

EFFECT OF PRIOR PELVIC SURGERY ON CLINICAL AND URODYNAMIC PARAMETERS IN WOMEN WITH HIGH GRADE PELVIC ORGAN PROLAPSE

Hypothesis / aims of study

Many women presenting with high grade pelvic organ prolapse (HGPOP) (Baden Walker Grade 3-4) have a history of prior pelvic surgery. We evaluated women with HGPOP to see if this influenced any clinical or urodynamic parameters commonly assessed.

Study design, materials and methods

Retrospective chart review of 78 patients with HGPOP evaluated 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.

Results

Average age of 23 patients with a history of prior anti-incontinence surgery (group 1) was 65 years and that of 37 women without prior similar surgery (group 2) was 63 years. Average parity for both groups was 2.5. Hysterectomy had been performed in all women in group 1, but in only 49% of the patients in group 2. Cystocele was seen in all patients. Concomitant enterocele, rectocele or both was seen in 74% of group 1 patients but in only 57% of group 2 patients. Subgroup analysis comparing group 2 patients with and without a history of hysterectomy showed a rate of concomitant apical or posterior defects of 78% and 42%, respectively. Urodynamic evaluation revealed a similar incidence of detrusor instability (DI) (35% and 32%) and low compliance (14% and 17%) in groups 1 and 2. Differences between the groups were not statistically significant (X^2 $p=0.85$ and 0.74 , respectively). A similar trend toward mildly elevated voiding pressures and low flow rates was also seen in both groups. Capacity was similar between the groups (331 and 299 ml). Residual urine volume of > 100 ml was present in 32% of group 1 patients, but only 9% of group 2 patients. This difference was statistically significant ($p=0.02$).

Interpretation of results

A history of prior incontinence surgery was associated with significantly higher post void residuals, but did not alter other urodynamic parameters evaluated. Prior incontinence surgery initially appeared to be associated with a predisposition to multicompartamental defects in POP, however this was lost in subgroup analysis controlling for prior hysterectomy.

Concluding message

An elevated post void residual is the only clinical or urodynamic parameter we found to be influenced by prior pelvic surgery.