

Symptoms accompanying fibromyalgia

Sintomi associati alla fibromialgia

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RIASSUNTO

In 67 pazienti con fibromialgia sono stati analizzati i rapporti fra dolore spontaneo e dolore provocato e i rapporti fra dolore muscolare e altri sintomi. Non è stata rilevata una correlazione significativa fra l'intensità del dolore spontaneo e l'intensità del dolore provocato. I seguenti sintomi sono risultati più frequenti nei soggetti esaminati che nella popolazione generale: cefalea, disturbi del sonno, astenia cronica, sindrome dell'intestino irritabile, sindrome delle gambe senza riposo, emorroidi ed epistassi. Alcuni di questi sintomi, come le emorroidi e le epistassi, sono frequentemente espressione di una diatesi caratterizzata da lassità dei tessuti connettivali, alla quale può essere riconducibile anche la fibromialgia.

Reumatismo, 2008; 60(3):217-220

INTRODUCTION

Fibromyalgia is a pain syndrome frequently observed in clinical practice. The classification criteria for fibromyalgia were proposed by Wolfe et al. (1), who clearly indicated the essential clinical features of the syndrome, i.e. chronic widespread pain and muscular tender points in at least 11 out of 18 sites of localisation. It must be noted that the criteria of Wolfe et al. were proposed for epidemiological and research purposes, but are currently used as diagnostic criteria.

In patients suffering from fibromyalgia, the intensity of spontaneous pain and of pain provoked by mechanical stimulation of tender points may vary in a wide range and may induce more or less suffering and disability. Therefore, the intensity of spontaneous and provoked pain must be taken into account to evaluate the severity of the syndrome in every patient. Moreover, it has been observed that

pain of fibromyalgia is frequently accompanied by other symptoms, which are not comprised in classification criteria but may provoke a further increase of the patient's suffering and disability. In clinical studies of fibromyalgia, the following symptoms accompanying pain are usually reported: headache, fatigue, sleep disorders, irritable bowel syndrome and restless legs syndrome, but patients with fibromyalgia may also report other symptoms, such as paresthesias in the upper limbs, hemorrhoids or epistaxis.

The aim of the present investigation was to evaluate whether a relationship could be detected between the severity of spontaneous and provoked pain in a group of patients suffering from fibromyalgia and to observe the frequency of associated disturbances, taking also into account some disturbances (such as hemorrhoids, epistaxis and paresthesias in the upper limbs) which are not usually considered as typical symptoms associated with pain in fibromyalgia.

PATIENTS AND METHODS

Sixty-seven patients were examined, 2 males and 65 females, with mean age of 55.61 years (± 11.01),

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who fulfilled classification criteria for fibromyalgia (1).

The severity of both spontaneous and provoked pain was evaluated. A visual analogue scale (VAS) was used to assess the severity of spontaneous pain. For provoked pain an original method of assessment was used, in which both the number of tender points and the intensity of provoked pain were considered. In every patient a force of 4 kg was applied in the typical sites of localisation of tender points; pain intensity was evaluated according to the following scale: 0: no pain; 1: slight pain; 2: moderate pain; 3: severe pain; 4: severe pain with hyperreaction. The sum of scores obtained in every patient was named 'tender score' and was considered a comprehensive index of the severity of provoked pain.

The occurrence of accompanying symptoms was investigated in every patient. The following symptoms were considered: headache, chronic fatigue, sleep disorders, irritable bowel syndrome, restless legs syndrome, paresthesias in the upper limbs, hemorrhoids and epistaxis.

RESULTS

The mean value of spontaneous pain intensity, measured by the visual analogue scale, was 60.49 ± 22.02 mm. The mean value of the 'tender score' was 35.69 ± 11.74 . No significant correlation was present between spontaneous pain intensity and tender score ($r=0.256$; $p=0.040$).

The frequency of occurrence of the associated symptoms is reported in table I. Values observed were compared with the frequencies reported in general population and with the frequencies re-

ported in other studies of fibromyalgia (for symptoms usually considered associated with fibromyalgia) (1-13). In the patients who reported paresthesias of the upper limbs, a diagnosis of cervical osteoarthritis, thoracic outlet syndrome or carpal tunnel syndrome had been excluded.

DISCUSSION

In the examined patients no correlation was found between the intensity of spontaneous pain and the 'tender score', which is an index of the severity of provoked pain (resulting from an evaluation of both the number of tender points and of the intensity of pain provoked by the stimulation of each tender point). It may be deduced that spontaneous and provoked pain of patients with fibromyalgia are two independent clinical aspects, which should be independently considered in every patient to evaluate the severity of the pain syndrome. As regards the assessment of provoked pain, in the present investigation an original 'tender score' was used, which is more sensitive than other scores currently used, such as the 'tender point index' or 'myalgic score' described by Russell and Bieber (4). The 'tender score' used in the present investigation is obtained by a procedure that includes the evaluation of different intensities of pain not accompanied by pain reaction; other scores are instead obtained by procedures in which different types of pain reactions are evaluated but different intensities of pain not accompanied by reaction are not considered.

