

## DIAGNOSIS AND TREATMENT OF OCCULT URINARY INCONTINENCE IN WOMEN WITH PELVIC ORGAN PROLAPSE; 5-YEAR EXPERIENCE AT A TERTIARY CARE CENTER

### Hypothesis / aims of study

The aim of this study was to share our five-year experience in the diagnosis and treatment of occult urinary incontinence in women with pelvic organ prolapse.

### Study design, materials and methods

The medical records of all patients who were admitted to the Urogynecology Unit of Istanbul Faculty of Medicine between 2008 and 2013, in total of 1600 patients, were retrospectively examined. 287 patients had two consecutive urodynamic testing first before and second after reduction of the prolapsed organs. Among 287 patients, 85 were continent (29.62%). Demographic data, medical records, physical examination, full urogynecological workup, urodynamic investigations, treatment modality, the results of the treatment and King's Health Questionnaire scores before and after the treatment were recorded. This study was approved by local ethics committee and informed consent was obtained from each patient.

### Results

The mean age of 287 patients is 56.41 (max: 87, min: 30, Std Dev. 11.7). The mean number of delivery is 3.5 (max: 12, min: 0, Std Dev. 1.92). 48 patients had been previously operated; the operations performed were abdominal hysterectomy for 20 patients, vaginal hysterectomy for 6 patients, anterior colporrhaphy for 7 patients, abdominal hysterectomy and anterior colporrhaphy for 6 patients, vaginal hysterectomy and colporrhaphy anterior and posterior for 4 patients, sacrocolpopexy for 2 patients, Kelly plication for 1 patient, cervicosacropepy for 1 patient and andominal hysterectomy and Burch colposuspension for 1 patient.

202 patients were incontinent (%70.38); 23 patient were suffering from stress urinary incontinence, 61 patients from urge urinary incontinence and 118 patients had mixed urinary incontinence.

On physical examination, cough test was positive in 54 patients (18%). According to the pelvic organ prolapse quantification (POP-Q) system, 36 patients had stage II, 227 patients stage III and 24 patients stage IV pelvic organ prolapse. The mean intravaginal pressure with appropriate pelvic musculature contracted was 17.5460 (max: 69, min: 0, Std Dev: 11.22). Uroflowmetry test results first before and second after reduction of the prolapsed organs are shown in Table 1 and in Table 2.

Of the 85 continent women, 20 were found to have occult stress urinary incontinence. So, the prevalence of occult stress urinary incontinence was found to be 23.53%. The mean abdominal leak point pressure was 90.78 (max: 150, min: 9, Std Dev: 36.88).

Table 3 shows the treatment modality, the complications, King's Health Questionnaire scores before and after the treatment of the patients with occult stress urinary incontinence.

### Interpretation of results

20 patients were diagnosed as having occult stress urinary incontinence (23.53%). 20 patients had overactive bladder symptoms during urodynamic studies after the reduction of the prolapsed organs.

Among these 20 patients with occult stress urinary incontinence; 17 were operated. King's Health Questionnaire scores before and after the operation, showed that health status of 12 patients was better, 1 patient was unsatisfied after the treatment, 2 patients' scores did not change and 2 patients were lost to follow up.

### Concluding message

The prevalence of occult urinary incontinence diagnosed with urodynamic investigations was 23.53 %. Patients having advanced pelvic organ prolapse are good candidate for urodynamic testing with reduction of prolapsed organs because a detailed work-up before surgical treatment seems to be necessary and efficacious.

	Minimum	Maximum	Average	Std. Dev.
Qmax	0	67	24,04	13,14
Voiding time	0	84	29,75	14,50
Voided volume	0	1240	278,43	170,26
PVR	0	650	57	82,14

Table 1. Uroflowmetry test results before reduction of the prolapsed organs. Qmax: maximum flow. PVR: post-void residual volume.

	Minimum	Maximum	Average	Std. Dev.
Qmax	0	84	23,45	10,53
Voiding time	0	201	31,48	20,04
Voided volume	0	675	269,20	98,22
PVR	0	350	26,06	51,91

Table 2. Uroflowmetry test results after reduction of the prolapsed organs. Qmax: maximum flow. PVR: post-void residual volume.

### The treatment modality and outcome of the patients with occult stress urinary incontinence

n	Treatment modality	Preop. King	Postop. King	Complication
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1		260	0	-
2		215	25	-
3		31.66	41.66	-
4		718.86	83.33	-
5	Vag. hyst. + TOT +	494.43	0	-
6	colporrhapy ant. / post.	627.76	-	Difficulty in urinating
7		841.66	202.77	De novo urge UI
8		273.87	222.75	Leg pain
9		313.87	130.55	De novo urge UI
10		48.33	16.66	-
11		31.66	0	-
12	Vag. hyst.+colporrhapy ant./post.	438.33	25	-
13		658	410	Bladder injury
14	Vag. hyst.+TOT+colpocleisis+perineorrhaphy	25	25	-
15		683.32	25	-
16	TOT + colporrhapy ant. / post.	186.66	-	-
17	TOT	122.77	433.33	De novo urge UI
18		755.55	-	-
19	Conservative treatment modalities	480.53	-	-
20		360.56	175	-

Table 3. The treatment modality, the complications, King's Health Questionnaire scores before and after the treatment of the patients with occult stress urinary incontinence.

Disclosures

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