

Can Change in Stress Level and Dietary Habits Significantly Improve the Symptoms of Fibromyalgia in Males? A Case Report

Ference T*, Casella G and Gomez M

Department of Rehabilitation Medicine, University of Miami Miller School of Medicine, USA

*Corresponding author: Tamar Ference MD, Department of Physical Medicine and Rehabilitation, University of Miami Miller School of Medicine, Florida, USA, Tel: 305-243-4588; Fax: 305-243-4650; E-mail: t.ference@med.miami.edu

Received date: April 6, 2017; Accepted date: May 4, 2017; Published date: May 10, 2017

Copyright: ©2017 Ference T, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Abstract

We report a male patient with fibromyalgia that significantly improved pain and associated symptoms without medication, physical therapy or psychotherapy. Psychological stress has been implicated in the origin of fibromyalgia and avoidance of stress may be pivotal to its treatment. There are no conclusive studies demonstrating the beneficial effects of diet to treat fibromyalgia, however some reports associated dietary excitotoxins, coenzyme Q10 deficiency, and aspartame ingestion with fibromyalgia and that certain diets such as anti-inflammatory, vegan and leaky-gut diet may ameliorate fibromyalgia symptoms. The pronounced improvement in this patient's symptoms was obtained by associating stress avoidance and diet changes. The improvement in the pain levels allowed him to engage in a regular exercise program that may have further contributed to the treatment without the need of medication or psychotherapy.

Keywords: Fibromyalgia; Stress; Diet

Introduction

Psychological stress has been implicated in the origin of fibromyalgia and avoidance of stress may be pivotal to its treatment [1]. There are no conclusive studies demonstrating the beneficial effects of diets to treat fibromyalgia [2,3], however some reports associated dietary excitotoxins [4], coenzyme Q10 deficiency [5], and aspartame ingestion [4,6] with fibromyalgia and that certain diets such as vegan [7] and leaky-gut diet [8] may ameliorate fibromyalgia symptoms.

We present a case of fibromyalgia in a 44 year old male that significantly improved his symptoms after dramatically changing his stress level and diet composition.

Case description

44 year old male who was a triathlete and a paramedic for 8 years, presented with symptoms of severe generalized pain, fatigue, anxiety, depression, memory impairment and sleep disturbances. Significant functional impairment forced him to dramatically decrease his activity level and be assigned to light duty at work, which decreased his daily stress level. He had physical therapy without improvement. He also started a diet with no dairy products, no gluten, no processed foods, low in carbohydrates and rich in lean proteins. He was occasionally taking tramadol for pain. He received no other treatment for his fibromyalgia [9].

Two months after changing his stress level and diet, he noticed a significant improvement in the pain and fatigue. His pain now is 3/10, his sleep has improved and the fatigue has resolved to the point that he now runs 5 miles a day (Figure 1).

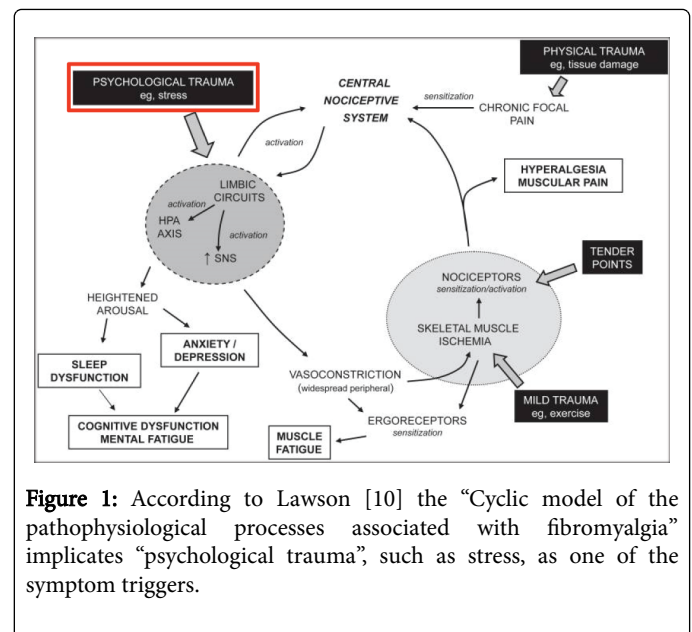


Figure 1: According to Lawson [10] the “Cyclic model of the pathophysiological processes associated with fibromyalgia” implicates “psychological trauma”, such as stress, as one of the symptom triggers.

Diagnosis

Fibromyalgia (Table 1).

Discussion

We report a male patient with fibromyalgia that was able to significantly improve pain, fatigue and sleep without medication, physical therapy or psychotherapy.

