

THE EFFECT OF ANIMATED BIOFEEDBACK TRAINING IN TREATING PATIENTS WITH VOIDING DYSFUNCTION

Hypothesis / aims of study

The purpose of this study is to determine the effect of animated biofeedback training in treating patients with voiding dysfunction in the urology department of king Fahd specialist hospital -Dammam

Study design, materials and methods

A retrospective single centre study by chart review and biofeedback machine data sheets of all patients with voiding dysfunction who underwent animated biofeedback sessions training using urostym machine in department of urology at king Fahd specialist Hospital –Dammam between March 2010 to Feb 2014.

Study included all patients who underwent Biofeedback training age 5 years and more in both male and females

Using a data sheet to retrieve all data from the files (the sheet includes age,gender,diagnosis,basic labs, uti episodes, urgency/frequency ,urinary incontinence , nocturnal enuresis,and pst void residual).

All patients who didn't complete at least 6 sessions of biofeedback were excluded from the study.

Success was considered as completely cured or 50% or more improvement of the presenting complaint. Rest were considered as failure of treatment.

Results

IRB was obtained from our local research department in the hospital. All files were reviewed.

Among 80 patients who underwent biofeedback training sessions during the mentioned period, 13 patients were excluded due to failure to complete at least 6 sessions of training .

All the statistical analysis were performed using spss version 16 and 67 patients out 80 were included in the analysis.

17 males (25.4%) versus 50 females (74.6%). Minimum age 6 and maximum was 69 with mean age of 29.94.

Diagnosis included 33 dysfunctional voider(49.3%),13 with stress urinary incontinence (19.4%),others 21 (31.3%) includes mixed incontinence ,overactive bladder,nocturnal enuresis and neurogenic bladder disorder.

The major complaints were analysed as follow:

41 patients with urinary incontinence,46 patients with frequency /urgency, 22 patients with recurrent UTI,18 patients with high residual , and 17 patients with Nocturnal enuresis.

Interpretation of results

1. Out of 41 patients with urinary incontinence 2 were dry after treatment (4.9%),29 more than 50% improvement(70.7%) with success of overall 75.6% and 10 patients didn't improve (24.4%).

2.Frequency /urgency resolved in 4 out 46 patients (8.7%) , improved in 30 patients (65.2%) with overall success of 73.9% and 12 patients with no change (26.1%).

3.recurrent UTI improved in 18 out of 22 patients(81.8%) with 4 patients didn't improve (18.2%)

4.nocturnal enuresis resolved in 3 out 17 patients (17.6 %) , improved in 8 patients (47.1%) , with overall success of 64.7%and 6 patients didn't show any improvement (35.3 %).

All the results were statistically significant with overall success rate of 74.8%.

5. post void residual improved in 12 out 18 patients (66.7 %) with 6 patients (33.3 %) no change in residual.

Concluding message

Treatment of patients with voiding dysfunction using biofeedback urostym training is associated with improved urinary incontinence ,urgency frequency symptoms,nocturnal enuresis episodes and decreased urinary tract infection rates.

AGE IN YEARS

N	Valid	67
	Missing	0
Mean		29.94
Std. Error of Mean		2.438
Median		30.00
Std. Deviation		19.960
Minimum		6
Maximum		69

		Frequency	Valid Percent	Cumulative Percent
Valid	MALE	17	25.4	25.4
	FEMALE	50	74.6	100.0
	Total	67	100.0	

Disclosures

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