

## **THE RELATIONSHIP BETWEEN SYMPTOMS SUGGESTIVE OF VOIDING DYSFUNCTION AND THE URODYNAMIC FINDINGS IN WOMEN WITH VAGINAL VAULT PROLAPSE.**

### **Hypothesis / aims of study**

To evaluate the relationship between symptoms suggestive of voiding dysfunction and the urodynamic findings in women with vaginal vault prolapse.

### **Study design, materials and methods**

A retrospective review of case records. From 2000-2003 a retrospective case note review was conducted on 42 consecutive women undergoing surgery for vaginal vault prolapse (VVP) (24 sacrocolpopexy and 18 sacrospinous fixation). The patients' mean age was 63.1 (range 43-86). Median parity was 3 (range 0-6). 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 as well as pre-operative dual channel cystometry with prolapse reduction maneuvers irrespective of the presence or not of any bladder-related symptoms. Preoperative voiding symptoms (i.e. hesitancy, straining, poor stream, post voiding dribble and sensation of incomplete emptying) were compared to voiding function as revealed by the urodynamic studies.

### **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. One or more voiding symptoms were found in 50% (8/16), 75% (9/12) and 28.6% (4/14) of grade 1, 2 and 3 VVP respectively.

Patients were divided into group A 50% (21/42) who had one or more voiding symptoms and group B 50% (21/42) who did not have any voiding symptoms.

Of group A; 57.1% (12/21) had sensation of incomplete emptying, 42.9% (9/21) post voiding dribble, 42.9% (9/21) hesitancy, 42.9% (9/21) poor stream and 14.3% (3/21) had straining.

Of group A; 52.4% (11/21) had urodynamic findings suggestive of voiding dysfunction. Of these women, 45.5% (5/11) had post voiding residual volume more than 100ml, 72.7% (8/11) had maximum voiding flow rate less than 15 ml/second and 81.8% (9/11) had maximum voiding detrusor pressure more than 50 cmH<sub>2</sub>O.

Of group B; 52.4% (11/21) had urodynamic findings suggestive of voiding dysfunction. Of these women, 45.5% (5/11) had post voiding residual volume more than 100ml, 63.6% (7/11) had maximum voiding flow rate less than 15 ml/second and 36.4% (4/11) had maximum voiding detrusor pressure more than 50 cmH<sub>2</sub>O.

### **Interpretation of results**

The objective urodynamic findings suggestive of voiding dysfunction were comparable between patients in group A who had symptoms suggestive of voiding dysfunction and patients in group B who did not have any symptoms suggestive of voiding dysfunction.

### **Concluding message**

Absence of voiding symptoms is unreliable in the objective prediction of voiding dysfunction in women undergoing surgery for vaginal vault prolapse. We recommend performing pre-operative urodynamic studies before vaginal vault prolapse surgery to assess voiding function especially if an anti-incontinence procedure is considered simultaneously and to allow more effective pre-operative counselling.