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HIGH GRADE PELVIC ORGAN PROLAPSE AND CLINICAL AND URODYNAMIC FINDINGS

Hypothesis / aims of study

Urodynamic testing is frequently used in the evaluation of high grade pelvic organ prolapse (HGPOP). We sought to determine if patient symptoms were predictive of urodynamic findings.

Study design, materials and methods

Retrospective chart review of 78 patients with HGPOP (Baden Walker grade 3-4) seen in our clinic was conducted. Patients with underlying neurologic disease or those who did not undergo urodynamic testing were excluded, leaving 60 patients for evaluation. Patient histories, physical exam findings and urodynamic studies were reviewed. Fisher's exact test was used for statistical analysis.

Results

Average age of 60 patients was 64 years. 93% were menopausal and half were on hormone replacement therapy. Average parity was 2.6. 68% had undergone hysterectomy, and 30% had prior incontinence surgery. 65%, 68% and 38% had stress, urge and spontaneous incontinence, respectively. 10% were taking anticholinergic medication. 62% noted pelvic prolapse symptoms. 58% had only storage symptoms, 33% had mixed storage and voiding symptoms, and 3% had only voiding symptoms. Urodynamic evaluation demonstrated detrusor instability (DI) in 33% of the patients and abnormal compliance in 18%. While patients voided with low flow rates and somewhat elevated voiding pressure, most were able to void to completion. When comparing patients with voiding symptoms alone, storage symptoms alone, and those with mixed symptoms, analysis demonstrated statistically significant differences in incidence of DI ($p=0.0001$) and abnormal compliance ($p=0.039$) between the subgroups. Higher incidences of both abnormalities were seen in the storage symptom only group.

Interpretation of results

HGPOP can present in a variety of ways. Classically described voiding symptoms such as positional voiding were observed less commonly than storage symptoms such as frequency, nocturia and incontinence. Detrusor instability was frequently demonstrated urodynamically. A higher incidence of DI and decreased compliance was seen in patients with storage symptoms only. High rates of DI and decreased compliance may be clinical manifestations of the anatomic changes associated with prolapse.

Concluding message

Urinary storage symptoms may be predictive of urodynamic detrusor instability and decreased compliance in women with high grade pelvic organ prolapse.