COLLÈGE DES MÉDECINS
DU QUÉBEC

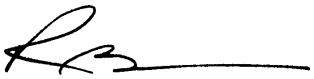
Fibromyalgia

Foreword

In recent years, a growing number of Quebecers have been affected by fibromyalgia and, given the very nature of the disease, this entails considerable social costs. Because little is known about fibromyalgia, it creates confusion on many counts, particularly with respect to definition, diagnosis and medical approach.

Given the complexity of the situation, the Collège des médecins du Québec thought it advisable to publish guidelines that define, among other things, certain basic standards of assessment, treatment and follow-up of patients.

We hope the information in this publication will enable members of the medical profession involved with this health problem to be better equipped to help patients struggling with it. This document may also be useful to all physicians directly or indirectly interested in fibromyalgia.



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I. Introduction

Fibromyalgia remains a controversial nosologic entity, despite its recognition by the World Health Organization (WHO), which has given it number M79.0 in its Tenth Revision of the *International Statistical Classification of Diseases and Related Health Problems* (ICD-10)[1]. Because the medical profession is reluctant to consider fibromyalgia a nosologic entity, the syndrome has received scant attention in the medical literature and in areas of activity related to medical training.

The purpose of these guidelines is to recall to physicians certain basic standards of assessment, treatment and follow-up of patients. Their foremost aim is the quality of care given by physicians to persons suffering from fibromyalgia. While chronic fatigue syndrome and fibromyalgia share many of the same clinical manifestations, with the approach to diagnosis and treatment often being similar, this document is concerned only with fibromyalgia.

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2. Definition

In 1990, the American College of Rheumatology (ACR) adopted criteria for the classification of fibromyalgia; these are found in Table 1.

Table 1

1990 Criteria for the Classification of Fybromyalgia[2]

Generalized pain

- Axial region, upper and lower segments, as well as the right and left sides of the body
- Lasting at least three months

Pain on palpation of at least 11 tender points out of 18 at the following nine bilateral sites:

- Suboccipital region
- Front of the neck at the level of C5 to C7 transverse processes
- Trapezius muscles
- Origin of supraspinatous muscles
- Chondrocostal regions of the second ribs
- Region situated two centimetres away from the lateral epicondyles
- Upper-outer quadrants of the buttocks
- Greater trochanters
- Adipose cushions on the inner surface of the knees

Given the fact that this classification is based essentially on the presence of subjective symptoms, one can readily understand how the approach to diagnosis and treatment hinges upon the physician's clinical skills.

Many theories on its etiology have been advanced in the literature, but to date none of these has been proven conclusively[3].

3. Associated Somatic Problems

While the officially recognized criteria emphasize the presence of chronic pain, it is nonetheless important to note that patients suffering from fibromyalgia generally present a whole string of somatic symptoms that complicate the approach to diagnosis. But the clinician who is alerted to the possibility of a multisymptomatic picture will find it easier to make the diagnosis and not become unduly alarmed. The subjective symptoms reported most frequently appear in Table 2.

Table 2

Associated Somatic Complaints

Cardiovascular system

- Palpitations
- Raynaud's phenomenon

Respiratory system

- Allergies
- Dyspnea
- Cough

Digestive system

- Dry mouth
- Dysphagia (e.g. "lump" in the throat, difficulty swallowing, sore throat)
- Dyspepsia
- Irritable bowel (diarrhea or constipation)

Genitourinary system

- Irregular menstrual cycles
- Dysmenorrhea
- Irritable bladder (urgency of urination)

Endocrine system

- Generalized fatigue
- Excessive sweating, localized or generalized
- Hypoglycemia
- Dry skin
- Hair loss

Musculoskeletal system

- Costochondritis
- Temporo-mandibular dysfunction
- Muscle spasms (including nocturnal myoclonia)

Nervous system

- Chronic headaches, migraines
- Generalized dysesthesia (e.g. burning sensation, heat, numbness, chills, pins and needles, subjective sensation of swelling)
- Hypersensitivity to noise, odours and air conditioning
- Insomnia
- Tendency to drop things
- Tinnitus
- Double vision
- Balance problems and dizziness
- Dry eyes or excessive tearing

In general, the patient suffering from fibromyalgia develops these symptoms gradually, meaning that, at each visit, new symptoms are often added to the clinical picture presented previously.

4. Associated Psychological Problems

Almost two-thirds of those suffering from fibromyalgia also present associated psychological problems. Different research groups have tried to establish a psychological profile for people suffering from fibromyalgia[7-17]. While they have not been able to come up with a specific profile, it is accepted that 36 percent of patients with fibromyalgia have a psychological profile that is considered normal, 33 percent present a psychological profile similar to that seen in patients suffering from chronic pain, and 31 percent have serious psychological problems[9].

