prostate volume, voided urine volume and post-voided residual volume. International Prostate Symptom Score (IPSS), Quality of Life score, and Overactive Bladder Symptom Score (OABSS) were also analyzed.

Results

Mean Q_{max} was 30.82±5.13 in supervoiders and 15.95±4.88 ml/sec in controls (p<0.001). There were statistical differences in IPSS between supervoiders and controls (12.63±5.81 versus 16.13±6.90; p=0.002). Although the IPSS voiding symptom subscore in supervoiders was lower than controls (5.09±3.35 versus 7.40±4.00; p<0.001), there were no significant differences in storage symptom and post-micturitional symptom sub-scores. In OABSS and subdomain scores for frequency, nocturia, and urgency, there were no significant differences between the groups. However, the urge incontinence subdomain score was significantly higher in supervoiders versus controls (0.69±1.26 vs. 0.18±0.52; p=0.003).

Interpretation of results

Supervoiders experience comparable levels of storage and post-micturition symptoms, but display more severe urge incontinence despite milder voiding symptoms and better uroflowmetric measurements, than propensity score-matched controls.

Concluding message

When compared to propensity score-matched controls, supervoiders in the clinical setting suffer from comparable levels of storage and post-micturition symptoms, and more severe urge incontinence despite displaying milder voiding symptoms and better uroflowmetric measurements.

References

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Disclosures

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