The effect of overactive bladder syndrome on the sexual life in asymptomatic continent women

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KEYWORDS

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ABSTRACT

Objective
Overactive bladder syndrome (OAB) is a very common problem, particularly in women, and has an effect on their daily lifestyle and sexual activity. The purpose of this study was to evaluate the effect of overactive bladder syndrome on sexual life in asymptomatic continent women who are considered to be sexually active.

Design
Descriptive and cross-sectional study.

Setting
Gynaecology and obstetrics outpatient clinic, Pamukkale University Medical Faculty, Turkey.

Subject
A total of 1,504 patients as research population were examined and 117 patients without gynaecological symptoms presenting to the Obstetric and Gynaecology Clinic were included in the study.

Main outcome measures
For data collection a questionnaire to gather socio-demographic and medical information, an assessment tool (OAB-at) and the Female Sexual Function Index (FSFI) for evaluating sexual dysfunction were utilised.

Results
Patients were determined as 28 continent women with OAB, 89 women without OAB. In line with this information we found the mean score of OAB positive continent women was 13.00±5.06 and the mean score of OAB negative women was 3.57±2.15. Patients with OAB had negatively impacted sexual function in the areas of arousal, lubrication, orgasm and pain.

Conclusion
OAB syndrome adversely affects sexual life even in continent women.

INTRODUCTION

In the 2002 International Continence Society (ICS) Standardisation of Terminology report overactive bladder (OAB) is defined as urgency, with or without urge incontinence, usually with frequency and nocturia in the absence of infection or another proven pathology (Abrams et al 2002). The overall prevalence of OAB is 12.8% of women and the rate increases with age (Irwin et al 2006; Teloken et al 2006). The usual prevalence of OAB in premenopausal women is 5–10% (Milsom et al 2001; Moller, Lose and Jorgensen 2000).

In clinical practice, it is commonly found that not only the symptoms of urinary incontinence (UI) but also OAB syndrome affect daily lifestyle and sexual activity, especially for women during the most active era of their social and personal lives (McVary 2006; Patel et al 2006; Kim, Seo and Yoon 2005;). Sexual well-being is an important aspect of women's health, and dysfunction can lead to reduced quality of life and affect marital relationships (Oh et al 2008). Female sexual dysfunction (FSD) is a common disorder with an incidence of 30–50% and is an age-related and progressive problem (Hayes and Dennerstein 2005; Cayan et al 2004).

A number of studies have found that OAB and urinary incontinence in women are associated with sexual dysfunction (Peters et al 2007; Aslan et al 2005; Kizilkaya Beji et al 2005; Handa et al 2004; Salonia et al 2004; Salonia, Zanni et al 2004; Gordon et al 1999). However, there is a lack of data demonstrating the effect of OAB syndrome without urinary incontinence on sexual activity in the sexually active age group (Oh et al 2008; Serati et al 2008; Coyne et al 2007; Sen et al 2007; Patel et al 2006; Kim, Seo and Yoon 2005). The aim of this study is to evaluate the effect of OAB syndrome on the sexual life of asymptomatic continent women.

METHOD

Participants

The research population comprised 1,504 women who presented to Pamukkale University Medical Faculty Gynaecology and Obstetrics Outpatient Clinic in Denizli, Turkey. All patients were evaluated with history taking, urinalysis and urine culture. Those who were in the postmenopausal period, pregnant or had gynaecologic complaints (pelvic pain, dysfunctional bleeding, pelvic inflammatory disease, etc) were excluded from the study. The research sample comprised 120 women in the premenopausal period. Urine samples for culture were obtained and three women with culture-proven urinary tract infection were excluded from the study. Using the Over Active Bladder Assessment Tool women were categorised into two groups: with and without OAB. Eighty-nine women without OAB symptoms and 28 continent women with OAB symptoms were included in the study. Written and oral approval was obtained from patients prior to the study.

