

PREDICTION OF PERSISTING STORAGE SYMPTOMS AFTER TRANSURETHRAL RESECTION OF THE PROSTATE IN PATIENTS WITH BENIGN PROSTATIC HYPERPLASIA

Hypothesis / aims of study

To identify the prognostic variables causing persistent storage symptoms following transurethral resection of the prostate (TURP) in patients with benign prostatic hyperplasia (BPH)

Study design, materials and methods

A total of 116 men with symptomatic BPH requiring surgery were enrolled in the study between January 2011 and December 2012. Patients underwent basic clinical evaluations: prostate volume estimated by transrectal ultrasound, International Prostate Symptom Score (IPSS) with a subscore for storage symptoms (questions 2, 4, and 7), quality of life score, functional bladder capacity (FBC), and voiding frequency per day. Full urodynamics were also assessed, including Qmax (maximum flow rate), postvoid residual urine, maximum cystometric capacity, pdet.Qmax (detrusor pressure at maximum flow), Abrams–Griffith number (PdetQmax – 2 × Qmax), and percentage of reduced tissue weight (reduced tissue weight/preoperative prostate volume × 100). After 6 months, we rechecked the IPSS and classified all patients by their subscore: storage symptom negative (0–7 points) and positive (8–15 points). All variables were statistically investigated to identify any factors that could influence symptomatic improvement.

Results

The 116 patients were divided into a persistent storage symptom group (n = 33) or a symptom-free group (n = 83). The persistent storage symptom group showed higher age, initial storage, and voiding symptom score and lower FBC, pdet.Qmax, and bladder contractile index (BCI) compared with the symptom-free group. A multivariate analysis suggested that the degree of worse initial storage symptoms (odds ratio [OR] = 8.32), small FBC (OR = 4.31), impaired detrusor contractility (OR = 2.96), and age (OR = 1.05) were consistently associated with persistent storage symptoms. Suggestive cutoffs for persistent storage symptoms are an initial storage symptom score of 10, an FBC of 225 mL, aged 72 years, and a BCI of 95.3.

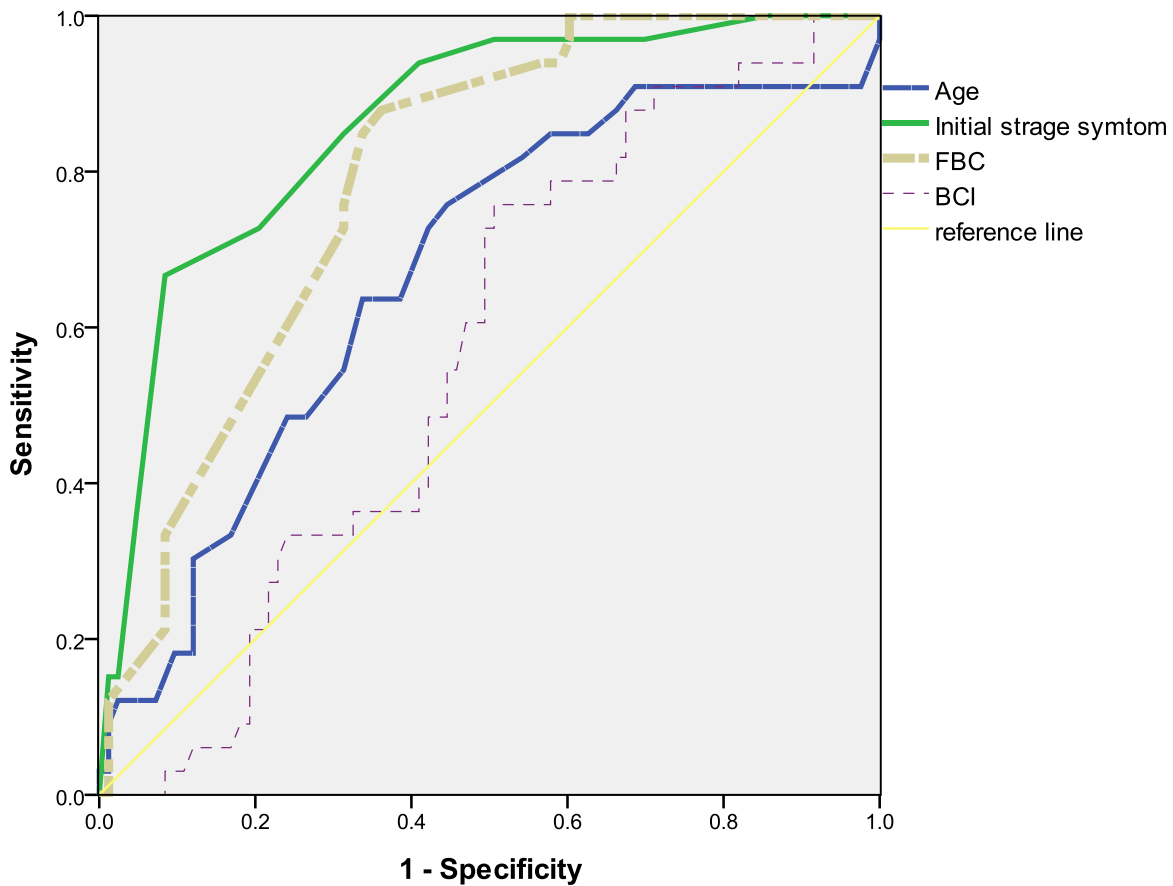
Interpretation of results

This short-term study confirms the positive and consistent correlations between the baseline degree of worse initial storage symptoms, bladder capacity, detrusor contractility, and age on the improvement in storage symptoms. Our results of suggestive cutoff values are also useful for the prediction of persistent storage symptoms after TURP.

Concluding message

various preoperative variables with cutoffs are available for the prediction of storage symptom benefits following surgical relief of BOO.

Figure. Receiver operating characteristic (ROC) curves to determine the cutoff values for preoperative variables with regard to persistent storage symptoms.



References

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Disclosures

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