

ARE PRE-OPERATIVE URODYNAMICS INDICATED IN WOMEN PRESENTING WITH SYMPTOMATIC ANTERIOR COMPARTMENT PROLAPSE?

Aims of Study

The associations between genital tract prolapse and stress urinary incontinence (SUI) are well recognised (1). In addition, significant uterine or vault prolapse may mask the presence of urethral sphincter incompetence, with reported rates in the literature between 36-80% (1-4). The prevalence of occult SUI in women presenting with isolated symptomatic anterior compartment relaxation is not defined and the role of pre-operative urodynamics in those where surgery is considered is unclear. The aim of this study was therefore to evaluate clinical and urodynamic findings in a large series of women presenting with symptomatic anterior compartment prolapse with and without symptoms of SUI.

Methods

Data for all women presenting to a large tertiary urogynaecology service over a six-year period between 1996 – 2001 were reviewed. Standard detailed data sheets including history and findings on clinical examination had been prospectively completed in each case and stored on a dedicated computerised database. In each case provocative testing had been performed with the prolapse reduced to identify occult stress incontinence. Prolapse was assessed at six sites in the left lateral position using the Baden Walker 'half-way' grading system (0–3). Cases presenting with symptomatic anterior compartment prolapse with no vault or uterine descent with and without SUI were identified. Clinical and urodynamic data were evaluated in each case and statistical analysis performed to determine the correlation between the symptom of SUI on history and the presence of SUI on clinical examination or genuine stress incontinence (GSI) at urodynamics.

Results

4158 women were evaluated over the specified time period of whom 956(23%) fulfilled the criteria. Of these 765(80%) reported SUI in association with symptomatic anterior compartment prolapse while 191(20%) did not. The mean age was years 57(R25-99), 174(94%) women were parous [mean 3(R1-12)]. The mean weight for the largest baby was 3.6KG(R-1-5). 119(16%) of women with symptoms of SUI had undergone previous prolapse surgery compared to 37(19%) without such symptoms ($p=0.2$, Yates-corrected Chi Squared test). The findings on clinical history, examination and urodynamics for both groups are listed in Table 1. Urodynamic data was available for 374(50%) of those with associated SUI and 88(46%) of those without. In women with occult SUI demonstrated on examination or GSI at urodynamics there was no association between these findings and either previous surgery, the type or grade of anterior compartment prolapse or the presence of a concomitant rectocele.

Conclusions

Stress urinary incontinence is a common symptom in women presenting with isolated symptomatic anterior compartment prolapse. Of these 1 in 3 will have demonstrable SUI on examination and 1 in 2 a diagnosis of GSI at urodynamics. In contrast, in women without such symptoms on history only 1 in 20 have occult SUI on examination and 1 in 10 GSI at urodynamics. These findings question the role of routine urodynamic assessment in continent women with asymptomatic anterior compartment prolapse in whom surgery is considered.

Table 1 -

	Anterior Prolapse (+) SUI	Anterior prolapse (-) SUI	
Clinical History	(n=765)	(n=191)	*p
Frequency (> 8 daily)	447(58%)	78(40%)	0.001
Nocturia (>2)	346(45%)	117(61%)	0.001
Urgency	606(79%)	142(74%)	0.3
Urge incontinence	539(70%)	87(45%)	0.001
Urinary tract infection	164(21%)	33(17%)	0.3
Strains to void	132(17%)	36(18%)	0.7
Poor stream	31(4%)	34(18%)	0.001
Dyspareunia	72(9%)	22(11%)	0.5
Clinical findings	(n=765)	(n=191)	
Stress incontinence	229(30%)	7(4%)	0.0001
Rectocele G 1 - 2	601(79%)	114(60%)	0.001
Urodynamic diagnosis	(n=374)	(n= 88)	
Normal	101(27%)	30(34%)	0.04
Genuine stress incontinence	172(46%)	8(9%)	0.0001
Detrusor instability	38(10%)	30(34%)	0.0001
Mixed incontinence	61(16%)	4(5%)	0.006
Hypersensitive bladder	0(0%)	2(3%)	0.04
Voiding dysfunction	2(1%)	2(3%)	0.3

[Values expressed as n(%), *p = Yates-corrected Chi squared test]

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