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aggressive tumor growth (Gleason 4/5) in biopsies with small amount of tumors. Still, this approach may be very helpful in clinical practice.

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### NEUROUROLOGY & FEMALE UROLOGY

# Development of de novo urge incontinence in women post sling: The role of preoperative urodynamics in assessing the risk

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Neurourol Urodyn. 2008; 27: 407-11

Aims: The study was undertaken to investigate if there are specific identifiable risk factors on the preoperative history or urodynamics testing associated with an increased risk for the development of symptoms of de novo urge urinary incontinence after a minimally invasive sling procedure.

Methods: Two hundred eighty-one women who had undergone minimally invasive sling surgery for stress urinary incontinence between January 2000 and December 2003 were identified. The records of 92 patients were included in this review.

Results: Twenty-five patients (27%) reported urge urinary incontinence on postoperative questioning. Clinical and urodynamic parameters were correlated with the development of de novo urge urinary incontinence. Preoperative history parameters were not predictive of the increased risk of de novo urge urinary incontinence, with the exception of increased preoperative daytime frequency (OR 3.3 (1.2, 9.1)). Of 16 women whose detrusor pressure during the filling phase of cystometry exceeded 15 cm H2O, de novo urge urinary incontinence developed in 9 (56%) vs. 16 (21%) of 76 women, whose detrusor pressure was </= 15 cm H2O (OR 4.6 (1.4, 15.0)).

Conclusions: Directed patient history is only minimally helpful in the identification of women at increased risk for the development of de novo urge urinary incontinence, with the exception of the complaint of increased daytime frequency. Women with elevated detrusor pressure during the filling phase of cystometry were more likely to develop urge urinary incontinence postoperatively. Therefore, we suggest that preoperative urodynamic evaluation, and specifically detrusor pressure > 15 cm H2O may help identify patients at increased risk of developing de novo urge urinary incontinence following the minimally invasive sling procedure. Neurourol. Urodynam. 27:407-411, 2008. (c) 2007 Wiley-Liss, Inc.

### **Editorial Comment**

The authors reviewed a population of women who had undergone a midurethral sling. Out of this population, 92 women were identified as having had no complaints and/or urodynamic evidence of urge urinary incontinence or detrusor overactivity before their operation. Of those 92 women, 25 (27%) developed de novo postoperative urge urinary incontinence after their surgery. The authors found that of all the preoperative variables examined, only a history of daytime urinary frequency or a bladder filling pressure of > 15 cm of

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water predicted an increased risk for the development of de novo urge urinary incontinence. All the patients underwent a midurethral retropubic operation with none receiving a transobturator sling.

This manuscript points out the definite morbidity of new onset urinary urge incontinence after an antiincontinence operation for stress urinary incontinence. A 27% incidence rate seems high but is very realistic.
Great interest would be if the authors would expand their study in the future to look at patients who underwent
a transobturator technique to see if the rates of new onset urinary urge incontinence would be the same given
the potential for less obstruction with this newer technique. In addition, in view of the large number of patients
available for review, it would be very beneficial for the data base to be re-mined to note if the remaining 189
patients who were excluded for history of reported urinary urge incontinence preoperatively or evidence of
detrusor overactivity on preoperative evaluation had resolution of their complaint(s) on a historical basis. This
is a topic that has been examined for greater than two decades. Readers should revisit the article written by Dr.
E. McGuire, almost exactly 20 years ago in the same journal on this very topic (1).

### Reference

1. McGuire E: Bladder instability and stress incontinence. Neurourol Urodyn. 1988; 7: 563-7.

### Steven P. Petrou, M.D.

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# Urodynamic characteristics of mixed urinary incontinence and idiopathic urge urinary incontinence

Chou EC, Blaivas JG, Chou LW, Flisser AJ, Panagopoulos G Department of Urology, School of Medicine, China Medical University, Taichung, Taiwan Neurourol Urodyn. 2008; 27: 376-8

Purpose: To evaluate and compare the clinical and urodynamic findings in patients with either mixed urinary incontinence (MUI) or simple urge urinary incontinence (UUI).