Instruments

Patient socio demographic and medical data were collected via face-to-face interview and from medical chart abstraction using structured questionnaires. In addition, for the diagnosis of OAB, the OAB assessment tool was used. For evaluation of sexual function the Female Sexual Function Index (FSFI) was used. To determine the pattern of sexual intercourse, the frequency of intercourse was also enquired about. Data were collected in two stages. In the first stage, the OAB diagnostic form and the FSFI questionnaire were administered to the patients by two different investigators. In the second stage, the questionnaires were evaluated by all investigators. Patients with a total score of less than 8 on the OAB diagnostic questionnaire were classified as OAB negative and those with a total score of 8 or greater were classified as OAB positive.

Over Active Bladder Assessment Tool (OAB-at)

Since one of the aims of our study was to distinguish those women with OAB problems from those without, the eight question symptom bother scale was used. Each item can be assigned scores from 0 to 5. The OAB

V8 screener describes and identifies the number of individuals with OAB symptoms presenting to urology outpatient clinics (Acquadro et al 2006).

The Female Sexual Function Index (FSFI)

The FSFI was developed by Rosen et al (2000) as a 19-item multidimensional scale to evaluate female sexual function. This index evaluates the sexual function and related problems in the preceding four weeks. The index comprises six subsections: desire, arousal, lubrication, orgasm, satisfaction and pain. Each domain consists of two to three questions and has a specific coefficient factor (0.6 for desire, 0.3 for arousal and lubrication, and 0.4 for orgasm, satisfaction and pain) that is used to obtain the final score for each domain. The individual domain scores are combined to give a total score with higher scores implying better or more normal sexual function (Rosen 2000). The index was adapted to Turkish culture and validated in Turkish women by Aygin et al (2005).

Table 1: The demographic and other characteristic of patients with and without OAB

	OAB 8 < n:89	OAB 8 => n:28	P value
Mean age (SD)[a]	40,80±8,66	41,60±8,39	0,756
Marriage durationa	20,21±9,44	21,82±9,52	0,404
Body Mass Index(BMI)[a]	27,46±4,52	28,73±4,44	0,098
Primipare age [a]	21,81±3,70	20,80±2,87	0,275
Parity [a]	2,98±1,66	3,89±1,79	0,017
Education level [b]			
- < 8 years	56 (%62,9)	17 (%60,7)	
- 12 years or university level	33 (%37,1)	11 (%39,3)	0,833
Occupation [b]			
Employed	18 (%20,2)	5 (%17,9)	
Unemployed	71 (%79,8)	23 (%82.1)	0,783
Abdominal surgery [b]			
Yes	22 (%24,7)	12 (%42,9)	
No	66 (%75,3)	16 (%57,1)	0,065
Chronic disease [b]			
No	80 (%89,9)	26 (%92,9)	
Diabetes Mellitus	1 (% 1,1)	-	
Hypertension	4 (%4,5)	1 (%3,6)	
Others	4 (%4,5)	1 (%3,6)	0,936
Income [b]			
Low	79 (%88,8)	22 (%78,6)	
Medium	10 (%11,2)	6 (%21,4)	0,171
Delivery type [b,c]			
NSVD	73 (%91,3)	22 (%88,0)	
C-section	7 (%8,8)	3 (% 8,0)	0,629
Frequency of sexual intercourse [b]			
1-2/month	29 (70,7)	12 (29,3)	
1-2/week	46 (79,9)	12 (20,9)	
3-4/week	14 (77,8)	4 (22,2)	0,605

a Statistical analysis was performed using the Mann Whitney-U test
b Statistical analysis using Chi-square test
c: Since there are nulliparous women, group 1 includes 80, group 2 includes 25 patients.
NSVD: Normal Spontaneous vaginal delivery

Data Analysis

The Statistical Package for Social Sciences (SPSS) 11.0 software was used for statistical analysis. The significance level for all analyses was set at 5%. Chi-square test was used to compare categorical variables; since it did not match normal distribution the Mann–Whitney U test was used to compare two groups.