The pronounced improvement in this patient's symptoms was obtained by stress reduction and diet changes. The improvement in the pain level allowed him to engage in a regular exercise program that

may have further contributed to his healing without the need for medication or psychotherapy.

Diet description	Study and Result	Reference
Vegan diets composed of vegetables, fruits, berries, seeds, and nuts with avoidance of alcohol, caffeine, meat, and dairy.	33 patients showed a significant decrease in self-reported morning stiffness and pain at rest compared with controls after 3 months.	Hanninen , et al. [11]
	18 patients improved pain, sleep quality, and morning stiffness, and decreased BMI and serum cholesterol compared with 15 patients on an omnivorous diet.	Kaartinen K, et al. [7]
	18 patients improved in scores at Fibromyalgia Impact Questionnaire, SF-36, quality of life survey, shoulder pain, flexibility, and 6-minute walk test after 7-months.	Donaldson MS, et al. [12]
	78 patients in a randomized, controlled crossover trial on a vegetarian diet (versus amitriptyline) had no significant change in symptoms except for pain score, though the difference was less than that observed in the amitriptyline group.	Azad KA, et al. [13]
Exclusion diets diets which certain substances or foods are removed	A case series of 4 patients reported nearly complete resolution of symptoms with exclusion of monosodium glutamate and aspartame and recurrence of symptoms with re challenge.	Smith JD, et al. [4]
	51 self-selected patients in treatment or control groups. Treatment group patients were asked to exclude foods to which a lymphocyte response assay was used to determine food sensitivities. There was less pain, depression, fatigue, and stiffness after 3 months compared with baseline.	Deuster PA, et al. [14]

Table 1: Review of the trials on Fibromyalgia and Diet [9].

Conclusion

This case report emphasizes the importance of associated treatments such as stress avoidance and dietary changes in successful management of fibromyalgia.

References

- Vierck CJ (2012) A mechanism-based approach to prevention of and therapy for fibromyalgia. *Pain Res Treat*.
- Holton KF, Kindler LL, Jones KD (2005) Potential dietary links to central sensitization in fibromyalgia: past reports and future directions. *Rheum Dis Clin North Am* 35: 409-420.
- Arranz LI, Canela MA, Rafecas M (2010) Fibromyalgia and nutrition, what do we know? *Rheumatol Int* 30: 1417-1427.
- Smith JD, Terpening CM, Schmidt SO, Gums JG (2001) Relief of fibromyalgia symptoms following discontinuation of dietary excitotoxins. *Ann Pharmacother* 35: 702-706.
- Miyamae T, Seki M, Naga T, Uchino S, Asazuma H, et al. (2013) Increased oxidative stress and coenzyme Q10 deficiency in juvenile fibromyalgia: amelioration of hypercholesterolemia and fatigue by ubiquinol-10 supplementation. *Redox Rep* 18: 12-19.
- Ciappuccini R, Ansemant T, Maillefert JF, Tavernier C, Ornetti P (2010) Aspartame-induced fibromyalgia, an unusual but curable cause of chronic pain. *Clin Exp Rheumatol* 28: 131-133.
- Kaartinen K, Lammi K, Hypen M, Nenonen M, Hanninen O, et al. (2000) Vegan diet alleviates fibromyalgia symptoms. *Scand J Rheumatol* 29: 308-313.
- Maes M, Leunis JC (2008) Normalization of leaky gut in chronic fatigue syndrome (CFS) is accompanied by a clinical improvement: effects of age, duration of illness and the translocation of LPS from gram-negative bacteria. *Neuro Endocrinol Lett* 29: 902-910.
- Holton KF, Kindler LL, Jones KD (2009) Potential dietary links to central sensitization in fibromyalgia: past reports and future directions. *Rheum Dis Clin North Am* 35: 409-420.
- Lawson K (2008) Treatment options and patient perspectives in the management of fibromyalgia: future trends. *Neuropsychiatry Dis Treat* 4: 1059-1071.
- Hanninen, Kaartinen K, Rauma AL, Nenonen M, Törrönen R, et al. (2000) Antioxidants in vegan diet and rheumatic disorders. *Toxicology* 155: 45-53.
- Donaldson MS, Speight N, Loomis S (2001) Fibromyalgia syndrome improved using a mostly raw vegetarian diet: an observational study. *BMC Complement Altern Med* 1: 7.
- Azad KA, Alam MN, Haq SA, Nahar S, Chowdhury MA, et al. (2000) Vegetarian diet in the treatment of fibromyalgia. *Bangladesh Med Res Counc Bull* 26: 41-47.
- DeusterPA, Jaffe RM (1998) A novel treatment for fibromyalgia improves clinical outcomes in a community-based study. *J Musculoskel Pain* 6: 133-149.