Clinical and Experimental Rheumatology 2005; 23: 697-700.

Awareness and knowledge of fibromyalgia among French rheumatologists and general practitioners

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This study has been funded by the Laboratoires Pierre Fabre, Castres, France.

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Received on February 23, 2005; accepted in revised form on June 24, 2005.

Key words: Fibromyalgia, rheumatology, general practitioner, awareness, knowledge.

ABSTRACT

Objectives. *Fibromyalgia is a chronic disorder characterized by widespread musculoskeletal pain and fatigue. Its prevalence is estimated to be at 3.4% in women and 0.5% in men. It is a major cause of morbidity. Our objective was to evaluate, using a self-questionnaire sent by mail, the level of knowledge of French physicians, general practitioners, and rheumatologists on fibromyalgia and to analyse their therapeutic approach.*

Methods. *The demographic characteristics of a sample of general practitioners and rheumatologists were compared to those of the overall data available. This comparison demonstrated the good representativeness of our sample.*

Results. *Fibromyalgia was considered as a disease by 23% of rheumatologists and 33% of general practitioners. While on average, each rheumatologist followed 30 fibromyalgia patients, each general practitioner followed 6.1 patients (i.e., 2 to 5% of their practice's patient base).*

Among rheumatologists, 6.4% made no distinction between this disease and depression vs. 13.1% of general practitioners. The diagnosis of fibromyalgia was made based on tenderness that occurs in precise, localized areas of the body (trigger points) by 94% of rheumatologists and 79.1% of general practitioners. Of general practitioners and rheumatologists, 93.7% and 73.7% respectively, have not received any medical school training on fibromyalgia or chronic fatigue syndrome.

Conclusion. *Given the lack of medical school training and continuing professional education concerning fibromyalgia (rare use of pain rating scales, confusion in the classification of rheumatic diseases), there is an urgent need to initiate an explicit teaching effort on chronic pain, and on fibromyalgia in particular.*

Introduction

Fibromyalgia is a chronic disorder characterized by widespread musculoskeletal pain and fatigue. Its prevalence is estimated to be at 3.4% in women and 0.5% in men. It is a major cause of morbidity (1). The impact of fibromyalgia on patient's daily life is important as assessed with the Fibromyalgia impact questionnaire (FIQ), the specific quality of life scale for fibromyalgia (2-4). The very existence of fibromyalgia is highly debated. It generates very significant direct and indirect health care costs (5).

Following the studies by R. Grahame (6) and D. Buskila (7), we sought to evaluate the knowledge of French physicians, both general practitioners and rheumatologists, on this disease and to determine their therapeutic approaches through a questionnaire-based observational study.

Materials and methods

Questionnaire

In November 2003, a questionnaire with a stamped return envelope was sent to all the rheumatologists in France and to a sample of general practitioners. This questionnaire was organized in six main sections: the characteristics of the physician's professional practice (location of professional practice, date when MD degree was obtained, average number of patients seen per day), the physician's opinion on fibromyalgia (including the number of patients followed), the main symptoms of fibromyalgia, diagnosis criteria (knowledge or lack of the ACR criteria), treatments of fibromyalgia, sources of knowledge on fibromyalgia (medical school training or continuing professional education). A list detailing the essential symptoms of fibromyalgia was included.

At the end of the questionnaire, physicians could indicate their interest in receiving additional information. This questionnaire could be returned anonymously or could bear the physician's name and address, if additional information was desired. Questionnaires sent to general practitioners had additional questions concerning specialists (rheumatologists, neurologists, or psychiatrists) to whom they refer their fibromyalgia patients for an opinion. No compensation was given for completing this questionnaire.

Physicians surveyed

The questionnaires were sent to all rheumatologists practicing in France

and to a representative sample of general practitioners, which were chosen based on a randomization list generated by EpiInfo software (8). EpiInfo™ is a health information systems software providing relevant data management and analysis in epidemiology. This program was developed in 1985 by the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO).

Each of the 90,000 general practitioners was assigned a number from 1 to 90,000. The Epi Info™ software made it possible to randomly select 10.000 representative GPs from this group.

The return of this questionnaire was not requested by telephone reminder.

Statistical analysis

This statistical analysis was only descriptive, listing sample sizes and corresponding percentages. Mainly, it described the symptoms and treatments of fibromyalgia, differentiating between general practitioner and rheumatologist responses.

