Is it still an invisible disease? Physical signs found in fibromyalgia syndrome

Sirs,

Fibromyalgia is a multidimensional disease in which pain is the most defining symptom, but not the only one. Patients also describe severe asthenia, sleep disorders, headaches, neurocognitive and mood problems, and many other symptoms (1). In contrast, apart from increased sensitivity to pressure (tender points), no other exploratory findings are included in the diagnostic criteria. And it is noteworthy that the tender points disappear in the new proposals for clinical diagnosis. In fact, until 2010, there was no proposal for diagnostic criteria for this disease, but only classification criteria for research use, which were never created for clinical use (2). The criteria that have been used up to that year were based solely on the patient describing their pain and tender points. Alternative diagnostic criteria to the previous ones were established as a proposal in 2010 (3), with some corrections introduced in 2011 and 2016 (4, 5). These criteria include a self-questionnaire of symptoms, together with the severity of fatigue, memory problems, depression and headaches, but no clinical signs. We set out in this observational study to describe the most common physical findings found in a group of fibromyalgia patients.

A total of 200 consecutive patients with fibromyalgia were recruited, the first 150 women and the first 50 men who were assessed in our hospital consultations to participate in this study. Informed consent was requested from all patients to participate in the study. All patients were first assessed and examined by a rheumatologist with expertise in fibromyalgia, and subsequently assessed and examined by a neurologist with extensive experience in this pathology. All patients had to meet the new 2016 clinical criteria (5). Patients also had to meet the following criteria: 1) >18 years of age; 2) if female, not be pregnant or breastfeeding; 3) not have any other chronic disease. 3) not have any other chronic disease that could interfere with the exploratory data, such as rheumatic, psychiatric or major neurological diseases. The mean age for the female group was 46 years (range 21-73) and 44 years for the males (range 29-66). The majority of participants were white (95%). The final results of the most commonly found signs on physical examination are shown in the Table I. As can be seen, a large proportion of patients, both in women (especially in this group) and in men (less prevalent) show objectifiable signs on examination. The most frequent signs are those related to sensitivity, which is well known in this type of disease, with increased sensitivity to touch and especially to pressure in practically the whole body, which for a long time has been a compulsory criterion for diagnosing the disease (tender points). It is a well-known fact that not all the men tested had increased pressure sensitivity, but nevertheless met the new classification criteria for fibromyalgia, which supports the widespread idea that it is not essential for a diagnosis of fibromyalgia to have a number of tender points on the body (6). Other signs very commonly found in our sample are those related to the skin, mainly skin dryness, or hyperaemia under pressure (dermographism), again being more prevalent in women than in men. This may indicate that the hypersensitivity presented by these patients is not limited exclusively to the central nervous system, as has been repeatedly mentioned (4), but also underlies an immunological problem. We also find relatively frequent alterations in cranial nerves, such as visual, auditory or temporo-mandibular alterations. And finally, alterations in strength or mobility, even in gait, fundamentally to perform the tandem test, as has also been described previously (7, 8). We found no significant differences in other clinical signs, such as joint swelling, alteration of the normal range of motion, or alteration of the osteotendon reflexes. As previously described by other authors (7, 9), fibromyalgia is not only a condition with symptoms such as pain, fatigue or sleep problems, among many others, but also encompasses a wide variety of exploratory signs easily accessible to the clinician, which lend significant credibility to its origin as a real disease. We believe it is appropriate for any physician dealing with such patients to be aware of these clinical findings in addition to the established diagnostic criteria, as it will strengthen their understanding of the origin of this prevalent disease.

Table I. Prevalence of physical signs in fibromyalgia patients.

Sign	Females (n=150)		Males (n=50)	
	Percentage (%)	(95% CI)	Percentage (%)	(95% CI)
Visual acuity	63	(54-75)	55	(43-65)
Hearing abnormalities	34	(21-52)	37	(25-45)
TMJ disfunction	56	(44-71)	35	(20-48)
Sicca syndrome	67	(50-82)	53	(34-69)
Skin dryness	82	(64-90)	43	(29-56)
Skin hyperemia to pressure	90	(78-95)	78	(66-90)
Livedo reticularis	12	(9-22)	4	(2-8)
Peripheral oedemas	23	(15-34)	9	(6-13)
Distended abdomen	77	(57-89)	52	(34-64)
Impaired propioception	2	(0-4)	1	(0-2)
Impaired vibratory sensation	6	(2-10)	4	(0-7)
Impaired temperature sensation	56	(43-66)	49	(35-56)
Impaired pinprick sensation	59	(46-72)	51	(35-67)
Impaired tactile sensation	76	(60-83)	70	(55-80)
Impaired pressure sensation	100	(0)	74	(68-83)
Weakness	35	(26-58)	13	(8-21)
Impaired fine motor control	15	(8-22)	8	(4-14)
Gait disturbances	36	(24-47)	21	(17-32)

TMJ: temporo-mandibular junction.

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