REV BRAS REUMATOL. 2016;**56(1)**:69–74

REVISTA BRASILEIRA DE REUMATOLOGIA

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Review article

Psychological aspects of juvenile fibromyalgia syndrome: a literature review☆

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ARTICLE INFO

Article history:
Received 23 October 2014
Accepted 17 July 2015
Available online 27 October 2015

Keywords:
Fibromyalgia
Adolescent
Child
Psychology
Review

ABSTRACT

Juvenile fibromyalgia syndrome (JFMS) is a non-inflammatory chronic pain condition that occurs mainly in girls aged 9–15 years. JFMS is characterized by constant widespread pain in different parts of the body, poor sleep quality, daytime sleepiness and an altered mood. Concomitant psychological and organic factors result in a diminished capacity to cope with pain. The quality of life of individuals with chronic pain and their caregivers is severely restricted and the occurrence of symptoms of anxiety and depression is common in this population. The aim of the present study was to perform a systematic review of the literature on psychosocial factors related to JFMS. The findings reveal differences in opinion between patients and family members regarding the effect of the condition, as mothers tend to classify JFMS as more severe than the patients themselves. Individuals with JFMS seem to share the same personality traits and there seems to be a type of family environment that is favorable to the occurrence of this condition. Psychological and functional aspects should be treated with methods that can help patients and family members alter their coping strategies regarding day-to-day problems, attenuate the dysfunctional consequences of pain and fatigue and diminish the risk of catastrophizing that individuals submitted to constant pain develop in relation to their surrounding environment.

☆ Study conducted at Programa de Pós Graduação Interdisciplinar em Ciências da Saúde, Universidade Federal de São Paulo, Santos, SP, Brazil.

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http://dx.doi.org/10.1016/j.rbre.2015.07.017

Aspectos psicológicos da síndrome da fibromialgia juvenil: revisão de literatura

RESUMO

Palavras-chave:
Fibromialgia
Adolescentes
Crianças
Psicologia
Revisão

A síndrome da fibromialgia juvenil (SFJ) é uma condição dolorosa não inflamatória crônica que ocorre principalmente em meninas com idades entre 9 e 15 anos, podendo ser caracterizada por dores generalizadas e constantes em várias regiões do corpo, distúrbios do sono, fadiga diurna e estado de humor alterado. Fatores psicológicos e biológicos concomitantes resultaram na diminuição da capacidade de lidar com a dor. A qualidade de vida das crianças que sofrem de dores crônicas, e a de seus cuidadores, é severamente prejudicada, e a ocorrência de sintomas de ansiedade e depressão é mais comum nessa população. Este estudo objetivou realizar uma revisão sistemática da literatura dos fatores psicossociais relacionados com a SFJ. Os achados revelam uma percepção divergente entre pacientes e familiares em relação aos efeitos da condição, sendo que as mães dos pacientes tendem a classificar a doença com uma gravidade maior que os próprios pacientes. Os pacientes com fibromialgia parecem compartilhar os mesmos traços de personalidade, e parece existir um tipo de ambiente familiar favorável à ocorrência da doença. As implicações psicológicas e funcionais devem ser tratadas com métodos que ajudem pacientes e familiares a modificar suas estratégias de enfrentamento dos problemas cotidianos, a aliviar as consequências disfuncionais da dor e da fadiga e a diminuir o risco de catastrofização.

Introduction

Fibromyalgia in children and adolescents is a non-inflammatory chronic pain condition that mainly occurs in girls aged nine to 15 years[1] and is therefore denominated juvenile fibromyalgia syndrome (JFMS). This syndrome is relatively under-investigated, but is characterized by constant widespread pain in different parts of the body, poor sleep quality, daytime sleepiness and an altered mood. Despite the similarities between JFMS and fibromyalgia in adulthood, the reduction in physical activity, absenteeism from school and the less-developed coping mechanisms in youths justify the differentiated analysis of JFMS.[2–5] The quality of life of individuals with chronic pain and their caregivers is severely restricted and the occurrence of symptoms of anxiety and depression is common in this population.[6]

The aim of the present study was to perform a systematic review of the literature on psychosocial factors related to JFMS. Searches were performed in the PubMed, Scielo, LILACS and MEDLINE databases using the keywords “fibromyalgia”, “child”, “juvenile”, “primary fibromyalgia” and “syndrome” as well as Boolean operators. Articles published in English, Portuguese and Spanish between 1985 and 2014 on descriptive characteristics or factors associated with JFMS were selected. The initial search led to the retrieval of 108 records. Following the exclusion of editorials, letters to the editor, abstracts from conferences, review articles on other topics, articles on fibromyalgia in adults and articles focused on diagnostic tools rather than patients, 54 papers were selected. Twelve more articles were excluded because the focus was on treatment without taking into consideration the psychosocial characteristics of the subjects. Thus, 42 pediatric references and seven complementary texts were analyzed.

Prevalence and etiology

The diagnosis of JFMS remains the subject of debate with regard to what criteria to use[1,6,7] (specifically, those of the American College of Rheumatology[8] (ACR) or those proposed by Yunus and Masi[9]), the measurement of the force to be applied in the evaluation of tender points,[6,7,9–11] the definition of headache[7] and the most adequate assessment tools for the determination of anxiety and depression. One systematic review from Germany[7] proposes that even the term “juvenile fibromyalgia syndrome” should be discarded due to the lack of diagnostic consistency. Such methodological difficulties partially explain the differences in prevalence rates across studies, which range from 1%[8] to 6%.[4]

There are no conclusive studies on the possible causes and risk factors of JFMS and speculations regarding associated genetic and metabolic factors lack adequate scientific evidence. Some studies have sought to demonstrate the occurrence of hormonal abnormalities in individuals with fibromyalgia,[12,13] but not specifically in young patients. Buskila and Neumann,[14] and Feng et al.[15] have identified candidate genes for the development of fibromyalgia, but concomitant environmental and familial factors hinder drawing definitive conclusions regarding the determination of the syndrome. However, this notion should not be discarded, as the literature has demonstrated low levels of growth hormone[16] as well as the occurrence of hypermobility syndrome[17] in patients with JFMS, both of which have a genetic origin. What can be stated with some degree of certainty is that JFMS occurs together with familial conditions that have not yet been