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# Assessment of Sexual Dysfunction in Patients with Fibromyalgia Syndrome

Fibromiyalji Sendromu Olan Hastalarda Seksüel Disfonksiyonun Değerlendirilmesi

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# Summarv

**Objectives:** The aim of our study is to determine the presence, quality of sexual dysfunction in patients with fibromyalgia syndrome and to compare with normal population.

Material and Methods: A total of 55 sexually active women who were admitted to Department of Physical Therapy and Rehabilitation of Antalya Research and Training Hospital and diagnosed with fibromyalgia syndrome according to 1990 and 2010 American College of Rheumatology (ACR) criteria. A control group composed of 50 sexually active women who were admitted to our clinic with various musculoskeletal system complaints were also included in the study in order to compare the parameters used for clinical assessment of patients and to determine whether the patients differ from normal population. Patients and controls who met inclusion criteria were applied Female Sexual Function Index (FSFI) for assessment of sexual function. This test was developed by Rosen and colleagues in 2000, it is composed of 19 questions and inquires six different dimensions including desire, arousal, lubrication, orgasm, sexual satisfaction and pain. Turkish validation test was done by Turkish Society Of Andrology in 2003, answers are multiplied with a coefficient and each section is evaluated on six scores. Minimum score is 2.4 and maximum is 36 and standardly used for assessment of female sexual dysfunction in Turkey.

Results: Subscale and total score of Female Sexual Function Index of Fibromyalgia syndrome patients were found statistically significantly lower than those of control group (p<0.05).

**Conclusion:** Disorders of sexual function or its quality are one of the problems seen in fibromyalgia syndrome patients. It should be noticed that sexual function assessment must be a part of treatment of fibromyalgia syndrome. It is quite difficult to determine the mechanism between sexual dysfunction and fibromyalgia syndrome and new and larger studies are needed to determine this mechanism. (Turkish Journal of Osteoporosis 2013;19: 65-8)

Key words: Fibromyalgia, sexual, dysfunction

# Özet

Amaç: Çalışmamızın amacı çeşitli semptom birlikteliği bulunan fibromiyalji hastalarında cinsel işlev bozukluğunun varlığını, niteliğini belirlemek ve normal popülasyonla karşılaştırmaktır.

Gereç ve Yöntem: Çalışmamıza Antalya Eğitim ve Araştırma Hastanesi, Fiziksel Tıp ve Rehabilitasyon polikliniğine başvuran, 1990 ve 2010 American Collage of Rheumatology (ACR) kriterlerine göre fibromiyalji sendromu tanısı konan 55, cinsel aktif, kadın hasta dahil edilmiştir. Hastaların klinik değerlendirmesinde kullanılan parametreleri karşılaştırabilmek ve fibromiyalji sendrom (FMS)'lu kadın hastaların normal popülasyondan farklı olup olmadığını belirlemek için polikliniğimize değişik kas iskelet sistemi yakınmaları ile başvuran, cinsel olarak aktif, 50 hastadan oluşan kontrol grubu çalışmaya dahil edildi. Çalışmaya dahil olma kriterlerini tamamlayan onamları alınan hasta ve kontrol olgularına cinsel işlevi değerlendirmeye yönelik Kadın Cinsel Fonksiyon İndeksi (KCFİ) (female sexual function index; FSFI) sorgulandı. Rosen ve arkadaşları tarafından 2000 yılında geliştirilmiş, 19 sorudan oluşan, cinsel istek, uyarılma, kayganlaşma, orgazm, cinsel doyum ve ağrıyı içeren altı farklı boyutu sorgulayan bir testtir. Türk Androloji Derneği tarafından 2003 yılında Türkçe validasyonu yapılan formun puanlamasında, sorular belli bir katsayı ile çarpılarak her bölüm 6 puan üzerinden değerlendirilmektedir. En az 2,4 en çok 36 puan alınan form, kolay uygulanabilmesi ile Türkiye'de kadın cinsel fonksiyon bozukluğu değerlendirilmesinde standardizasyon için kullanıma sunulmuştur.

**Bulgular:** Fibromiyalji Sendromlu hastaların kadın cinsel fonksiyon indeksi alt ölçek ve toplam skorlarının tamamı kontrol grubu hastalarının skorlarına göre istatistiksel olarak anlamlı derecede düşük saptandı (p<0,05).

