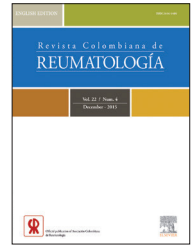


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Editorial

Pain, Personality and Psychiatric Disorders in Rheumatic Diseases[☆]

El dolor, la personalidad y los trastornos psiquiátricos en las enfermedades reumáticas

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Rheumatic diseases are a common cause of consultation to the general practitioner and, in turn, the costs derived from their management, both direct and indirect, are enormous.^{1–3} They are characterized by alterations in the structures of the locomotor system, produced by different diseases: autoimmune, metabolic, infectious, degenerative, etc. All of them cause pain, which is the most common and frequent symptom both of articular diseases such as rheumatoid arthritis (RA), and non-articular, such as fibromyalgia (FBM).¹ Although pain is defined as an unpleasant sensation caused by nociceptive stimuli, the concept covers both the social aspect and physical pain.² The majority of studies on pain and sleep in rheumatic diseases have found a high prevalence of insomnia, and many of the daytime symptoms such as morning stiffness, pain and fatigue, may be related to a pattern of non-restorative sleep.¹

Rheumatic diseases are closely related with the personality and with psychological and psychiatric disorders, the most common being anxiety and depression.⁴ Anxiety is a pathological response of the human being to certain situations of everyday life in the form of stress. Depression is a negative mood, which makes the patient to lose the ability and the desire to confront any situation and everyday life. The clearest example of the relationship that exists between personality, stress, anxiety and depression with the rheumatic diseases is FBM, although an association with other diseases such as RA is also found.^{4,5}

Among the rheumatic diseases, the most prevalent are the osteoarthritis (OA), followed by FBM, lumbago, inflammatory arthropathies and ankylosing spondylitis (AS). RA affects between 0.4% and 0.7% of the population.³ The prevalence,

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the functional consequences and the high socio-economic impact of these diseases have turned them into a public health problem in the developed countries. A series of studies sponsored by the International League Against the Rheumatism, conducted in countries with different levels of development in America and Asia, showed that the magnitude of this impact, both in prevalence and in the generation of disability seems to be global. It was found that the prevalence of non-traumatic musculoskeletal pain in adults ranged between 7% and 36%, while the prevalence of disability attributable to musculoskeletal disease ranged between 1.4% and 10.4%. Similarly, the prevalence of rheumatic diseases such as regional syndromes, OA, RA, gout and FBM, showed relatively substantial variations.⁶

FBM is a highly complex syndrome which includes chronic and generalized pain, along with a wide variety of other signs and symptoms, such as fatigue, depression, gastrointestinal disorders and sleep problems.⁴ The etiology of FBM is still under study, it is a problem of cerebral origin rather than a disease of the peripheral system, involving different neurochemical, neuroendocrine, immunologic, muscular and psychological abnormalities, and sleep alterations.⁷⁻⁹ The main cause of FBM is central sensitization, which is defined as an increased painful response to the stimulation of the central nervous system. This condition is similar to that which occurs in other diseases characterized by chronic pain, such as the irritable bowel syndrome, tension-type headache, disorders of the temporomandibular joint, miofascial syndrome, complex regional pain syndrome, restless legs syndrome and post-traumatic stress disorder.^{9,10}

This central sensitization consists in an increased excitability of the sensitive and pain pathways, which is the product of repetitive painful stimuli that lead to a deficient endogenous modulation of pain. The neural plasticity is modified in the long term in patients with FBM, in such a way that a repeated painful stimulus, or a stimulus that is normally not painful, is perceived with greater pain when compared with individuals without this disorder, lasting this condition throughout life.⁶ It has been noted that the FBM exhibits a disorder in the general processing of pain, aspect which is evidenced by neurochemical alterations, decrease in serotonin levels and increased levels of substance P in the cerebrospinal fluid. Serotonin is a neurotransmitter that acts as an inhibitor in the pathways of transmission of pain at the dorsal horn of the spinal cord, and in the individuals with FBM is at low levels, increasing the hypersensitivity to pain.^{6,8,11}

The controversy about the association between FBM and psychological problems is still a research topic, without conclusive results, the depressive clinic being the most frequent. On the other hand, between 70-90% of patients with FBM refer sleep disorders, expressed as a non-restorative, light and unstable sleep. There is general agreement that the sleep fragmentation and the reduction of the deep slow sleep are the two leading modifications of sleep in patients with FBM. Both symptoms, depression and sleep disorders, are common alterations in processes with chronic pain.^{1,8,12}

This edition of the REVISTA COLOMBIANA DE REUMATOLOGÍA presents a study on the relationship between perceived pain and personality styles in rheumatic patients, which was sub-

mitted as the doctoral thesis of a student at the University of Almería in Spain. The proposed hypothesis suggests that the more maladaptive personality styles are related to a higher perception of the level of pain. In an attempt to clarify the psychological factors linked both to pain and its chronification, emerges the fear-avoidance model of pain. This model explains that the transition from acute pain to chronic pain is due to the interaction between the pathophysiological conditions of the disorder and a set of psychosocial factors.

The fear-avoidance model of pain postulates that most people deem pain as an unpleasant experience, but they do not attribute a highly threatening meaning to it, and do not consider that it will have serious consequences. After a reasonable rest period, their level of activity will gradually increase until the pain is healed. However, a minority of individuals give to the experience of pain a catastrophic meaning, which is associated with personality traits such as negative affect (neuroticism). This assessment will provoke the fear of pain, which is conceptualized as the beliefs that movement and activity will worsen the pain or will cause a new injury. In this way, the lack of movement would increase the chronicity of pain, as well as the associated disability.⁹

The results found in this study, although not conclusive, point to the development of a multidisciplinary management of patients with pain in rheumatic diseases, which should include not only the rheumatologist, the orthopedist, or the pain clinic. Psychotherapeutic intervention lines and comprehensive rehabilitation therapies should also be included in order to focus on the emotional modulation of the patient and to develop various occupational activities such as physical exercise, with the purpose to pay less attention to the pain itself.

It is worth mentioning that this study has several biases and limitations that were very well exposed by the authors. Being a cross-sectional study it is only descriptive, the results yield only temporary relationships between data, and they cannot generate conclusive results. The population groups represent a small sample, and there is not the same distribution regarding the variable gender, affecting the subjectivity of pain. In addition, within the group of rheumatic diseases only are included RA and AS, knowing in advance, for example, the close relationship between FBM and the type of personality.

This article leaves the door open for the development of future studies with more elaborate methodological designs, either of longitudinal or cohort type, where it would be possible to study systems of stochastic behavior as rheumatic diseases are. In addition, they should be studies with a larger sample size, with greater homogeneity among the population groups, and should include both articular and non-articular diseases. It is worth mentioning that the development of this type of studies entails high costs, which in our Country are a big constraint, but that should not be an excuse for the limitation of efforts in the development of Medicine in Colombia.

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