Particular attention must be given to screening for depressive disorders and

anxiety disorders that may coexist with the fibromyalgia profile; these are often hidden by multiple forms of somatization and, for that reason, underdiagnosed.

Also to be taken into account is the comorbidity with psychosomatic disorders, drug dependencies and personality disorders that compound the difficulties in terms of treatment and make the prognosis less favourable. In all cases, a psychosocial assessment is recommended to diagnose or rule out these conditions.

The subjective complaints of a psychological or emotional nature most frequently reported appear in Table 3.

Table 3

Associated Psychological Complaints

Affective sphere	*Cognitive sphere*
• Anxiety	• Difficulty naming objects
• Emotional distress	• Difficulty concentrating
• Irritability	• Memory problems
• Panic	
• Mood swings	

5. Initial Presentation: History and Clinical Examination

The typical fibromyalgia profile may take one of the two following forms:

- a profile of pain and fatigue, generalized from the outset, with associated suggestive symptoms whose gradual appearance may date back as far as childhood (primary fibromyalgia);
- a profile of localized pain progressing toward a profile of generalized pain that appears following an event that precipitates it, such as surgery, an automobile accident, a pregnancy, a viral episode or a musculoskeletal injury[2,4,17-21] (secondary fibromyalgia).

With the traditional anamnesis, the history of the disease emerges—the nature of the pain, localization, severity, frequency, and areas into which it radiates; the presence of a precipitating event; relevant personal and family history; lifestyle; the assessment of the various functions (review of systems). Thus, it is important to document the many subjective symptoms the patient may report. Previous treatments should also be carefully recorded, including their date and duration, their outcome, their undesirable effects and the patient's opinion on why the treatment was unsuccessful.

The patient-centred history also brings out the patient's ideas and beliefs relative to his health problem, and any feelings (e.g. fears,

insecurities) related to it, the repercussions of his problem on his everyday functioning and his expectations as regards treatment, particularly if his therapeutic goal is to have the pain eliminated completely[22-24].

In addition to identifying the tender points at the sites listed in Table 1, the complete objective examination must include an objective and systematic assessment of muscle strength, the range of motion of joints, the gait, a neurological examination and a peripheral vascular examination. It should also include an assessment of the systems involved in the associated subjective symptoms the patient reports. Essentially, the physical examination of a person suffering from fibromyalgia does not reveal any objectifiable anomaly other than the presence of tenderness on palpation of the many sites listed in Table 1.

Nevertheless, a meticulous physical examination will enable the physician to establish a therapeutic rapport with the patient and facilitate the task of announcing a diagnosis of fibromyalgia. An examination that is too quick or too superficial is often interpreted as disinterest on the part of the physician vis-à-vis this complex problem. Hence, the relational aspect proves to be an important therapeutic tool.

6. Differential Diagnosis and Basic Investigation

While a differential diagnosis is imperative, many pathologies may be ruled out through an in-depth history-taking and a good clinical examination that includes looking for tender points. It has been demonstrated that laboratory examinations or more sophisticated tests are, all things considered, not very useful[25].

The basic investigation should then be limited to a complete blood count, a sedimentation rate and a TSH.

7. Management and Treatment Plan

When announcing the diagnosis, the physician must be ready to provide structured basic information, which will be repeated and elaborated on during subsequent visits.

What is more, patients with fibromyalgia, who frequently lack the means to cope with their suffering, have a tendency to simultaneously consult many different types of therapists. As a result, they use the opinions expressed by the various professionals consulted, and this can lead to confusion in the clinician's mind. The consultants, who are just as baffled by the lack of clinical explanation for the patient's suffering, also have a tendency to multiply the referrals. This attitude is not only costly, it is very unproductive. Thus, the physician designated as the attending physician should be the **only** one to manage the medical referrals ordered for a given patient. It is paramount that the patient commit himself to respecting this order.

The attending physician is therefore responsible for opening a complete file, which must include the results of all investigations and consultations, as well as a description of all treatments and their results. Moreover, in the initial phase, the attending physician must make sure that the patient is followed closely. The pain and somatic symptoms are multidimensional experiences, with psychological and relational factors having a major influence on the way these are perceived and managed. Also, any attempt to determine how much pain is due to physical factors and how much is generated by psychological factors is doomed to therapeutic impasse.

