SKIN PROBLEMS IN FIBROMYALGIA

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ABSTRACT

• ***Objective:*** *Fibromyalgia is a chronic disease characterized by diffuse or specific muscle, joint, or bone pain, fatigue, and a wide range of other symptoms. The aim of this study was to highlight the association between fibromyalgia and dermatological diseases.*

• ***Material and Method:*** *66 female patients diagnosed with fibromyalgia between March and June 2007 in Physical Therapy and Rehabilitation outpatient clinic and 79 healthy female control were enrolled to the controlled, cross-sectional study. All patients were seen in same day by the dermatologist. The patients' diagnoses were categorized into 14 different dermatological diseases.*

• ***Results:*** *The incidence of xerosis (respectively 32 vs 13 cases, p<0.001) and neurotic excoriation (respectively 11 vs 0 cases, p<0.001) were found to be significantly higher in fibromyalgia group than that of control group. The presence or absence of dermatological diseases in patients with fibromyalgia did not have a statistically significant impact to short form-36 quality of life.*

• ***Conclusion:*** *Our results showed that some stress-induced dermatological problems were common in patients with fibromyalgia.*

Further studies are necessary in order to have better idea about the relation between the skin problems and fibromyalgia.

• ***Key Words:*** *Fibromyalgia, xerosis, neurotic excoriation, quality of life, skin.* ***Nobel Med 2009; 5(2): 50-52***

ÖZET

FİBROMİYALJİDE DERİ PROBLEMLERİ

• **Amaç:** Fibromiyalji, yaygın kas, eklem, kemik ağrısı, yorgunluk ve daha birçok semptomun eşlik ettiği kronik sistemik bir hastalıktır. Bu çalışmanın amacı fibromyalji ile dermatolojik hastalıklar arasında ilişki olup olmadığını ortaya koymaktır.

• **Materyal ve Metod:** Çalışmaya Mart-Haziran 2007 tarihleri arasında Fizik Tedavi ve Rehabilitasyon polikliniğine başvuran 66 kadın fibromiyalji hastası ve 79 sağlıklı kadın kontrol dahil edildi. Tüm hastalar araştırmacı dermatolog tarafından aynı gün değerlendirildi. Saptanan dermatolojik hastalıklar 14 farklı başlıkta kategorize edildi.

• **Bulgular:** Fibromiyalji hastalarında kserosis (sırasıyla 32 ve 13 vaka, p<0,001) ve nörotik ekskoriasyon (sırasıyla 11 ve 0 vaka, p<0,001) sıklığı kontrol grubu ile kıyaslandığında anlamlı derecede yüksek bulundu.

Hastalarda ek olarak dermatolojik problem varlığı yaşam kalite ölçeği kısa form-36'da anlamlı bir değişiklik oluşturmamaktaydı.

• **Sonuç:** Sonuçlarımız stresin indüklediği bazı dermatolojik problemlerin fibromiyalji hastalarında sık olarak görülebileceğini düşündürmektedir.

Fibromiyalji ile dermatolojik problemler arasındaki ilişkinin değerlendirilmesinde daha geniş çalışmalara ihtiyaç vardır.

• **Anahtar Kelimeler:** Fibromiyalji, kserosis, nörotik ekskoriasyon, yaşam kalitesi, deri. **Nobel Med 2009; 5(2): 50-52**

INTRODUCTION

Fibromyalgia (FM) is a chronic pain illness characterized by widespread musculoskeletal aches, pain, stiffness, soft tissue tenderness, general fatigue, and sleep disturbances.[1-3] The most common sites of pain include the neck, back, shoulders, pelvic girdle, and hands, but any body part can be affected. Fibromyalgia is seen in 2% to 6% of the general population, and is most commonly diagnosed in individuals between the ages of 20 and 60, though onset can occur even in childhood. It affects females more than males. FM is characterized by the presence of multiple tender points and a constellation of symptoms. Additional symptoms may include: irritable bowel, headaches and migraines, restless legs syndrome, impaired memory and concentration, skin sensitivities and rashes, dry eyes and mouth, anxiety, depression, ringing in the ears, dizziness, vision problems, Raynaud's syndrome, and impaired coordination.[2, 3]

The aim of our study is to determine if there is a relationship between the FM patients and dermatological diseases which are induced by emotional stress.

MATERIAL and METHOD

A total of 66 female FM patients aging from 18-71 years who apply to physical therapy and rehabilitation outpatient clinic and 79 healthy female control group between March and June 2007 were enrolled in this study. Controls were randomly selected from the accompaniment of patients who apply to ear-nose-throat outpatient clinic. American College of Rheumatology 1990 criteria were used for diagnosing FM.[2] These criteria include; 1-History of widespread pain has been present for at least three months. Pain is considered widespread when all of the following are present: Pain in both sides of the body. Pain above and below the waist. In addition, axial skeletal pain (cervical spine, anterior chest, thoracic spine or low back pain) must be present. Low back pain is considered lower segment pain. 2-Pain in 11 of 18 tender point sites on digital palpation. (Tender points are: Occiput-at the suboccipital muscle insertions.