Results

Return of questionnaires

In France as of January 2003, the number of general practitioners was 95,805 and the number of rheumatologists practicing was 2614, 1871 in private practice and 743 with salaried status (9). As of March 1, 2004, 430 questionnaires were returned by the rheumatologists, i.e., a response rate of about 17% and 1,130 questionnaires were returned by the general practitioners, i.e., a response rate of about 11.3%.

Sample representativeness

The comparison of demographic characteristics of the sample of general practitioners or specialists compared to the overall data available demonstrated a good representativeness of our sample (Table I). The length of practice of rheumatologists and general practitioners was similar: 18.6 years.

French physicians and the concept of fibromyalgia

Fibromyalgia does not exist according to 2% of the rheumatologists and 4% of the general practitioners. It is considered to be a disease by 23% of the rheumatologists and 33% of the general practitioners, while 72% of the rheumatologists and 63% of the general practitioners consider it to be a syndrome. Lastly, 3% of the rheumatologists and 7% of the general practitioners did not answer this question.

Each rheumatologist followed an average of 30 fibromyalgia patients while each general practitioner only followed an average of 6.1 patients (i.e., 2 to 5% of their practice's patient base).

Clinical signs of fibromyalgia

Table II details the main symptoms that physicians considered to be characteristic of fibromyalgia. Among the rheumatologists, 57.4% made a partial distinction between fibromyalgia and depression, while 6.4% made no distinction at all vs. 56.4% and 13.1% of general practitioners, respectively.

The diagnosis of fibromyalgia was made by 94% of the rheumatologists based on tenderness to palpation in precise, localized areas of the body (trigger points), and by 2% of the rheumatologists surveyed based on widespread pain experienced for more than 3 months and which was responsive to non-steroidal anti-inflammatory drugs. Tenderness upon digital palpation was considered characteristic by 79.1% of the general practitioners while 20.2% considered that responsiveness to non-steroidal anti-inflammatory drugs was an essential criterion.

Knowledge of ACR criteria

Of the ACR criteria, 83.7% of rheumatologists and 17.7% of general practitioners knew all of them, while 13.7% of rheumatologists and 36.1% of general practitioners knew them in part. While 46.2% of general practitioners did not know them, this occurred in only 1.9% of rheumatologists.

In daily practice 23.1% of the rheumatologists and 10.9% of the general practitioners systematically use visual analog scales for measurement of pain (VAS), while 17.6% of the rheumatologists and 34.8% of the general practitioners never use them.

Management of patients with fibromyalgia (Table III)

Management varied widely, with pharmacological and physical therapy prescriptions as well as recommendations for certain physical exercises. Non-

Table I. Main characteristics of physicians who answered the questionnaire compared to the total population of physicians.

	Total number of rheumatologists	Rheumatologists who replied	Total number of general practitioners	General practitioners who replied
Number	2.614	430	95.805	1.130
Mean age	48	48.2	46.7	47
% women	32.9	34	36.8	34

Table II. Symptoms considered essential in fibromyalgia.

Proposed symptom	General practitioners' responses (in%)	Rheumatologists' responses (in%)
Widespread pain	85	91
Gastrointestinal disorders	21.7	33.1
Headache and migraine	39.9	43
Abnormal radiologic finding	4.1	0.9
Non-restful sleep	61.5	88.2
Lack of concentration and memory loss	37.4	43
Joint swelling	15.6	4.5
Muscle weakness	75.1	44.7
Tendency to feel depressed, anxious and sad	79.8	79.4
Excessive fatigue	91.1	91
Seasonal sensitivity	44.9	34
Palpitations	15.3	17.7

Table III. Main pharmacological prescriptions or recommendations.

Prescriptions/ recommendations	General practitioners (in %)	Rheumatologists (in %)
Analgesics	77	73
Trycyclic anti-depressants	42	25
Serotoninergic anti-depressants	55	17
Sedatives, hypnotic agents	33	31
Homeopathy	21	3
Morphine-like agents	6	3
Acupuncture	42	41
Chiropraxis	3	3
Osteopathy	33	12
Hypnosis	9	16
Hydrotherapy or spa therapy	31	45
Relaxation exercises	74	90
Physical therapy	85	93
Swimming	78	80
Regular walking	68	71
Yoga	53	67
Stretching	27	88
Cycling	33	37

medical or unconventional methods were also commonly used.

