The Effect of Nocturnal Enuresis in Adults on Sexual Satisfaction and Self-Esteem

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Abstract

**Aim:** To determine whether there is a change in sexual satisfaction and self-esteem in adult patients with monosymptomatic enuresis.

**Methods:** This study was a prospective questionnaire analysis. 35 adult age individuals still suffering from monosymptomatic enuresis filled out 5-item Arizona Sexual Experiences (ASEX) scale and the 10-item Self-Esteem Scale (SES). Same query forms were filled out by 23 similar aged healthy control group and the results were compared. A value of P<0.05 was used as significance limit.

**Results:** Mean age of the 35 individuals included in the study was 21.6 ± 1.39 for the patient group and 22 ± 2.59 for the control group (n:23). While 7 patients in the enuresis group had sexual dysfunction, there was only in 1 patient in the control group. The self-esteem score has decreased in 22 respondents in patient group whereas there wasn’t any decline in the self-esteem of control group. The two groups’ responses to SES questions were statistically different (p<0.02).

**Conclusion:** Monosymptomatic enuresis at adult ages might affect body respect negatively as well as it might have negative effects on sexual function independent of lower urinary tract symptoms.

Keywords: Nocturnal enuresis; Sexual satisfaction; Self-esteem

Introduction

Nocturnal enuresis is the condition describing the symptom of incontinence during night. Any wetting during sleep above the age of 5 years is enuresis. While 5 years-old children are expected to sleep dry, 15% still wet their bed. Frequency of the disease decreases with age, with 15% of decay rate, the incidence is reduced to 1-3% [1-4]. Most of them suffer primary enuresis nocturnal [2,4].

Bed-wetting is known to have negative psychosocial effects on children. Feeling different, social avoidance and reduced self-esteem are some of them [5,6]. A study on adults shows a decrease in self-esteem caused by enuresis [4]. Also lower urinary tract symptoms (LUTS) such as overactive bladder and nocturia are shown to have negative effects on quality of life, including business life and sexuality [7,8]. However, effects of enuresis on sex life have not yet been studied. The purpose of our study is to comparatively identify self-esteem and sexual problems in young adult males with enuresis and to present the effects of previous failed treatments to this case.

Methods

Adult male patients who consulted to our outpatient clinic with complaints of bed-wetting are included in to the study. Institutional Ethics Committee approval for the study was obtained and the written informed consent was obtained from all the study subjects. 35 patients suffering from monosymptomatic nocturnal enuresis and 23 healthy people have been included in the study.

Starting date of complaints have been recorded in order to find out the frequency of bed-wetting, whether the disease is primary or secondary. The presence of constipation has been evaluated under criteria of Rome III [9]. Physical examination of the patients were done carefully, lower back, external genital organ and presence of globe vesicles have been checked. Urine analysis, urinary density, serum urea, creatinine and glucose have been checked. Kidney, ureter, bladder X-ray (KUB radiography) and urinary ultrasonography have been done. The dimensions of kidney, presence of hydrourephrosis and abnormalities of bladder have been checked. The patients underwent uroflowmetry 2 times at least and the volume of residual urine has been recorded. The voiding diary was filled for at least 3 days. In this diary: time of voiding, voiding volume and the amount of liquid consumed in one day was recorded. It is defined as nocturnal polyuria if the voiding volume during night is 20% over of the volume during the daytime [10].

The patients with spinal dysraphism, uroflowmetry abnormalities, urinary system stone disease, bilateral ureterohydronephrosis, chronic constipation, patients with daytime complaints and suspect of diabetes mellitus, renal failure or diabetes insipitus were excluded. Only the patients with monosymptomatic enuresis were included to the study.

Self-esteem Scale (SES) was developed in 1965 by Rosenberg, used to measure the patients self-esteem [11]. Validation of SES to Turkish was made by Cuhadaroglu [12]. It is a multiple-choice question scale and consists of 12 sub categories and 63 questions. The self-esteem
category of the scale consists of 10 questions. The scale ranges from 0-30. Scores between 15 and 25 are within normal range; scores below 15 suggest low self-esteem [12,13].

Arizona Sexual Experiences (ASEX) is a 5-item rating scale that quantifies sex drive, arousal, vaginal lubrication/penile erection, ability to reach orgasm, and satisfaction from orgasm. Possible total scores range from 5 to 30, with the higher scores indicating more sexual dysfunction. With a total ASEX score of > 19, any one item with a score of 6, any two items with a score of 5 or any three items with a score of 4 would have sexual dysfunction [14]. The validation of scale in Turkish was made by Soykan in 2004 [15]. The Cronbach’s alpha value of ASEX is 0.89 and 0.90.

The control group was selected from among the young adult males, hospital employees with no health complaint. Patients and the control group were compared with each item of ASEX, total score of ASEX and the total score of SES. In addition, patients previously treated unsuccessfully and those who were not treated, compared with each other by again each item of ASEX, total score of ASEX and the total score of SES.

The change in sexual satisfaction and self-esteem in adult patients with nocturnal enuresis was evaluated using SPSS®, version 16.0. The independent samples t test, Mann-Whitney U test was used to compare the groups. A p value of less than 0.05 was accepted as the threshold for statistical significance.

Results

35 patients suffering from monosymptomatic nocturnal enuresis and applied to urology outpatient clinic between 2009-2011 with complaints of bed-wetting have been included in the study. Mean age of patients was 21.6 ± 1.39. Frequency of bed-wetting was 4.6 (1-7) days/week. 18 patients had failed treatment.

