Gender Differences in Patients with Fibromyalgia at the Initial Visit

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Text

Gender Differences in Patients with Fibromyalgia at the Initial Visit

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Abstracts

Objective: Gender differences in patients with fibromyalgia (FM) were investigated.

Subjects: The number of tender points, number of control sites, the visual analog scale (VAS), global-VAS, face scale, short-form McGill pain questionnaire (SF-MPQ), self-rating depression scale (SDS), and Fibromyalgia Impact Questionnaire (FIQ) of both genders at the initial visit were compared. The Mann-Whitney U-test was performed in all analyses. $P < 0.05$ was considered significant.

Results: Ninety-one females and 21 males were studied. There were no significant differences between female and male patients in the number of tender points (13.9 vs 14.2), number of control points (2.6 vs 3.4), VAS (70.9 vs 77.2), global-VAS (52.7 vs 62.2), face scale (12.9 vs 13.8), SF-MPQ; S-PRI (17.1 vs 20.8), A-PRI (5.6 vs 6.7), T-PRI (22.8 vs 27.5), and present pain intensity (3.3 vs 3.8), SDS (53.4 vs 55.0), and FIQ (69.2 vs 79.9); however, the symptoms of male patients tended to be more serious than those of female patients.

Conclusions: Some studies show no significant gender differences or mixed results. Other studies show that males with FM reported more severe symptoms than females and vice versa. No gender differences were found in this study, but symptoms of male patients tended to be more serious than those of female patients.

Key words; Fibromyalgia; Gender differences; Symptoms

Introduction

Patients with fibromyalgia (FM) experience a variety of symptoms such as widespread pain, fatigue, and sleep disturbance [1]. Women account for approximately 80% of patients with FM. Gender differences in patients with FM were investigated.

Methods

This retrospective case-control study included patients with FM at Hiroshima Prefectual Rehabilitation Center from April 2004 to March 2007 or Hatsukaichi Memorial Hospital from April 2007 to February 2011. All patients fulfilled the 1990 American College of Rheumatology (ACR) criteria for the classification of FM. The number of tender points, number of control sites, visual analog scale (VAS), global-VAS, face scale, short-form McGill pain questionnaire (SF-MPQ), self-rating depression scale (SDS), and Fibromyalgia Impact Questionnaire (FIQ) of both genders at the initial visit were compared.

Seven control sites, gleaned from the summary of control sites provided by the ACR [2] and from the control sites provided by the American Pain Society [3], were defined as control sites for this study. They included: the bilateral thumbnails, the bilateral distal dorsal third of the forearms, the bilateral midpoint of the dorsal third metatarsals, and the mid-forehead.

The G-VAS uses a straight line with 0 at one end, meaning the best condition and 100 at the other, meaning the worst condition [4].

The SF-MPQ is a shortened version of the McGill Pain Questionnaire developed by Melzack. Here, a Japanese version of SF-MPQ developed by Yokota et al. [5] was used. The sensory pain rating index (S-PRI) consists of sensory pain scores of 11 items. Each item is ranked on an intensity scale in four stages from 0 to 3. No pain is 0 and the worst pain score is 33. The affective pain rating index (A-PRI) consists of affective pain scores of four items. Each item is ranked on an intensity scale in four stages from 0 to 3. No pain is 0 and the worst pain score is 12. The total pain rating index (T-PRI) is the sum of S-PRI and A-PRI. The present pain intensity is a self-administered survey to quantify the present pain status. It is ranked on an intensity scale in six stages, the best status is 0 and the worst is 5 [4].

The tentative Japanese version of FIQ [6] was until January 2008 and the Japanese version of the FIQ [7] from February 2008. The Mann-Whitney U-test was performed in all analyses. $P < 0.05$ was considered significant. This study was approved by the ethics committee of Hatsukaichi Memorial Hospital.

Table

Table 1. Gender differences in patients with fibromyalgia at the initial visit

TePs = tender points, CSs = control sites, VAS = visual analog scale, SDS = self-rating depression scale, SF-MPQ = short-form McGill pain questionnaire, S-PRI = sensory pain rating index, A-PRI = affective pain rating index, T-PRI = total pain rating index, PPI = present pain intensity, FIQ = fibromyalgia impact questionnaire

Figure in parentheses shows the number of patients.

Table 1. Gender differences in patients with fibromyalgia at the initial visit

	Female	Male	P
N	91	21	
Age at initial visit	48.5(12-83)	48.2(27-67)	
Nunber of TePs	13.9 (91)	14.2 (21)	0.4856
Number of CSs	2.6 (67)	3.4 (10)	0.2652
VAS	70.9 (76)	77.2 (13)	0.4384
Global-VAS	52.7 (76)	62.2 (13)	0.1597
Face scale	12.9 (73)	13.8 (12)	0.6254
SF-MPQ			
S-PRI	17.1 (76)	20.8 (16)	0.0736
A-PRI	5.6 (76)	6.7 (16)	0.0736
T-PRI	22.8 (76)	27.5 (16)	0.0736
PPI	3.3 (75)	3.8 (17)	0.0885
SDS	53.4 (78)	55.0 (16)	0.4413
FIQ	69.2 (68)	79.9 (11)	0.0933

Text 2

Results

Ninety-one females (age 12-83 years, average 48.5 years) and 21 males (age 27-67 years, average 48.2 years) were studied. There were no significant differences between female and male patients in the number of tender points, number of control points, VAS, global-VAS, face scale, SF-MPQ (S-PRI, A-PRI, T-PRI, and present pain intensity), SDS, and FIQ; however, symptoms of male patients tended to be more serious than those of female patients (Table 1).

Discussion

Women account for approximately 80% of patients with FM. There are a variety of studies about gender differences of patients with FM. Some studies show no significant gender differences [8-10] or mixed results [11]. Whereas other studies show that males with FM reported more severe symptoms than females [12-13] and vice versa [14-15].

Social factors such as education history, employment rate, and working status are different in both genders. There are two opinions, one is that multivariate analysis excluding these factors should be performed to know the true gender differences, and the other opinion is that multivariate analysis is not necessary because a difference in social factors is one of the main factors of gender differences. Among previous studies, one study alone [12] matched age and education level, and the other studies just compared female with male patients without adjustment. No gender differences were found in this study, but symptoms of male patients tended to be more serious than those of female patients.

Two hospitals where the author has worked are inconveniently located in terms of public transportation and the consultation time is on weekday mornings; therefore, it is difficult for working patients to be examined. It is believed that working patients have a tendency to be examined after the symptoms have become aggravated. The employment rate of men is higher than that of women, which may result in the tendency for symptoms of male patients to be more serious than those of female patients.

Based on the results of this study and published articles, it is unclear whether the symptoms of one gender are more serious than those of the other gender.

Conclusions

No gender differences were found in this study, but symptoms of male patients tended to be more serious than those of female patients.

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