RESULTS

In line with this information we found the mean score of OAB positive continent women group was statistically different than the OAB negative women group (13.00±5.06 and 3.57 ±2.15 respectively). Table 1 presents the demographic and other characteristics for all patients by OAB status. The mean age of patients with and without OAB were 41.60±8.39 and 40.80±8.66 years, respectively. All women had been married for a long time (20.57±9.41). Slightly more than 60% had only primary education and over three-quarters of the women were employed. While 71% (n=89) of women did not experience OAB, 23.9% (n=28) did have OAB symptoms. When sexual intercourse frequency was evaluated, 49.6% of patients had sexual intercourse once or twice a week. Age, length of married life, body mass index, age at first parturition, educational level, employment status, history of abdominal surgery, presence of other chronic diseases, income level, delivery type and frequency of intercourse were not associated with the presence of OAB syndrome. A higher parity was associated with OAB ($p<0.05$).

Patients with OAB had significantly lower scores in the sub-categories of arousal (p=0.035), lubrication (p=0.035), orgasm (p=0.013) and pain (p=0.038) compared to patients without OAB (table 2).

Table 2: FSFI scores of patients with and without OAB

	0ab 8< n:89	0ab 8=> n:28	mean p value
Desire	2,99 (0,91)	3,02 (0,95)	0,905
Arousal	3,23 (0,72)	2,70 (1,25)	0,035
Lubrication	3,23 (0,72)	2,70 (1,25)	0,035
Orgasm	2,93 (0,64)	2,40 (1,04)	0,013
Satisfaction	2,01 (0,95)	2,58 (4,20)	0,469
Pain	3,71 (0,91)	3,07 (1,53)	0,038
Total FSFI	18,11 (2,94)	16,48 (7,26)	0,239

*Statistical analysis was performed using the Mann Whitney-U

DISCUSSION

It has found the existence of OAB syndrome in continent women is related to sexual dissatisfaction. Most published studies have reported that women with OAB syndrome and urinary incontinence have some problems during sexual functioning; (Peters et al 2007; Handa et al 2004) however, there are little and conflicting data on sexual dysfunction in OAB patients without urinary incontinence. Women with OAB syndrome often suffer from suprapubic pain or discomfort, dysuria, and experience more pain during intercourse as well as other sexually related problems (Kim, Seo, and Yoon 2005). In a prospective study of 100 women referred for urogynaecological evaluation, those with detrusor instability and resulting OAB had significantly lower sexual function scores than those with stress urinary incontinence (Gordon et al 1999). Troublesome urge urinary incontinence was reported in 46% of women complaining of orgasmic phase difficulties (Salonia, Zanni et al 2004). Kim et al (2005) found that sexual activity was significantly reduced in OAB syndrome and UI versus the asymptomatic group (Kim, Seo, and Yoon 2005). Sen et al (2007) reported that although all the FSFI domain scores are lower in the OAB group, only ‘desire’ was found to be statistically different.

The FSFI scores of the OAB-dry and OAB-wet groups were also similar. In another study including OAB with and without incontinence negatively affects women's sexual health, reducing sexual desire and the ability to achieve orgasm (Coyne et al 2007). However, in contrast to these findings, in our study sexual desire was not affected with the existence of OAB complaints. Our results suggest that OAB syndrome adversely affect arousal, lubrication, orgasm and pain scores. These data are extremely important in that the OAB syndrome without incontinence may decrease the sexual function quality. In contrast to our results and above studies, in their report on the quality of sexual life of UI patients, Tomoe et al (2005) and Patel et al (2006) pointed out that UI had little impact on the sex lives of patients. Oh et al (2008) suggested that women with stress urinary incontinency more frequently experienced pain during intercourse and coital incontinence than those with OAB.

The absence of OAB incontinent women in the study group may be the limitation of this study. However, recent research results show that there is no statistical significance in sexual function scores between continent and incontinent OAB groups (Sen et al 2007).

CONCLUSION

In conclusion, OAB symptoms were found to be the significant risk factor for decreased sexual function. Direct questioning of patients by physicians and nurses regarding OAB symptoms during consultations could lead to earlier identification of these important problems and ensure that sexual satisfaction is addressed with women with over active bladder to improve their quality of life. Further research with a large sample size is needed to confirm the negative effect of OAB syndrome in sexual function of continent women.

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