The lack of correlation between spontaneous and provoked pain of fibromyalgia may suggest that spontaneous pain is not a direct consequence of pain-provoking conditions localized in 'tender

Table I - Frequency of occurrence of symptoms associated with fibromyalgia in the patients examined in comparison with the frequency observed in general population and with the frequency observed in other studies on fibromyalgia (for symptoms usually considered associated with fibromyalgia).

Symptoms	Frequency observed in the examined patients (%)	Frequency reported in general population (1-13) (%)	Frequency reported in other studies on fibromyalgia (1-5) (%)
Headache	74.62	51	70-76
Sleep disturbance	80.59	32.3	72-90
Chronic fatigue	80.59	38.1	79-94
Irritable bowel syndrome	14.92	~20	30-60
Restless legs syndrome	65.67	2.5-11.5%	31
Paresthesias in the upper limbs	94.03	52	87
Hemorrhoids	44.62	33	-
Epistaxis	50.72	14.7	-

points' and that spontaneous and provoked pain may be two independent consequences of a pathophysiological process, e.g. a functional disturbance of C.N.S., which has been considered an important pathogenetic mechanism of fibromyalgia according to a series of investigations (4, 12).

As regards symptoms associated with pain of fibromyalgia, the frequencies of some symptoms observed in the present investigations are similar to the frequencies observed in other studies. Only the frequency of irritable bowel syndrome was much lower than the frequency reported in other studies. Such a difference may be due to the use of different criteria for the diagnosis of irritable bowel syndrome. In the present investigation, Rome 2 diagnostic criteria were followed: patients were considered as suffering from irritable bowel syndrome when they reported at least 12 weeks in the preceding 12 months of abdominal discomfort or pain with at least two of the following features:

1. relieved by defecation;
2. onset associated with changes in stool frequency;
3. onset associated with changes in stool forms (14).

In the present investigation, a high frequency of paresthesias in the upper limbs, hemorrhoids and epistaxis was observed in patients with fibromyalgia. These disturbances are not usually considered associated with pain of fibromyalgia.

Paresthesias in the upper limbs may be another consequence of a functional disturbance of the nervous system causing pain. It may be observed that paresthesias are frequently associated with pain in different pain syndromes and are frequently reported by patients with muscular pain. Moreover, restless legs syndrome, which is considered a typical syndrome associated with fibromyalgia, is also characterized by paresthesias. The pathogenetic mechanisms causing paresthesias of the upper limbs may be similar to those causing restless legs syndrome.

The occurrence of hemorrhoids or epistaxis is especially interesting because it is frequently due to a diathesis characterized by laxity of connective tissues; fibromyalgia could be a consequence of such a diathesis. For instance, dermographism is much more evident and widespread (pomphoid dermographism) than in healthy individuals.

RIASSUNTO

Objective: The objective of the study was to investigate the relationship between spontaneous and provoked pain in fibromyalgia and to evaluate the frequency of disturbances associated with muscle pain, including some disturbances which are not usually considered as typical symptoms associated with pain in fibromyalgia.

Methods: In sixty-seven patients with fibromyalgia the severity of spontaneous pain was assessed by a visual analogue scale and the severity of provoked pain by an original method, which includes the evaluation of the number of tender points and the evaluation of the intensity of provoked pain. The method used to assess the severity of provoked pain is more sensitive than other methods currently used. The occurrence of accompanying symptoms was also evaluated. The investigation included the occurrence of paresthesias of the upper limbs, hemorrhoids and epistaxis, which are not usually considered as typical symptoms associated with fibromyalgia.

Results: No significant correlation was observed between the severity of spontaneous and provoked pain. The following disturbances were more frequent in the examined patients than in general population: headache, chronic fatigue, sleep disorders, irritable bowel syndrome, restless legs syndrome, paresthesias in the upper limbs, hemorrhoids and epistaxis.

Conclusions: Spontaneous and provoked pain should be considered two independent clinical features of fibromyalgia. Paresthesias in the upper limbs, hemorrhoids and epistaxis should be considered as typical symptoms associated with fibromyalgia. Hemorrhoids and epistaxis are frequently due to a diathesis characterized by laxity of connective tissues and fibromyalgia could be a consequence of such a diathesis.

Parole chiave - Fibromialgia, dolore, parestesie, emorroidi, epistassi.

Key words - Fibromyalgia, pain, paresthesias, hemorrhoids, epistaxis.

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