Materials and Methods: A series of 100 consecutive female patients with MUI and UUI were identified from a database. Patients with neurogenic bladder, fistula, urethral diverticulum, prior urologic surgery or known urinary tract obstruction were excluded. All patients were classified according to the urodynamic classification of overactive bladder of Flisser et al. and all patients underwent history, physical examination, validated incontinence questionnaire, 24-hour voiding diary, 24-hour pad test, video urodynamic study (VUDS), and cystoscopy.

Results: A significantly higher proportion of patients with UUI exhibited detrusor overactivity at VUDS, (67% of the patients with UUI vs. 24% of the MUI, P < 0.05). Patients with UUI had fewer episodes of incontinence (6.7 vs. 4.2, P < 0.05) with slightly less objective urine loss (24-hour pad test 94 gm vs. 128 g of loss, P < 0.05) and voided at higher pressures (p(det) at Q(max) 21.4 vs. 15.6 cm H2O, P < 0.05). Patients in both groups had functional and urodynamic bladder capacities that were not statistically different.

Conclusions: Women with UUI were more likely to exhibit detrusor overactivity but experienced fewer episodes of incontinence and less urinary loss when compared with women who had MUI. The "urge incontinence" component of MUI appears to be different than that of UUI, and suggests that urge incontinence may

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be overdiagnosed in patients with SUI who misinterpret their fear of leaking (because of SUI) for urge incontinence. Neurourol. Urodynam. 27:376-378, 2008. (c) 2008 Wiley-Liss, Inc.

#### **Editorial Comment**

A straightforward report from leaders in the field comparing the urodynamic characteristics and variables of patients suffering from stress urinary incontinence combined with urinary urge incontinence versus those plagued with urinary urge incontinence alone. The authors started with 100 patients in the study population then parsed the group down to a total of 72 patients: 45 patients with mixed urinary incontinence versus 27 patients with urinary urge incontinence alone (patients were excluded from the original 100 if they had a neurogenic bladder, urinary fistula, urethral diverticulum, prior urologic surgery, or known infravesical outlet obstruction). The patient's overactive bladder was classified by the criteria of Flisser et al. (1). Significant differences were noted upon analysis with regards to the presence of absence of detrusor overactivity, episodes of urinary incontinence for 24 hour period, voiding pressure, functional bladder capacity, as well as severity of urinary incontinence on a 24 hour pad test.

A well written paper with an excellent discussion on urinary urge incontinence in patients with and without stress urinary incontinence. The presentation does raise an excellent point with regards to the presence of urinary urge incontinence in patients classified with mixed urinary incontinence: are these patients really suffering from urge episode or do they just void often to minimize bladder volume and potential leakage episodes? This paper is an appropriate companion to the other reviewed article in this month's journal to engender thought on urinary urge incontinence and its role in anti-incontinence surgery success rates.

### Reference

1. Flisser AJ, Walmsley K, Blaivas JG: Urodynamic classification of patients with symptoms of overactive bladder. J Urol. 2003; 169: 529-33; discussion 533-4.

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## PEDIATRIC UROLOGY

A long-term prospective analysis of pediatric unilateral inguinal hernias: should laparoscopy or anything else influence the management of the contralateral side?

Maddox MM, Smith DP *East Tennessee Children's Hospital, Knoxville, TN, USA* J Pediatr Urol. 2008; 4: 141-5

Purpose: To prospectively determine if children who present with a unilateral inguinal hernia can be identified as at risk for developing a metachronous inguinal hernia (MIH) based on risk factors and laparoscopic findings of the contralateral internal ring. Materials and Methods: Between April 2000 and October 2004, 299 patients with a unilateral inguinal hernia were followed prospectively. Laparoscopy was attempted in each child. Bilateral repair was only performed in those with contralateral swelling or crepitus during laparoscopic evalua-