The physician must also avoid openly doubting the authenticity of the symptoms the patient presents. This attitude will only serve to put the patient in a situation where he has to prove to his physician just how sick he really is. In fact, it is paradoxical that the patient should have to try and attend to his affairs despite the pain, while trying to convince the physician that his symptoms are real. Rather, the physician must listen attentively to the patient's complaints and insist on the importance of mobilization and physical exercise.

Some patients suffering from fibromyalgia report a considerable improvement and sometimes even a complete resolution of their symptoms within months of beginning management and treatment of their problems. But for the majority of patients, the symptoms persist for several years[9,26]. For these, as for all patients suffering from chronic pain (pain that persists for more than three months), the treatment goal **must not be** to relieve the pain, but to manage it in the course of one's daily activities.

As there are few pharmacological treatments that offer relief to patients with fibromyalgia, and as these patients often present associated psychological problems, it is important not to make the diagnosis without careful consideration. Even though studies show that the coping process does not usually begin until after the diagnosis has been established, the physician must avoid making a diagnosis of fibromyalgia if he is not prepared to take the patient's care well in hand. Thus, the physician must provide his patient with the information he needs to react positively to the diagnosis.

Certain patients meet all the diagnostic criteria straightaway. Others present a clinical picture that strongly suggests a diagnosis of fibromyalgia. Whether or not the patient meets the criteria, the physician must:

- give the patient basic information on what fibromyalgia is (see Section 8.1 on page 7);
- prescribe physical activity in the form of an exercise program with an aerobic component as well as one that increases muscular endurance;
- teach the patient certain pain management techniques.

The physician thus assumes a coaching role. By choosing the appropriate therapeutic approaches, the physician can avoid over-medicalization. In most cases, a psychosocial assessment is required to identify patients who are experiencing psychological and/or psychosocial difficulties; the physician may then better adapt the therapeutic approach to the patient's needs and treat the psychopathology, if necessary.

Once the patient seems to be adjusting better to his condition, meaning that he is still working or making concrete plans to return to work, it is important to have good follow-up to reinforce what has been accomplished.

But should the patient complain of a deterioration in his condition following the proposed treatments, he must be promptly referred to a specialized resource (integrative global approach) for the treatment of patients suffering from chronic pain, in an effort to favour early intervention.

8. Treatment Strategies

8.1 Education

During the course of the visit in which he diagnoses fibromyalgia, the physician must be prepared to furnish basic information, which will be repeated and elaborated on during subsequent visits. To do so, he must:

- explain the elements on which the diagnosis of fibromyalgia is based (ACR criteria presented in Table 1) and the steps to be taken to rule out the other causes of organic pathology;
- define fibromyalgia as being a problem of chronic pain that displays itself with a host of other physical symptoms (see Table 2) that do not in any way reflect the degree of seriousness of the disease;
- inform the patient that the severity of the pain felt does not in any way mean a deterioration in his physical condition. It is important to realize that one cannot get rid of chronic pain; rather, one must accept it and carry on an active, productive lifestyle, despite the pain;
- reassure the patient that the disease is not degenerative or terminal;
- explain the vicious circle of manifestations in fibromyalgia: the pain and lack of restorative sleep produce fatigue, which in turn leads to a withdrawal from activities, which gives rise to muscular deconditioning and a feeling of isolation and emotional distress;
- present the psychosocial resources that may prove to be an invaluable support in these situations, since the repercussions of chronic pain are not only psychological, but social and relational as well.

It appears useful to present this information in the presence of a significant person from the patient's circle of friends or family. Indeed, the anxiety induced by announcing the diagnosis may affect the person's ability to understand and assimilate all of the information given.

8.2 Medication

Between 30 and 40 percent of patients benefit from a prescription of amitriptyline hydrochloride (Elavil™) or cyclobenzaprine

hydrochloride (Flexeril™)[25]. To produce an "analgesic" effect, the doses must be small.

- Amitriptyline hydrochloride: 25 mg, one half-tablet (12.5 mg) at bedtime; the dose may be increased every two weeks from one half-tablet to a maximum dose of 50 mg.

To be accepted as valid, a trial course of treatment must last at least two months. When prescribing amitriptyline hydrochloride, the physician should explain to the patient that the medication is being used for analgesic purposes and not as an antidepressant; as a result, the undesirable effects will likely be transitory and much less severe.

- Cyclobenzaprine hydrochloride: 5 mg to 10 mg at bedtime; the dose may be increased every two weeks to a maximum of 30 mg daily, in separate doses of 10 mg in the morning and 20 mg at bedtime.

If the patient has already tried the proposed medication without obtaining the anticipated effect, and the physician attempts to re-prescribe the same medication without further explanation, he runs the risk of failure. Since the effects of a medication are largely determined by the patient's expectations vis-à-vis that medication, it seems essential to explain to the patient the reasoning behind any new attempt.