**Sonuç:** Cinsel işlev veya niteliğindeki bozukluklar Fibromiyalji Sendromlu hastalarda sık görülen problemlerden biridir. FMS tedavisinde cinsel fonksiyon değerlendirmesinin yapılıp tedavinin bir parçası olması gerekliliği önemsenmelidir. Bu sorunu hastalıkla ilişkilendiren mekanizmanın tanımlanması oldukça güçtür. İlişkinin mekanizmasının belirlenmesi açısından yeni ve kapsamlı çalışmalara ihtiyaç duyulmaktadır. (Türk Osteoporoz Dergisi 2013;19: 65-8)

Anahtar kelimeler: Fibromiyalji, seksüel, disfonksiyon

## Introduction

Fibromyalgia syndrome (FMS) is the most common cause of chronic, widespread musculoskeletal system pain which can cause problems by impairing daily life activities of the individuals (1). FMS is a chronic painful syndrome characterized by widespread body pain and tenderness in identified specific anatomic localizations (2,3). Its prevalence was found as 3.6% between 20-64 years in Turkey (4). Prevalence of FMS was reported as 12-20% in rheumatology clinics, 5-6% in internal medicine and family medicine clinics. Health burden of FMS patients is high due to difficulties of diagnosis and treatment, patients' being examined by different physicians because of diversity of symptoms, making diagnosis for more patients because of increased awareness, long duration of therapy, loss of labor (2,5).

Female sexual dysfunction is defined as reduction or impairment of sexual desire and psychophysiological changes, having problems in the body and interpersonal relationships (6). It is a multifactorial problem involving biologic and psychosocial factors. It is seen commonly on the contrary to predictions. It is progressive, related with age, and its prevalence is 20-40% (7,8). Female sexual dysfunction includes symptoms like sexual aversion, sexual arousal and orgasm problems, vaginismus, dyspareunia (7). Particularly decreased sexual desire and arousal problems are common (9).

Studies are available indicating the relationship between sexual dysfunction and fibromyalgia as with many chronic diseases (10-13). The aim of our study is to determine the presence, quality of sexual dysfunction in patient with fibromyalgia and to compare with normal population.

## **Material and Method**

A total of 55 sexually active women who were admitted to Department of Physical Therapy and Rehabilitation of Antalya Research and Training Hospital and diagnosed with fibromyalgia syndrome according to 1990 and 2010 American College of Rheumatology (ACR) criteria. A control group composed of 50 sexually active women who were admitted to our clinic with various musculoskeletal system complaints were also included in the study in order to compare the parameters used for clinical assessment of patients and to determine whether the patients differ from normal population. Patients who had an identified systemic, metabolic, endocrinological, tumoral, infectious, neurologic disease, who were addicted to alcohol or drug, who were pregnant, who had not been diagnosed with fibromyalgia syndrome and who received antidepressants, pregabaline, gabapentine, magnesium-containing medications within the last 1 month, who did not have a sexual partner or whose sexual partner had a sexual problem, who had any gynecological diseases, who were not volunteer for participation were excluded from the study. Local ethics committee approval was obtained. Patients were informed about the study and written informed consent was signed out.

A detailed anamnesis including information about age, gender, height, weight, job, educational status, characteristics of widespread body pain, accompanying complaints, duration of complaints (month) and presence of comorbidities were obtained both from the patient and control groups.

All cases were questioned about widespread pain according to 1990 ACR criteria and assessment of 18 tender points was done with palpation. 2010 ACR criteria were questioned. Examinations and inquiry were done for differential diagnosis which includes myofascial pain syndrome, chronic fatigue syndrome, psychogenic pain, depression, rheumatoid arthritis, systemic lupus erythematosus, polymyalgia rheumatica, hypothyroidism, and neuropathies.

All cases were tested for hemogram, rutine biochemistry (fasting plasma glucose, urea, creatinine, uric acid, Ca, P, Mg, ALP, AST, ALT, LDH, CPK, GGT), erythrocyte sedimentation rate, C-reactive protein, parathormone, thyroid function tests.

Patients and controls who met inclusion criteria were applied Female Sexual Function Index; FSFI for assessment of sexual function. This test was developed by Rosen and colleagues in 2000, it is composed of 19 questions and inquires six different dimensions including desire, arousal, lubrication, orgasm, sexual satisfaction and pain. Turkish validation test was done by Turkish Society of Andrology in 2003, answers are multiplied with a coefficient and each section is evaluated on six scores. Minimum score is 2.4 and maximum is 36 and standardly used for assessment of female sexual dysfunction in Turkey.