Physicians to whom general practitioners referred fibromyalgia patients

General practitioners referred 54.6% of their fibromyalgia patients to a rheumatologist, 15.3% to a neurologist, 9.8% to a psychatrist and 2% to both a rheumatologist and a psychiatrist.

Medical training and fibromyalgia

No medical school training was provided on fibromyalgia or chronic fatigue syndrome for 93.7% of the general practitioners and 73.7% of the rheumatologists. If 82.1% of the general practitioners had not received any continuing professional education on this topic during their professional practice, this was also true for 45.9% of rheumatologists.

Request for information

Additional documentation was requested by 93% of the rheumatologists and 73% of the general practitioners. However, only 50% of them provided their name, address and phone number to receive such information.

Discussion

This is the first time that a study on physicians'knowledge regarding fibromyalgia and their approach in daily practice when confronted with it, has been conducted in France. Moreover, apart from a study by D. Buskila (7) on 172 Israeli general practitioners and another by R. Grahame (6) on 100 members of the British Society of Rheumatology, this topic has not often been covered in the literature.

This study contains several biases, which should be emphasized at the outset. It was a self-questionnaire survey with no possible data verification. In spite of the overall statistical representativeness of the sample, it is probable that the physicians particularly invested in their practice or especially interested in this disease replied more readily.

However, several interesting lessons seem to emerge from this survey: the interest in this topic is obvious; the response rate for these questionnaires was especially high, considering that this survey was conducted without telephone reminders and without any compensation or benefit. This was also demonstrated by the high demand for additional information from almost all physicians, even though only half of them listed their address. This is probably related to the very low percentage of physicians who received training in chronic bone and joint pain during their medical school training and, regarding general practitioners, during their continuing professional education.

We also confirmed the high incidence of fibromyalgia in daily practice. Each rheumatologist stated that he or she followed an average of 30 fibromyalgia patients, and each general practitioner followed 6 patients, i.e., 2 – 5% of their practice's patient base.

The existence of fibromyalgia is unquestioned by nearly all French physicians. Conversely, 34% of English rheumatologists do not consider fibromyalgia to be a specific clinical entity, while in Grahame's study 15% do consider it to be a distinct pathological entity.

Replies concerning clinical practice reveal some surprising statements. In the opinion of 17% of general practitioners, widespread pain is not characteristic of fibromyalgia, and 6% consider the disease to be characterized by radiographic erosion. Comparable data have been reported by Buskila. Although 96% of physicians in this study stated that they were familiar with fibromyalgia, only 55% indicated that this disease was associated with widespread pain and only 25% knew the number of painful point required by the ACR criterion. It must be emphasized that 20% of the general practitioners affirmed that fibromyalgia was responsive to non-steroidal anti-inflammatory drug therapy. The use of visual analog scales to measure patient's pain should also be emphasized: 35% of general practitioners stating that they never used them, despite the good medical practices insisting on the relevance of a precise assessment of pain in order to allow the most accurate patients' management.

The American College of Rheumatology criteria are widely known by rheumatologists, but much less so by general practitioners.

The relationship between fibromyalgia and depression is still the topic of much debate. In the opinion of 13% of general practitioners and 6.4% of rheumatologists, no distinction should be made between fibromyalgia and depression.

Pharmacological therapy used varied widely, based on analgesic agents and tricyclic or serotoninergic anti-depressants. Unvalidated or unconventional therapies, homeopathy, chiropraxis and osteopathy were frequently used. Acupuncture was also widely used. The

physicians commonly recommended physical exercise, swimming, walking regularly and cycling.

The rheumatologist's role in the management of pain was well demonstrated by their being the physician to whom patients were referred by general practitioners: 54.6% of GPs referred their fibromyalgia patients to them while 15.3% of patients were referred to a neurologist, 9.8% to a psychiatrist, and 2% both to a rheumatologist and a psychiatrist.

In summary, through this survey, the need for an explicit teaching effort on chronic pain, and fibromyalgia in particular, appears obvious. The lack of medical school training and continuing professional education in this field (rare use of VAS to measure pain, confusion in the classification of rheumatic diseases) must be corrected.

Acknowledgements

The authors wish to thank all of the French physicians who, by replying to the questionnaire, made it possible to determine their state of knowledge on fibromyalgia.

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