When the patient considers the side effects of the medication more undesirable than the fibromyalgia itself, the medication must be stopped. This kind of reaction should alert the clinician to the presence of psychological factors that are likely to get in the way of any treatment strategy. In this case, it is recommended that the patient be referred to a resource that specializes in the treatment of chronic pain.

8.3 Prescribing Physical Activity

In adjusting their level of functioning to their pain, most patients expose themselves to complications arising from physical deconditioning. The reason for prescribing physical activity is to counter this tendency and to get the patient moving toward an optimal functional level.

While the means and techniques may vary with the patient's resources, the physical activity prescribed must take into account the physiological needs of the individual and target the goals to be achieved. The physician should then suggest specific activities, so that he can measure the patient's compliance and give him more responsibility for his own care at subsequent visits.

For the cardiovascular system, and to provide an aerobic component, he may suggest minimal activities that include walking, aqua-fitness, swimming and cycling.

For the musculoskeletal system, the activity program should include, as a minimum, specific stretching exercises that maintain capsule-ligament flexibility of the spine and peripheral joints, and muscular elasticity.

This prescription should be complemented by activities that gradually build up strength; these may be adjusted depending on the symptomatic regions and the patient's tolerance, while making physical activity a priority.

The outcome of this treatment program invariably produces new levels of performance-related satisfaction for the patient who complies with it.

8.4 Principles of Pain Management

- Mention to the patient that it is important to accept the pain, as it is next to impossible to get rid of, and to learn to manage it better.
- Avoid analgesics and anti-inflammatories which, in any case, are quite ineffective in the treatment of chronic pain and create complications in the medium and long term.
- Avoid overusing so-called "passive" methods to control pain (hot baths, showers, topical analgesic creams, heating pads, massages, and others), as their effect is only temporary; what is more, they encourage the patient to perceive himself as disabled. For example, the patient may feel discouraged, if not despairing, when he still feels the same pain after spending twenty minutes stretched out in a hot bath, an hour getting a massage, and three hours lying on a heating pad. Time devoted to these activities is not only lost, at the expense of other more satisfying activities, but it also contributes to the feeling that the illness is serious.
- Do not resort to aids that create and perpetuate an image of disablement, such as a cervical collar, a corset, a cane or a wheelchair.
- Make the patient aware of his attitudes toward work. Learning to manage the performance of one's tasks is preferable to doing everything at once (pacing and energy-conserving measures).
- Explain how stress and tension may increase the perception of pain and feeling of emotional distress that accompanies it.

8.5 Self-Help Groups

Certain self-help groups may be beneficial in as much as they provide information about the disease while encouraging mobilization rather than disablement.

9. Guidelines Concerning Disability

Stopping work is an important decision with serious consequences including:

- increased awareness of the pain produced by inactivity;
- a feeling of isolation;
- a decrease in activity which leads to a loss in self-esteem;
- financial problems (e.g. lower salary, loss of job security, loss of pension plan);
- fear associated with a return to work, which increases proportionately to the length of time away from work (since the workplace changes with time, the patient finds it more and more difficult to be reinstated in his job);
- family problems.

Fibromyalgia should not be a disabling condition in itself. Initially, if one is given a work leave, it should be short (usually less than one month), and its duration should be clearly established beforehand with the

patient. The specific reason as well as the goal targeted should be rigorously documented in the file. A work leave can, for example, be presented as a short respite period during which the patient will begin to learn how to manage the disease (obtaining information, undertaking an exercise program, putting pacing into practice). The patient should avoid using this period to rest or recover. The timetable for returning to work should be respected even if the symptoms have not resolved completely.

10. Conclusion

Fibromyalgia is complex and poses a challenge when it comes to a treatment plan. To avoid running into roadblocks, particularly those associated with an exclusively etiological approach, which has shown disappointing results to date, the clinician should adopt a global approach aimed at a better understanding of the various biological, psychological, familial and social dimensions that may contribute to the syndrome as predisposing or precipitating factors, or perpetuate it.

This approach should be initiated promptly, and the follow-up should be as consistent as possible to avoid the harmful effects of chronicity. The treatment goals must be realistic, discussed with the patient and, above all, aimed at giving the patient a better quality of life.

To achieve this goal, the relationship-centred approach cannot be given short shrift, as it will prove to be the most valuable tool in creating a feeling of understanding, in giving better support and possibly in obtaining some measure of relief.

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Note: In this publication the masculine is used without prejudice and merely to simplify the presentation.