

ANTERIOR REPAIR IN WOMEN WITH URODYNAMIC MIXED INCONTINENCE

Hypothesis / aims of study

The urodynamic mixed incontinence and vaginal prolapse often co-exist and it is not clear what should be first line treatment. It is not known what effect surgical repair of the anterior vaginal wall has on urinary symptoms in women with urodynamic mixed incontinence. The aim of this study is to evaluate: 1) how anterior repair changes urinary symptoms in two groups of women with a symptomatic anterior vaginal prolapse: a) with urodynamic mixed incontinence and b) with presenting symptoms of mixed incontinence; 2) if a preoperative urodynamic to classify mixed incontinence could be important for different surgical outcomes for women with symptomatic mixed incontinence.

Study design, materials and methods

In this prospective observational study we included consecutive women with symptomatic anterior vaginal prolapse divided into a group with a urodynamic diagnosis of mixed incontinence and a second one with presenting symptoms of mixed urinary incontinence regardless their urodynamic diagnosis. All women were preoperatively assessed for urinary and prolapse symptoms and examined (ICS POP-Q system). Each woman underwent a complete multichannel urodynamic test. Women with at least a symptomatic stage IIa and either a urodynamic diagnosis of mixed incontinence or presenting symptoms of mixed urinary incontinence were included in this study and underwent an anterior repair which involved fascial plication. All women were then reassessed at 1,6,12 months and then yearly. Data were then stored onto a database and analysed for urinary symptom changes after surgery (Chi square test and Mann Whitney U test).

Results

Ninety-three women consecutive were recruited for this study.

Sixty-four of them, with a mean age of 62.2 years (range 38 – 84 years) had a preoperative urodynamic diagnosis of mixed incontinence. Thirty-four had a stage IIa prolapse, 21 a stage IIIa and 9 a stage IVa before surgery. Post-operatively we re-evaluated each single woman at a mean follow-up of 10.7 months (range 3 – 36 months).

Urgency either disappeared or greatly reduced postoperatively (Table 1) as did urge incontinence (Table 2) in these women with urodynamic mixed incontinence.

Table 1

	Absent (%)	Up to 3 times/week (%)	More than 3 times/week (%)	p
Pre-op Urgency	5 (7.8)	20 (31.3)	39 (60.9)	0.000
Post-op Urgency	44 (68.7)	12 (18.7)	8 (12.6)	

Table 2

	Absent (%)	Up to 3 times/week (%)	More than 3 times/week (%)	P
Pre-op Urge inc.	12 (18.7)	21 (32.8)	31 (48.5)	0.000
Post-op Urge inc.	50 (78.1)	14 (21.9)	0	

Table 3 shows how stress incontinence changed after surgery in this group.

	Absent (%)	Up to 3 times/week (%)	More than 3 times/week (%)	P
Pre-op Stress Inc	14 (21.9)	16 (25.0)	34 (53.1)	0.000
Post-op Stress Inc	53 (82.8)	10 (15.6)	1 (1.6)	

Twenty-nine women, with a mean age of 63.3 years (range 41 – 83 years) had a preoperative presenting symptom of mixed urinary incontinence. Sixteen had a stage IIa prolapse, 12 a stage IIIa and 1 a stage IVa before surgery. Post-operatively we re-evaluated each single woman at a mean follow-up of 15.9 months (range 4 – 50 months).

Table 4 shows how urgency changed after surgery in the group with symptomatic mixed incontinence.

	Absent (%)	Up to 3 times/week (%)	More than 3 times/week (%)	P
Pre-op Urgency	0	7 (24.1)	22 (75.8)	0.000
Post-op Urgency	20 (69.0)	8 (27.6)	1 (3.4)	

Table 5 shows how urge incontinence changed after surgery in the group with symptomatic mixed incontinence.

	Absent (%)	Up to 3 times/week (%)	More than 3 times/week (%)	P
Pre-op Urge inc.	11 (37.9)	6 (20.7)	12 (41.4)	0.000
Post-op Urge inc.	25 (86.2)	4 (13.8)	1 (3.4)	

Table 6 shows how stress incontinence changed after surgery in the group with symptomatic mixed incontinence.

	Absent (%)	Up to 3 times/week (%)	More than 3 times/week (%)	p
Pre-op Stress Inc	0	14 (48.3)	15 (51.7)	0.000
Post-op Stress Inc	15 (51.7)	12 (41.4)	2 (6.9)	

Interpretation of results

Our study shows that women with concomitant anterior vaginal prolapse and either urodynamic mixed incontinence or symptomatic mixed incontinence, a surgical approach with a fascial plication to repair prolapse as first line treatment significantly improved urgency, urge incontinence and stress incontinence. It was surprising to find that stress incontinence improved between the two groups considered. We have difficulties in interpreting it but it would mean, if these data will be confirmed by other authors, that urodynamics would be important to better counsel our patients preoperatively. Although these data need to be confirmed by larger studies, the message we take from our experience is to avoid any other form of treatment precedent or in association of this kind of women

Concluding message

Women with a Stage IIa prolapse associated either with urodynamic mixed incontinence or symptomatic mixed incontinence should be treated with anterior repair as first line approach.