

RINGING THE CHANGES IN EVALUATION OF UROGENITAL PROLAPSE

Hypothesis / aims of study

Women with urogenital prolapse may present with a plethora of lower urinary tract symptoms, which may or may not be related to the prolapse. Urogenital prolapse may mechanically obstruct the urethra, leading to bladder outlet obstruction, impede voiding assisted by abdominal straining and mask sphincteric incontinence. Occult stress incontinence (OUSI) is diagnosed in 50% of patients with urogenital prolapse [1]. Continent women with severe urogenital prolapse may become incontinent after prolapse is reduced, and therefore up to 80% of these women may develop stress incontinence (SUI) after prolapse surgery [2]. Stress incontinence in previously continent patients after vaginal surgery for prolapse is frustrating for both patient and physician. Reducing the prolapse with a ring pessary at pre operative videocystourethrography [VCU] might identify these patients but, at present, there are no data regarding its value. Our aim was to determine predictive value of the pessary test at urodynamics in identifying patients with OUSI, likely to develop SUI postoperatively.

Study design, materials and methods

This was a prospective longitudinal observational study conducted at a tertiary referral centre. Continent women with symptomatic urogenital prolapse were recruited from the surgical waiting list for pelvic reconstructive surgery. All these women underwent preoperative VCU. Multichannel video urodynamics were performed according to the recommendations of the International Continence Society. At the end of the filling phase of the cystometry, women were asked to cough once, three times and five times with simultaneous fluoroscopy of the bladder neck to detect any leakage of urine. Women who were observed to leak urine on coughing were classified as having "frank" urodynamic stress incontinence. Those women who did not leak even with five coughs were deemed to have no stress incontinence. They then had the test repeated after reducing their prolapse with a ring pessary. If urinary incontinence was detected on coughing, after reducing the prolapse, it was labelled as "occult" stress incontinence. SPSS (V 17 Chicago Illinois) was used for statistical analysis.

Results

In total, 112 women with symptomatic urogenital prolapse were studied over 2 years. Mean age of our patients was 64 (Range 45- 98) and mean parity was 2 (Range 0-4). Of this cohort, 48 women with urogenital prolapse had "normal" VCU, i.e. no urinary leakage on coughing. Upon reduction of the prolapse with a ring pessary, 43 continued to have no stress incontinence. Of these women, with no evidence of OUSI after pessary test, only one developed SUI postoperatively.

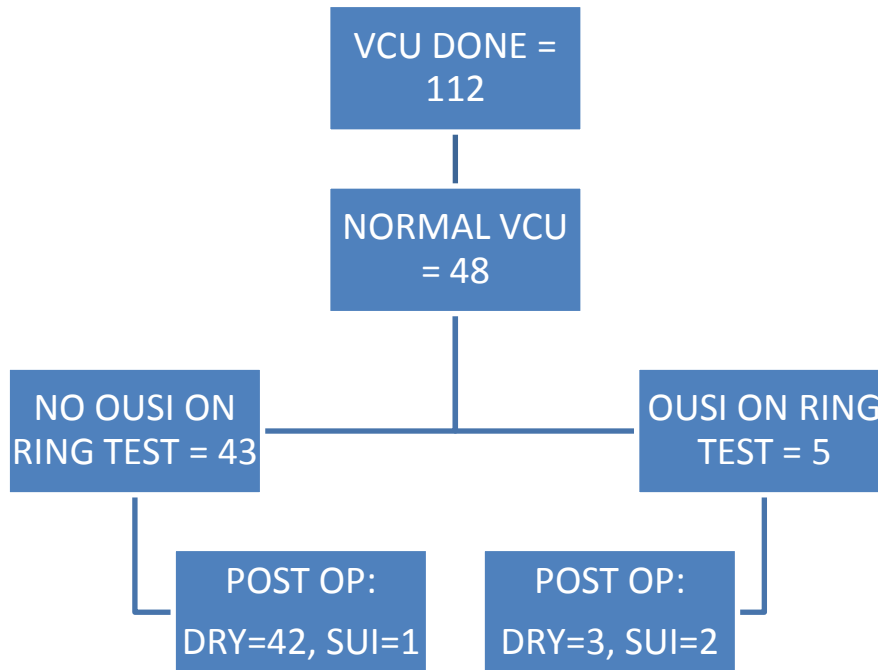
Five women were found to have OUSI on repeating the VCU with a ring pessary in situ. Of these, two developed frank SUI after surgical correction of their prolapse. [Figure 1]

The pessary test had poor sensitivity [67%] but high specificity [93%] in predicting postoperative SUI. Positive predictive value was low [40%], however it had an excellent negative predictive value [98%].

Interpretation of results

The association of urogenital prolapse and symptoms is not well understood. In our study occult sphincteric incontinence was present in only 10% of the women with severe urogenital prolapse. Considerable controversy exists regarding the wisdom of performing a concomitant anti-incontinence procedure in women with severe prolapse in whom stress incontinence is not demonstrated preoperatively [3]. Pelvic prolapse may be reduced by a split speculum, vaginal pack or vaginal pessary that may be conveniently and comfortably placed during urodynamics to simulate surgical correction. The findings of our study show that if women with urogenital prolapse remain continent during the pessary test, it is highly likely that they will continue to be continent after pelvic reconstructive surgery.

Figure 1: Results of VCU Ring test



Concluding message

Reduction of urogenital prolapse by a ring pessary is easy to perform, convenient and comfortable in most patients, and simulates surgical correction. Preoperative urodynamic evaluation with and without prolapse reduction is essential for making the correct diagnosis. The decision to perform a concomitant prophylactic continence procedure should be tailored to individual urodynamic findings. The pessary test is effective in predicting continence status following prolapse surgery and can be a valuable tool in pre operative counselling.

References

1. Obstet Gynecol (2004) 104:795-800
2. J Reprod Med (2004) 49:33-37
3. Int Urogynecol J Pelvic Floor Dysfunct. 2010 Feb;21(2):179-86

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Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	No
Is this a Randomised Controlled Trial (RCT)?	No
What were the subjects in the study?	HUMAN
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Specify Name of Ethics Committee	Kings College Hospital Ethics Committee
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes