

PREDICTING THE NEED FOR CONCOMITANT MID-URETHRAL TAPE PROCEDURE DURING CYSTOCELE REPAIR BY VAGINAL PACKING

Hypothesis / aims of study

The need for concomitant mid-urethral tape procedure during cystocele repair is still undetermined [1-3]. The aim of this study was to investigate the urodynamic effects of vaginal gauze packing and the feasibility of using the pad test for determining suitability for concomitant mid-urethral tape procedure during cystocele repair.

Study design, materials and methods

In this retrospective study, 140 consecutive women with POP-Q stage II or higher symptomatic cystocele who visited the urogynecologic outpatient clinics of a medical center between July 2005 and December 2010 were enrolled. All patients underwent a 20-min pad test and stress urethral pressure profile before and after vaginal gauze packing.

Table 1. Urethral pressure profiles and pad weight before and after reduction of the cystocele by vaginal packing (n = 140)

Variable	Mean ± SD		P*
	Before reduction	After reduction	
Pad weight (g)	11.7 ± 28.7	11.6 ± 30.3	<0.001
PTR25 (%)	95.7 ± 46.2	100.8 ± 45.1	0.07
PTR50 (%)	89.4 ± 43.6	99.7 ± 44.4	0.03
PTR75 (%)	88.9 ± 52.6	94.5 ± 48.5	0.09
MUP (cmH ₂ O)	101.4 ± 39.2	102.2 ± 34.7	0.21
MUCP (cmH ₂ O)	67.2 ± 40.5	70.1 ± 35.2	0.053
FPL (cm)	2.6 ± 1.1	3.0 ± 1.1	0.009
CL (cm)	1.5 ± 0.9	1.7 ± 1.0	0.11
UCPA (cm ² H ₂ O)	77.0 ± 68.2	94.4 ± 62.8	<0.001
CA (cm ² H ₂ O)	43.9 ± 39.1	55.1 ± 43.8	<0.001

*By Wilcoxon signed-rank test.

CA: continence area; CL: continence length; FPL: functional profile length; MUCP: maximal urethral closure pressure; MUP: maximal urethral pressure; PTR: pressure transmission ratio; PTR25: PTR near the proximal point of 25% functional profile length; PTR50: PTR near the middle point of functional profile length; PTR75: PTR near the distal point of 25% functional profile length; SD: standard deviation; UCPA: urethral closure pressure area.

Table 2. Number of patients who underwent cystocele/uterine prolapse repair according to vaginal gauze reduction and pad weight

Variable	Patients with cystocele (n = 140)	Patients who underwent surgery (n = 97)	Patients who underwent solitary/concomitant mid-urethral tape procedures (n = 30)	Patients who needed further mid-urethral tape procedure (n = 2)
Pad weight after cystocele reduction (g)				
≥8 g	35	25	25	0
>1 g and <8 g	62	46	5	2
≤1 g	43	26	0	0

Results

After cystocele reduction by vaginal gauze packing, a decrease in pad weight and an increase in pressure transmission ratio, functional profile length, urethral closure pressure area, and continence area were found (Table 1). Furthermore, 49% (34/69) of the continent patients (pad weight ≤ 1 g) became incontinent (>1 g). On the other hand, only 12% (13/109) of the patients with <8 g pad weight acquired severe stress incontinence (≥8 g).

Of the 23 patients with ≥8 g pad weight after reduction who received concomitant mid-urethral tape procedure with prolapse repair, none required further anti-incontinence surgery. Of the 41 patients with pad weight between 1 and 8 g after reduction who received solitary surgery for prolapse repair, only 2 (5%) required anti-incontinence surgery during follow-up (Table 2).

Interpretation of results

Cystocele reduction by vaginal gauze packing may improve the severity of stress incontinence. Few patients needed further anti-incontinence surgeries if using the criteria of a 20-min pad test with cutoff point of ≥8 g following vaginal gauze packing for concomitant mid-urethral tape procedure.

Concluding message

Pad weight test with a cutoff point ≥ 8 g following vaginal gauze packing may be used as the criteria of concomitant anti-incontinence surgery in cases who need cystocele repair.

References

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Disclosures

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RCT: No **Subjects:** HUMAN **Ethics Committee:** National Taiwan University Hospital Research Ethics Committee **Helsinki:** Yes **Informed Consent:** No