Statistical analysis was done using SPSS 15.0 Package Program. Constant variables were reported as mean ± SD or median, max-min. Student's t-test was used for comparison of constant variables between groups.

#### Results

Subscale and total score of Female Sexual Function Index of FMS patients were found statistically significantly lower than those of control group (p<0.05). FSFI subscales are given in Table 1. Distribution of scores between groups is given in Table 2.

Table 1. Subscales of female sexual function index				
Item	Question no	Minimum score	Maximum score	
Desire	1,2	1.2	6	
Arousal	3,4,5,6	0	6	
Lubrication	7,8,9,10	0	6	
Orgasm	11,12,13	0	6	
Content	14,15,16	1.2	6	
Satisfaction	17,18,19	0	6	
Total		2.4	36	

Table 2. Distribution of scores according to groups					
	FMS	Control	Р		
Desire	2.84±1.15	3.87±1.20	0.000		
Arousal	3.24±1.18	4.52±1.35	0.000		
Lubrication	3.80±1.40	4.82±1.33	0.000		
Orgasm	3.56±1.40	4.64±1.33	0.000		
Satisfaction	3.53±1.43	4.96±1.31	0.000		
Pain	3.78±1.58	4.60±1.50	0.007		
Total	20.70±6.22	27.42±6.78	0.000		

#### **Discussion**

Patients usually regret for talking about sexuality and sexual problems and it is an issue which is often neglected by the physicians. Female sexual dysfunction is a health problem which is common among women, which impairs quality of life and self-confidence, causes feelings of inadequacy, leads to difficulties in interpersonal relationships (4).

In this study, we investigated presence of female sexual dysfunction, relationship between subparameters of dysfunction, compared with normal population using Female Sexual Function Index which is a valid questionnaire method. Our study clearly showed the presence of sexual dysfunction in women with FMS and significance of difference between healthy volunteers in the same age group.

Prevalence of sexual dysfunction may vary between countries. This difference may arise from economic, social, cultural factors, beliefs and customs (14). In a study done with 1749 married women in USA, ratio of sexual dysfunction was reported as 43% (15). Total FSFI score was found significantly lower in FSFI group. In the study of Aslan et al., mean FSFI score was found as 24.3±9.5 when 1009 women were evaluated with the same scale in Turkish population (16). 518 women were evaluated in a study done with Turkish population in which sexual dysfunction score was determined as 25 and below and prevalence of dysfunction was found as 48.3% (17).

Many diseases may influence sexual activity in human. Sexual activity is frequently affected in diseases like FMS which is chronic, causes widespread pain and the cause of potential physical disability (13). Presence of sexual dysfunction was shown in rheumatoid arthritis which is one of the chronic diseases which consists significant proportion of patients in rheumatology clinics (18).

Two different hypotheses were developed to explain the relationship between FMS and sexual dysfunction in women. Prins et al. associated sexual dysfunction with psychological factors (5). On the other hand, Tikiz et al. advocated that fibromyalgia could directly lead to sexual dysfunction, not through psychological pathway and depression could be added to FMS or sexual dysfunction (19).

FMS frequently begins in 3-5. decades during which sexuality is most active (2). The most common complaint is widespread body pain in FMS. Pain is a factor which is reported to

be related with sexual dysfunction (20). Insomnia, fatigue, decreased physical activity, depression, anxiety, female urethral syndrome which may accompany with fibromyalgia may also facilitate sexual dysfunction.

Sexual dysfunction was shown in FMS patients in a study which evaluated sexual function and its quality using Glombok-Rust Sexual Satisfaction Scale. In the same study, sexual dysfunction was associated with anxiety and depression (11).

Presence of vulvodynia and that sexual life is affected were shown in fibromyalgia (21). In the study of Adın et al., dyspareunia was reported to be a quite common complaint in patients with FMS (22). Similarly, presence of vaginal tenderness and increased pain during sexual intercourse and relationship of them with sexual dysfunction were shown in another study (23). In our study, dyspareunia was found to significantly increase in FMS patients.

Disorders of sexual function or its quality are one of the problems seen in FMS patients. It should be noticed that sexual function assessment must be a part of FMS treatment. It is quite difficult to determine the mechanism between sexual dysfunction and FMS and new and larger studies are needed to determine this mechanism.

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