

THE EFFECTS OF TREATMENT MODALITIES ON QUALITY OF LIFE AND SEXUAL FUNCTION IN TYPES OF URINARY INCONTINENCE

Kadriye Nilay Özcan¹, Melike Doğanay², Burak Akselim³, Kuntay Kokanalı², Sabri Cavkaytar²

¹ *Servergazi State Hospital, Department of Obstetrics and Gynecology, Denizli, Turkey*

² *Dr. Zekai Tahir Burak Woman's Health Research and Education Hospital, Department of Obstetrics and Gynecology, Ankara, Turkey*

³ *Bursa Yüksek İhtisas Research and Education Hospital, Department of Obstetrics and Gynecology, Bursa, Turkey*

Aim of Study: The aim of this study was to determine the relationship between the sexual function and the treatment options in patients diagnosed with urinary incontinence by urodynamic studies.

Materials and Methods: One hundred and twenty-eight sexually active patients were enrolled in our prospective study and urodynamic studies were performed to determine the type of urinary incontinence. Patients were divided into three subgroups according to their urodynamic findings as urodynamic stress incontinence, detrusor overactivity and mixed incontinence and eligible treatment options for these groups were determined. According to experimental power analysis through the PASS 11 program (Posteriori Power Analysis), in order to detect two unit PISQ-12 score difference with a power of 80% and an error of 5.0% alpha at least 35 patients should be stated in the groups. The treatment options given to the patients were either surgical, medical treatment or Kegel exercises (42, 50, 36 patients in subgroups respectively). Verbal and written informed consent were obtained from all patients. Sexual function and urinary incontinence were assessed before treatment and on post-treatment sixth month with the Prolapse and Incontinence Sexual Function Questionnaire (PISQ-12), Urogenital Distress Inventory (UDI-6) and Incontinence Impact Questionnaires (IIQ-7).

Results: According to urinary incontinence types there was statistically significant difference between the pre-treatment and post-treatment 6th month total and physical PISQ-12 scores of each of the three urinary incontinence types individually ($p < 0.05$). Post-treatment scores were significantly higher than pre-treatment scores. There were no statistically significant difference between the urinary incontinence types in terms of pre-treatment and post-treatment total PISQ-12 scores ($p > 0.05$).

	n	Before Treatment	After Treatment	p*	
		Mean±S	Mean±S		
PISQ-12 Total	Stres Incontinence	59	26,75±6,94	31,61±5,82	<0,001
	Detrusor Overactivity	37	27,86±8,24	29,54±7,54	0,044
	Mixt Incontinence	32	25,06±7,82	28,63±7,70	0,002
	p**		0,417	0,198	
PISQ-12 Emotional	Stres Incontinence	59	7,03±3,38	7,53±2,95	0,026 ^b
	Detrusor Overactivity	37	7,19±3,53	6,73±3,56	0,298 ^b
	Mixt Incontinence	32	7,06±3,33	6,78±3,09	0,287 ^b
	p**		0,976 ^a	0,392 ^a	
PISQ-12 Physical	Stres Incontinence	59	12,25±4,59	16,25±3,60	<0,001
	Detrusor Overactivity	37	13,24±5,06	15,30±4,69	0,001
	Mixt Incontinence	32	10,53±4,82	13,66±5,28	0,001
	p**		0,075	0,083	
PISQ-12 Partner Related	Stres Incontinence	59	7,46±2,49	7,81±2,30	0,012
	Detrusor Overactivity	37	7,38±2,87	7,59±2,34	0,414
	Mixt Incontinence	32	7,53±2,60	8,00±2,02	0,056
	p**		0,979	0,753	

*Wilcoxon signed-rank test
**Kruskal Wallis Test
*One way ANOVA
^bPaired sample T test

TABLE 2 PISQ-12 SCORES ACCORDING TO TREATMENT MODALITIES

	n	Before Treatment	After Treatment	p*	
		Mean±S	Mean±S		
PISQ-12 Total	Surgical Treatment	42	25,31±7,59	31,93±5,92	<0,001
	Medical Treatment	50	27,36±8,16	29,20±7,77	0,007
	Kegel Exercise	36	27,22±6,62	29,81±6,52	0,003
	p**		0,472	0,100	
PISQ-12 Emotional	Surgical Treatment	42	7,29±3,64	7,55±2,91	0,339 ^b
	Medical Treatment	50	6,96±3,45	6,68±3,33	0,332 ^b
	Kegel Exercise	36	7,03±3,07	7,19±3,24	0,640 ^b
	p**		0,895 ^a	0,421 ^a	
PISQ-12 Physical	Surgical Treatment	42	11,00±4,99	16,79±3,76	<0,001
	Medical Treatment	50	12,78±5,05	14,80±5,03	<0,001
	Kegel Exercise	36	12,47±4,27	14,36±4,11	0,001
	p**		0,203	0,009 ^c	
PISQ-12 Partner Related	Surgical Treatment	42	7,07±2,86	7,50±2,37	0,048
	Medical Treatment	50	7,58±2,61	7,78±2,22	0,296
	Kegel Exercise	36	7,72±2,32	8,17±2,08	0,013
	p**		0,632	0,453	

*Wilcoxon signed-rank test
**Kruskal Wallis Test
^aOne way ANOVA
^bPaired sample T test
^c Statistically significant difference between surgical and kegel groups

TABLE 1. PISQ 12 SCORES ACCORDING TO URINARY INCONTINENCE TYPES

There was statistically significant difference between the pre and post-treatment 6th month total and physical PISQ-12 scores of each of the three treatment types individually ($p < 0.05$). Post-treatment scores were significantly higher than pre-treatment scores. There were no statistically significant difference between the treatment options in terms of pre and post-treatment total PISQ-12 scores ($p > 0.05$). Total IIQ-7 and UDI-6 scores were significantly lower after treatment in each of the treatment types.

Interpretation of Results: In a study, involving 655 patients with stress incontinence were compared Burch colposuspension with midurethral sling operations. 2 years later, the patients' sexual functions were assessed. Sexual functions of patients whose operations were successful were improved and there was no difference between groups.

In a study investigating the effect of Kegel exercises on sexual function, PISQ scores were found to increase after the treatment.

In our study, while there was an increase in all PISQ scores of patients with urinary continence, we thought that the time of ending complaints might be related to the absence of improvement in emotional and partner-dependent scale scores in patients with mixed-type and detrusor over activity.

After the treatment, similar to the literature, we found that there was an improvement of sexual functions in patients treated successfully. In our study, incontinence was improved after the successful treatment, resulting in a further increase in the physical scale score in PISQ-12. This caused the total score to increase. Rapid improvement of the incontinence improved emotional sexual functioning by increasing self-confidence, sexual desires and orgasmic capacities of the patients, especially after the successful surgical treatment. That the patients' emotional and physical problems related to sexual and urinary incontinence comes to end causes to decrease negative emotions and provides to increase sexual desires and close sexual intimacy with partners. This indirectly improves the sexual functions of partners. This process becomes faster especially for patients treated successfully and has achieved success.

Concluding Message: If there is an improvement in patient's urinary incontinence with any suitable form of treatment, quality of life increases and sexual function improves. Even if negative effects of urinary incontinence on sexual life are not often reported, patients must be evaluated in terms of sexual dysfunction and treatment should be planned properly.

Disclosure Statement: None