

## **DOES URETHRAL HYPERMOBILITY IMPACT THE SUCCESS OF SUBURETHRAL SLINGS WITH MERSILENE® MESH IN WOMEN WITH STRESS URINARY INCONTINENCE AND INTRINSIC SPHINCTER DEFICIENCY?**

### **Aims of Study**

In recent survey of members of IUGA, the suburethral sling procedure was chosen most commonly by North Americans for the treatment of stress urinary incontinence with poor sphincteric function(1). However, several authors (2,3,4) have noted decreased success of the suburethral sling in the setting of low urethral pressure without hypermobility. These studies are limited by the small numbers of patients in this category. Our goal was to compare the effectiveness of the suburethral sling procedure using Mersilene® mesh in a larger series for the treatment of genuine stress urinary incontinence due to intrinsic sphincter deficiency in women with and without urethral hypermobility.

### **Methods**

270 outpatient records of women who underwent suburethral sling procedures for intrinsic sphincter deficiency between January 1993 and December 2001 were reviewed. Outcomes were compared between patients with and without urethral hypermobility. Symptoms of stress urinary incontinence and urge incontinence were assessed at 6-month postoperative follow-up visits. All patients had undergone a complete urogynecologic evaluation, cotton-swab testing, and multichannel urodynamic testing. Demographic information, urodynamic indices and reported cure of stress and urge incontinence were compared between the groups. Parametric and non-parametric tests were used for data analysis.

### **Results**

A total of 270 patients were identified with genuine stress urinary incontinence with intrinsic sphincter deficiency (GSI/ISD), 170 with urethral hypermobility (UHM+) and 100 without urethral hypermobility (UHM-). The median follow up was 10 months (range 6 – 87 months). There was no significant difference between the groups for mean age (UHM+ was 61.0 years and UHM- was 62.4 years), parity, weight, hormone status, or urodynamic parameters. There was a significant difference in the number of prior Burch retropubic urethropexies between the two groups (UHM+ 2.9% versus UHM- 9.0%,  $p=0.01$ ), but other gynecological surgical history was not different. The group with UHM- had significantly less cystoceles and rectoceles ( $p<0.01$ ) and a lower EBL (217cc versus 289cc,  $p<0.01$ ). Days of catheter use and post-operative complications were not significantly different between the two groups. There was not a significant difference in the rates of subjective cure of stress urinary incontinence symptoms (UHM+ 96% and UHM- 93%,  $p=0.30$ ) or urge incontinence symptoms (UHM+ 37.6% and UHM- 34.0%,  $p=0.55$ ). There was a trend toward de novo urge incontinence in the UHM- group (UHM+ 2.9% versus UHM- 8.0%,  $p=0.06$ ).

### **Conclusion**

Women with or without urethral hypermobility have excellent subjective cure of stress incontinence following suburethral sling and similar resolution of urge incontinence at 10 months.

### **References**

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