

Old Obstacles but New Hopes: Trying to Understand the Fibromyalgia Construct

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Fibromyalgia is a chronic debilitating disorder characterized by widespread pain, allodynia and hyperalgesia on one hand, with fatigue, unrefreshing sleep accompanied by mood and cognitive disturbances on the other. It affects 5% of the population worldwide with a clear female preponderance [1]. More than two decades ago fibromyalgia was acknowledged and defined by classification criteria that underlined the somatic aspects of the disorder. This set of criteria was adopted by the American College of Rheumatology (ACR) [2]. Within the last 4 years the diagnosis of fibromyalgia has progressed, emphasizing the importance of the symptoms beyond pain. The new suggested criteria take into consideration additional symptoms mentioned above [3].

Despite significant achievements in the field of fibromyalgia research linking it to various neurophysiological mechanisms, many physicians still regard fibromyalgia as a controversial entity since there is no objective test to confirm the diagnosis [4]. The diagnosis is further complicated by the stigmatization of this disorder among treatment providers, the health insurance industry, and the general population. The immense financial and emotional burden of this syndrome reflects the complexity of the disease, its comorbidities, and the difficulties in its diagnosis [1].

The financial burden of fibromyalgia is substantial, with reported health care costs (for 12 months) ranging from \$2274 to \$9573 in the United States and up to \$2298 in Canada, not including indirect costs such as disability claims and loss of work days [5]. The health care system is utilized at significantly higher rates by fibromyalgia patients due to more frequent visits to the physician, laboratory and imaging tests and visits to the emergency department. In addition, these patients are more likely, as mentioned, to suffer from

comorbidities and are more prone to receive pain-related medications [1,3,6,7].

TREATMENT

Treatment of fibromyalgia is a complex issue, encompassing a wide diversity of therapies – both pharmacological and non-pharmacological [6]. The most substantiated pharmacological treatments, with an A1 level of evidence, are norepinephrine serotonin reuptake inhibitors (milnacipran, duloxetine), gabapentinoids (pregabalin, gabapentin), tricyclic antidepressants (amitriptyline), and γ -amino butyrate. To date, no specific medication has been proven significantly more efficient than another, but most medications show an amelioration of 30–50% in pain in up to half the patients [1,6]. Many non-pharmacological therapies have been studied such as exercise, education, and cognitive behavioral therapy, the latter being the most investigated and the most substantiated [1,6]. In addition, many alternative and complementary therapies are offered, although there is a paucity of good evidence due to different problems in study design. Most guidelines emphasize the importance of education on the nature of the disease. Empowerment of an active patient stance towards the disease and its implication is seminal in order to achieve therapeutic success; such an intervention should include physical activity and cognitive behavioral therapy as crucial adjuncts to pharmacological therapies [1,6,8].

ADHERENCE TO TREATMENT

There is little research on adherence in fibromyalgia. In general it has been shown that adherence is higher in acute pain conditions compared to chronic conditions, and that improving adherence leads to reduced health care costs and improved patient quality of life [9,10]. Various barriers to adherence have been studied, including cognitive barriers such as fears regarding analgesic use (fear of addiction, etc.); concern of appearing weak to family, physicians and others; and a belief that pain is an inevitable part of the disease [10]. Other obstacles to improved compliance are psychological factors, patient-

physician discordance, not being under a rheumatologist's care, comorbidities, and others. There is sparse literature on adherence specifically in fibromyalgia, and even less on adherence to specific medications. Of the little that is known, only 33% of patients prescribed duloxetine were considered highly adherent, with a higher adherence to lower dosages. When compared to pregabalin, duloxetine had better adherence rates with less titration of dosage during the first year.

It is of utmost importance to investigate adherence in fibromyalgia, addressing the many issues that affect it in order to better our practice. Addressing compliance and adherence, particularly in these patients, might lead to reduced health care costs and improved quality of care. More data on this issue are therefore warranted.

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