

PRE-OPERATIVE URODYNAMIC STUDIES IN WOMEN WITH VAGINAL VAULT PROLAPSE: ARE THEY WORTHWHILE?

Hypothesis / aims of study

Pre-operative urodynamic studies in women with vaginal vault prolapse: Are they worthwhile?

Study design, materials and methods

A retrospective review of case records. From 2000-2003 a retrospective case note review was conducted of all women presenting to our unit whom had surgery for vaginal vault prolapse (either sacrospinous fixation 18 or sacrocolpopexy 24). 42 women were identified: the age range was between 43-86, with mean= 63.1 year. The mean parity was 3.1. Past surgical history included abdominal hysterectomy 76.2% (32/42), vaginal hysterectomy 23.8% (10/42), anterior repair 47.6% (20/42), posterior repair 40.4% (17/42), colposuspension 16.6% (7/42), previous sacrospinous fixation 2.3% (1/42), previous sacrocolpopexy 4.7% (2/42) and tension-free vaginal tape 4.7% (2/42). All women had a detailed history and examination including looking for the clinical sign of stress urinary incontinence with prolapse reduction. Pre-operative dual channel cystometry with prolapse reduction manoeuvres was performed irrespective of the presence or not of any bladder-related symptoms. These prolapse reduction manoeuvres included the use of sponge-holding forceps or ring pessary. Symptoms, clinical findings and urodynamic outcomes were compared.

Results

Of the 42 women, 33.3% (14/42) had grade 3 Vaginal Vault Prolapse (VVP), 28.6% (12/42) grade 2 and 38.1% (16/42) grade 1VVP with grade 2 or more enterocele. Patients were divided into Group A 52.4% (22/42) who had symptoms of stress urinary incontinence and group B 47.6% (20/42) who did not have any stress incontinence symptoms.

Of group A; 31.7% (7/22) were found to have stress incontinence on examination. 63.4% (14/22) had evidence of urodynamic stress incontinence on urodynamic studies. Of those patients 35.7% (5/14) had evidence of urodynamic stress incontinence only after prolapse reduction manoeuvres. Also in Group A, 22.7% (5/22) had urodynamic evidence of detrusor over activity and 27.3% (6/22) had no evidence of urodynamic stress incontinence with or without prolapse reduction manoeuvres.

Of group B; 30% (6/20) were found to have stress incontinence on examination. 65% (13/20) had evidence of urodynamic stress incontinence on urodynamic studies (i.e occult USI). Of these patients, 61.5% (8/13) had evidence of urodynamic stress incontinence only after prolapse reduction manoeuvres. Also in Group B, 10% (2/20) had urodynamic evidence of detrusor over activity and 30% (6/20) had no evidence of urodynamic stress incontinence with or without prolapse reduction manoeuvres.

Interpretation of results

63.4% of women with VVP and stress incontinence symptoms had demonstrable urodynamic stress incontinence (USI) on urodynamic studies. In the vast majority (64.3%) of these cases USI was proven without needing prolapse reduction manoeuvres. However, in women with VVP and no history of stress incontinence, clinical examination demonstrated stress incontinence in 30% only while urodynamic studies revealed a 65% rate of urodynamic occult stress incontinence. In the later group, prolapse reduction manoeuvres were required to demonstrate this finding in 61.5% of cases.

Concluding message

In women with VVP, pre-operative urodynamic studies with prolapse reduction manoeuvres should form part of the routine work-up of patients pre-operatively. The absence of a history of urinary incontinence in these women is unreliable in excluding USI or occult USI. However, the clinical predictive value of this test needs further evaluation.