

N	Age	Sex	SAD	GFR	Dose	Mild AE	Moderate AE	Severe AE
1	48	W	CV	>90	1020	Increased liver enzymes Thrombocytopenia		
2	57	M	CV	66	700	Hypertension Diarrhea		
3	67	W	AAV	>90	1000		Pneumonia	
4	60	M	AAV	70	1000			NIC
5	39	W	AAV	8	2000			IPA
6	74	W	AAV	16	2000		PA	
7	52	M	AAV	9	1000			IC
8	77	M	AIHA	47	2175		Pneumonia	
9	76	M	APS	50	1000		Pneumonia	IPA
10	40	M	AAV	>90	900		Bronchospasm Rash	

C: Cumulative dose; W: Woman, M: Man; SAD: Systemic autoimmune disease; GFR: Glomerular filtration rate; AE: adverse event; CV: cryoglobulinemic vasculitis; AAV: ANCA associated vasculitis; APS: Antiphospholipid syndrome; AIHA: Autoimmune haemolytic anemia; NIC: nonischemic cardiomyopathy; IPA: Invasive pulmonary aspergillosis; IC: Invasive cryptococcosis.

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Fibromyalgia

AB0905

MAY CHRONIC CONSTIPATION-INDUCED CHRONIC INFLAMMATION AFFECT THE ONSET AND SEVERITY OF FIBROMYALGIA SYMPTOMS?

Başak Mansız-Kaplan. University of Health Sciences, Ankara Training and Research Hospital, Physical Medicine and Rehabilitation, Ankara, Turkey

Background: Up to 70% of fibromyalgia patients have functional bowel disorders as irritable bowel syndrome (IBS), constipation and diarrhea. Patients with chronic constipation may feature changes in microflora of large bowel, which are characterized by a relative decrease in obligate bacteria and a parallel increase in potentially pathogenic microorganisms and fungi. This condition causes chronic low-grade inflammation. It has been reported that as a result of chronic constipation, altered microbiota and intestinal permeability may be related to neurological diseases such as autism and Parkinson's disease.

Objectives: As you know, the etiology of fibromyalgia is related to both central nervous system and peripheral causes. So the aim of this study was to evaluate the relationship between chronic constipation and duration and severity of the disease in fibromyalgia.

Methods: The cross-sectional study was designed as two groups: fibromyalgia patients, who is diagnosed according to the ACR 2016 revised classification criteria, and healthy population. All study participants were 18 years and older. Subjects were excluded if they had systemic disease, neurological disease, cognitive problems and secondary fibromyalgia. The Fibromyalgia Impact Questionnaire (FIQ) was applied to fibromyalgia patient. All subjects were questioned in terms of IBS, functional constipation and functional diarrhea according to Roma IV criteria. The Patient Assessment of Constipation Quality of Life questionnaire (PACQLQ) and the Constipation Severity Instrument (CSI) were applied to patients with constipation.

Results: The study was completed with 40 patients in both groups. No difference was found between the fibromyalgia group and the control group in terms of age, body mass index and educational status ($p > 0.05$). While 10% constipation ($n = 4$), 0% IBS ($n = 0$) and 25% gastritis ($n = 10$) were observed in the control group; 45% constipation ($n = 18$), 22.5% IBS ($n = 9$), 67.5% gastritis ($n = 27$) were found in fibromyalgia group ($p < 0.01$). In fibromyalgia patients with constipation, the mean duration of constipation was 20.1 ± 8.9 and the mean duration of fibromyalgia symptoms was 16.0 ± 10.2 years. Fibromyalgia symptoms started in

16 of 18 patients after constipation (Mean year: 4.1 ± 5.3). Compared with constipated and non-constipated fibromyalgia patients, symptom duration and FIQ were significantly higher in constipated fibromyalgia patients ($p < 0.01$). The duration of constipation was correlated with duration of fibromyalgia symptom ($r^2 = 0.85$, $p = 0.000$), PACQLQ ($r^2 = 0.71$, $p = 0.001$) and CSI ($r^2 = 0.59$, $p = 0.01$). There was a correlation between FIQ and CSI ($r^2 = 0.96$, $p = 0.00$) and PACQLQ ($r^2 = 0.62$, $p = 0.006$). **Conclusion:** The frequency of gastrointestinal symptoms increased in patients with fibromyalgia. As the severity of constipation increases, the symptoms of fibromyalgia are exacerbated. The presence of constipation findings before fibromyalgia suggests that low-grade chronic inflammation caused by constipation may have an effect on the onset of fibromyalgia. There is a need for a prospective cohort study to clarify this cause and effect relationship.

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AB0906 RELATIONSHIP BETWEEN FIBROMYALGIA AND TRUNK MUSCLE PERFORMANCE

Cevriye Mülkoğlu, Sühan Taşkın, Seçil Vural, Başak Mansız-Kaplan, Hakan Genç. Ankara Training and Research Hospital, Ankara, Turkey

Background: Muscle performance is adversely affected by pain, fatigue and low aerobic capacity in fibromyalgia syndrome(FMS).

Objectives: We compared trunk muscle performance of women with FMS and healthy individuals who have similar age and body mass index (BMI).

Methods: A total of 37 women with FMS and 32 healthy women were included this study. The demographic and clinical characteristics of the participants such as age, height, weight, body mass index (BMI), occupations, exercise habits were recorded. In semi-standing position with isokinetic dynamometer (BIODEX) at 60° - 90° - 120° /second (s) angular velocities, trunk flexor and extensor muscle performances were evaluated. Flexor (flex) peak torque (PT), extensor (ext) PT values and flex/ext PT ratio (%) were noted.

Results: The mean age was 43.9 ± 8.1 years in FMS group and 43.7 ± 6.7 in control group. The mean BMI was 27.5 ± 4.19 in FMS group and 26.4 ± 4.08 in control group. There was no significant difference between the groups in terms of age and BMI ($p > 0.05$). As a result of isokinetic measurements of trunk muscles, extensor PT values were found significantly lower in women with FMS than C group at all three angular velocities ($p < 0.05$). The flexor PT values also were lower in FMS group but no statistically significance in flexor PT values between the groups ($p > 0.05$). When flexor/extensor PT ratio was compared, it was seen that this ratio increased in the FMS group.

Conclusion: There are many studies in the literature assessing upper and lower extremity muscle performances in FMS (1-2). To our knowledge, we first evaluated trunk muscle performances of patients with FMS and we found that trunk muscles, especially extensors, were significantly weaker in FMS group. As a result, in treatment of FMS, there is a need for more comprehensive randomized controlled studies showing the importance of strengthening exercises to improve trunk muscle performance.

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