The average SES scores of enuresis group is 15.28 ± 5.49 [6-27]. Decline in self-esteem was detected in 22 patients. The average SES score of those with decline of self-esteem was 11.59 and the score of those with regular self-esteem was 21.53 [6-25]. Average SES score of control group is 16.91 ± 1.99, no decline in self-esteem was detected (Table 1). Total SES score of patients and the control group were statically considerably different (p<0.02) [15-21].

While 7 of 35 patients in the enuresis group had sexual dysfunction, no sexual dysfunction was detected in the control group. Scores of sex drive, arousal, penis erection, having orgasm, orgasm satisfaction in patient and control groups were different (Table 2).

| State of being sexually eager | Minimum-Maximum | Mean | SD | p |
|------------------------------|------------------|------|----|---|
| With Medication              | 1-6              | 3.1  | 1.8| 0.32|
| Without Medication           | 1-6              | 2.27 | 1.32|

| Sexual Arousal               | Minimum-Maximum | Mean | SD | p   |
|------------------------------|------------------|------|----|-----|
| With Medication              | 1-6              | 2.55 | 1.37| 0.86|
| Without Medication           | 1-6              | 2.52 | 1.24|

| Penile Erection              | Minimum-Maximum | Mean | SD | p   |
|------------------------------|------------------|------|----|-----|
| With Medication              | 1-4              | 2.61 | 1.24| 0.68|
| Without Medication           | 1-4              | 2.47 | 1.06|

| State of Orgasm              | Minimum-Maximum | Mean | SD | p   |
|------------------------------|------------------|------|----|-----|
| With Medication              | 1-4              | 2.00 | 0.9| 0.37|

Table 1: The comparison of the ASEX scores in enuretic patient group and control group

Table 2: The comparison of the ASEX scores in enuretic patient group and control group

Independent variables with the t test

18 of the enuretic patients had a failed treatment with desmopressin, imipramine or tolterodine and 17 patients had not received any treatment before. No sexual function difference in sexual arousal, erection, satisfaction and total scores were found when both groups were compared in terms of ASEX. Likewise, no difference was found in self-esteem of both groups (p=0.7), (Table 3).
Although the incidence of enuresis nocturnal decreases with age, 1-3% of adults continue bed-wetting. While the recovery in time is bigger in those with low intensity of complaint, bed-wetting frequency of those with continuous plaint is usually 3 nights/week. This fact shows that the probability of recovery in the course of time is low for those with high frequency of bed-wetting [4]. In our study, the frequency of bed-wetting is 4.6 nights/week on average. In addition, latest studies show that patients with no response to therapy have low capacity of bladder, detrusor instability [16-18]. Although we did not evaluate patients with filling cystometry test, only the patients with monosymptomatic enuresis were included to the study according to our evaluation with uroflowmetry and voiding diary.

No difference was detected in studies on self-esteem of children with enuresis compared to those healthy [19-21]. Whereas, study of Hagglof and colleagues show decrease of self-esteem in children with enuresis [5,6]. However the fact that this study group included children who have daytime complaints should also is taken into consideration. Bed-wetting children are shown to start feeling different from the others in the course of time [22]. Urinary incontinence in children at later ages is perceived to be a humiliating, shameful situation. Fear of becoming known of urinary incontinence causes social avoidance [23]. This situation is thought to lead to a lowered body respect and physiological dysfunctions and other mental problems following [5,6].

According to a study about effects of adult enuresis on self-esteem, SES scores of male patients with enuresis nocturnal were lower than those of control group [4]. Also enuresis nocturnal is detected to affect social life, career choice, social activity attendance, and individual and family relations negatively. In our own study, body respect of enuresis patients is significantly lower than those of control group.

Self-esteem of children with enuresis is lower in males, the ones with high bed-wetting frequency, the ones who had a failed therapy and those having daytime complaints [5,23]. Male patients with high bed-wetting frequency were included in our study group.

Effects of LUTS and overactive bladder (OAB) on sexual functions had been studied before [24,25]. For those with LUTS, fear of urinary leakage or urinary leakage during sexual activity raises the risk of erectile dysfunction [25]. Nocturia and prostatitis are found to be particularly related with lowered sexual arousal and erectile dysfunction [8]. Also, overactive bladder is determined to have negative effects on sexual health in terms of decrease of sexual activity, decrease of satisfaction, erectile dysfunction and ejaculation dysfunction [24]. Yet, it should be considered that patients with comorbid situation such as diabetes mellitus, neurologic disorders, prostate cancer were also included in the study.

For the first time, in our study, we uniquely studied the effects of enuresis nocturnal on sexual function rather than LUTS. We determined significant statistical difference in 5 sub-categories of sexual function in enuretic patients compared to control group. The facts that the average age of our patients is 21.6 and absence of comorbidities and other LUTS increases our study's importance. Because it promotes the presence of negative effects of enuresis nocturnal alone on sexual function as well. Besides the possibility of sexual reluctance that is caused by decreased body respect should be taken into consideration [8].

### Conclusion

Our study suggests that enuresis nocturnal affects body respect negatively as well as it has negative effect on sexual function independent of LUTS.

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### Table 3: The comparison of patients in the enuretic group, who had taken medication before and the patients without medication

|                      | Without Medication | With Medication | Mann-Whitney U test |
|----------------------|--------------------|----------------|---------------------|
| Orgasm Satisfaction  | 1-4                | 1-5            | 0.34                |
|                      | 2.11               | 2.77           |                     |
|                      | 0.6                | 1.3            |                     |
| Total Scale Score    | 5-20               | 6-22           | 0.45                |
|                      | 11.88              | 13.05          |                     |
|                      | 4.24               | 5.06           |                     |

Mann-Whitney U test
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