Low cervical-at the anterior aspects of the intertransverse spaces at C5-C7. Trapezius-at the midpoint of the upper border. Supraspinatus-at origins, above the scapula spine near the medial border. Second rib-upper lateral to the second costochondral junction. Lateral epicondyle-2 cm distal to the epicondyles. Gluteal-in upper outer quadrants of buttocks in anterior fold of muscle. Greater trochanter-posterior to the trochanteric prominence. Knee-at the medial fat pad proximal to the joint line.)

All patients were seen in the same day by the dermatologist. At enrollment every patient was assessed by a single observer. The dermatological diagnoses were classified into different groups based on the International Classification of Diseases (ICD-10). Quality of life (QOL) impact of patient group and controlled group was measured using "Short form 36" (SF-36). Data were evaluated with SPSS for Windows v. 13.0 (Statistical Package for Social Sciences, Chicago, IL). In the evaluation of the data, in addition to the descriptive statistics (mean, standard deviation), Mann Whitney U test and Ki square test were used. The level of significance was determined to be $p \leqslant 0.05$.

RESULTS

There were 66 women with FM with a median age of 40.45±11.68 years (range: 18-71) and 79 women as healthy control group with a median age of 37.92±11.00 years (range: 17-72) included in this study.

The patients' diagnoses were categorized into 14 different diseases including xerosis, neurotic excoriation, contact dermatitis, seborrheic dermatitis, psoriasis, stasis dermatitis, notalgia paresthetica, tinea corporis, neurodermatitis, urticaria, keratosis pilaris, erythrasma, subacute prurigo and hyperhidrosis (Table 1). Dermatological diseases were significantly more common in FM group than that of the control group (p=0.002). The incidence of xerosis and neurotic excoriation were found to be significantly higher in →

Table 1: Dermatological diseases seen in patients with fibromyalgia

Dermatological disease	Patient group n	Control group N	P value
Xerosis	32	13	0.001*
Neurotic excoriation	11	0	0.001*
Contact dermatitis	7	12	>0.05
Seborrheic dermatitis	2	2	>0.05
Psoriasis	2	1	>0.05
Stasis dermatitis	1	0	>0.05
Notalgia paresthetica	2	2	>0.05
Tinea corporis	3	1	>0.05
Neurodermatitis	4	1	>0.05
Urticaria	1	0	>0.05
Keratosis pilaris	1	0	>0.05
Erytrasma	1	0	>0.05
Subacute prurigo	1	2	>0.05
Hyperhidrosis	1	2	>0.05
Total	69	36	0.002*

*p values are <0.05

Table 2: SF-36 scores

	Patient with dermatological diseases	Patient without dermatological diseases	P value
Bodily pain	24.98±16.80	27.80±17.43	0.585
Physical functioning	38.49±19.87	47.56±28.84	0.303
Role limitations (physical)	22.67±28.25	15.05±20.00	0.403
General medical health	26.02±17.27	24.67±16.65	0.672
Vitality	27.02±18.42	33.48±18.13	0.169
Social functioning	43.02±29.42	45.41±23.64	0.613
Role limitations (emotional)	26.36±33.77	21.66±31.11	0.599
Mental health	38.29±19.09	34.79±18.37	0.377

All p values are >0.05

FM group than that of the control group (Table 1). The presence or absence of dermatological diseases in FM patients did not have a statistically significant impact to SF-36 quality of life (Table 2).

DISCUSSION

Patients with fibromyalgia have been reported to display high rates of several concomitant medical and psychiatric disorders, including migraine, irritable bowel syndrome, chronic fatigue syndrome, major depression, and panic disorder.[4] Kirmayer et al reported that fibromyalgia patients had significantly more somatic symptoms of obscure origin and exhibited a pattern of reporting more somatic symptoms.[5]

However, as far as we know there is no study about the common dermatologic problems coexist with fibromyalgia in the literature so far. In this present study, we found that dermatological diseases were frequent in patients with fibromyalgia. Especially xerosis and neurotic excoriation were more common in patients group compare to the healthy control group. The causes of skin problems in fibromyalgia are unknown. While most of these skin problems are not health threats, they can be very annoying. Fibromyalgia prevents the brain from reading pain signals correctly, and this may cause the skin to feel sore or tender to the touch. Some possibilities for skin complaints in fibromyalgia patients may also be a result of pain signals being misunderstood by the brain.

Because the nature of fibromyalgia is not well understood, some physicians believe that it may be a psychosomatic illness or a psychogenic disease.[6] Another study had shown that stressful life events seem to be significant precipitating factor in the development of fibromyalgia.[7] In the literature there are few studies about skin changes in fibromyalgia.8,9 Ribel-Madsen et al. found that there are some differences between the amino acid composition of skin proteins in fibromyalgia patients compared with controls. The amount of collagen may be lower in the skin from fibromyalgia patients, and collagen packing in the endoneurium may be less dense.[8] Thune showed that FM were more frequent in patients with psoriasis than in general population.[9] In our study we did not observe increased incidence of psoriasis in fibromyalgia patients. However, there was a difference according to the study population between our study and Thune's study which was performed among the group of psoriatic patients.

CONCLUSION

In conclusion, according to our results, some dermatologic problems may be associated with FM. Additionally having psychological stress may lead to an increased incidence of dermatological problems in FM patients. We think further studies are necessary in order to have better idea about the skin problems seen in the FM patients.

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✔ **DELIVERING DATE:** 15 / 09 / 2008 • **ACCEPTED DATE:** 29 / 10 / 2008

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