XII Corso di Alta Formazione in Terapia del DOLORE

"Dolore acuto e cronico: dalla ricerca alla clinica"

Pain...too much neglected issue

PARTENOS
PAIn control and suppoRTive carE of NOxious Stimuli

ISTITUTO NAZIONALE TUMORI
IRCCS - Fondazione Pascale

NAPOLI
9-11 Marzo 2023
Centro Congressi Federico II

I tools diagnostici

Dottoressa Cristina Destefanis

Napoli, 10 Marzo 2023

Wolfe F, Smythe HA, Yunus MB, et al**. (1990)**

The American College of Rheumatology 1990 Criteria for the Classification of Fibromyalgia. Report of the Multicenter Criteria Committee. ArthritisRheum. 1990; 33: 160-72.

Wolfe F

New American College of Rheumatology criteria for fibromyalgia: a twenty-year journey. Arthritis Care Res (Hoboken). **2010;** 62(5):583-4.

Wolfe F, Clauw DJ, Fitzcharles MA, Goldenberg DL, Häuser W, Katz RL, Mease PJ, Russell AS, Russell IJ, Walitt B. **(2016)**

Revisions to the 2010/2011 fibromyalgia diagnostic criteria. Semin Arthritis Rheum. 2016 Dec;46(3):319-329. doi: 10.1016/j.semarthrit.2016.08.012.
Epub 2016 Aug 30.

Sindrome Fibromialgica: Nuovi criteri diagnostici (2016)

Ad oggi può essere diagnosticata negli adulti quando sono soddisfatti **tutti** i seguenti criteri:

(1) Il dolore è generalizzato, (presente in almeno 4 delle 5 regioni)
(2) I sintomi si sono mantenuti invariati (come intensità e localizzazione) per almeno 3 mesi.
(3) Indice di dolore diffuso (WPI) ≥ 7 e punteggio della scala di gravità dei sintomi (SSS) ≥ 5 O WPI di 4-6 e punteggio SSS ≥ 9.
(4) Il paziente non ha una patologia che potrebbe spiegare in modo diverso il dolore, anche se una diagnosi di fibromialgia non esclude la compresenza di altre malattie clinicamente importanti.

Wolfe F, Clauw DJ, Fitzcharles MA, Goldenberg DL, Häuser W, Katz RL, Mease PJ, Russell AS, Russell IJ, Walitt B. **(2016)**

Revisions to the 2010/2011 fibromyalgia diagnostic criteria. Semin Arthritis Rheum. 2016 Dec;46(3):319-329. doi: 10.1016/j.semarthrit.2016.08.012. Epub 2016 Aug 30.

(1) <u>Il dolore è generalizzato, (presente in almeno 4 delle 5 regioni)</u>

Si definisce dolore "generalizzato", il dolore presente in almeno 4 delle 5 regioni principali del corpo:

Arto superiore destro, Arto Superiore sinistro, Arto Inferiore destro, Arto Inferiore sinistro, Colonna.

Per dolore alla colonna si intende dal tratto cervicale al tratto lombo-sacrale, mentre il cingolo scapolare e pelvico rientrano all'interno della classificazione del dolore con i rispettivi arti.

Inoltre, mascella, gabbia toracica e addome non rientrano nella definizione di dolore generalizzato.

<u>(2) I sintomi si sono mantenuti invariati (come intensità e localizzazione) per almeno 3 mesi</u>

(3) Indice di dolore diffuso (WPI) ≥ 7 e punteggio della scala di gravità dei sintomi (SSS) ≥ 5 O WPI di 4-6 e punteggio SSS ≥ 9.

***WPI (indice di dolore diffuso*): (0-19)** Sommare il numero delle aree nelle quali il paziente ha avuto dolore durante l'ultima settimana: Cingolo scapolare sinistro, Cingolo scapolare destro, Braccio sinistro, Braccio destro, Avambraccio sinistro, Avambraccio destro, Anca (gluteo trocantere) sinistra, Anca (gluteo trocantere) destra, Coscia sinistra, Coscia destra, Gamba sinistra, Gamba destra, Mascella destra, Mascella sinistra, Torace, Area dorsale, Area lombare, Collo, Addome

***SSS (scala di severità dei sintomi)*: (0-9)**

Astenia (0-3), Sonno non ristoratore (0-3), Disturbi cognitivi (0-3)

Per ognuno dei tre sintomi suddetti, indicare il grado di severità durante l'ultima settimana utilizzando le seguenti scale:
0. Nessun problema
1. Problemi lievi o moderati, generalmente moderati o intermittenti
2. Problemi moderati, considerevoli, spesso presenti e/o moderata intensità
3. Problemi severi, penetranti, continui, che compromettono la vita

***Il punteggio SSS** (sss score 0-12)* è dato dalla somma della scala di severità dei sintomi SSS (0-9) più la somma (0-3) dei seguenti sintomi:
Indicare se presenti nell'ultima settimana:
Cefalea (0-1), Dolore o crampi addominali (0-1), Depressione (0-1)

(4) Il paziente non ha una patologia che potrebbe spiegare in modo diverso il dolore, anche se una diagnosi di fibromialgia non esclude la compresenza di altre malattie clinicamente importanti.

Reumatismo, 2021; 73 (2): 89-105

GUIDELINES

The Italian Society for Rheumatology clinical practice guidelines for the diagnosis and management of fibromyalgia Best practices based on current scientific evidence

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RECOMMENDATION 3

The clinical diagnosis is based on the presence of the peculiar symptoms, lasting for at least three months, excluding those related to other diseases (level 5, grade D).

The 2016 review of the American College of Rheumatology (ACR) FMS diagnostic criteria (2011/2010) is useful in the initial assessment in order to support a clinical diagnosis; however, it should be taken into account that symptoms vary over time (level 3, grade B).

Physical examination should be in the normal range with the exception of hypersensitivity to soft tissue pressure (level 5, grade D); nevertheless, the examination of 'tender points' according to the 1990 ACR diagnostic criteria has little clinical relevance and does not confirm a diagnosis of FMS (level 5, grade D).

Summary of guidelines. All the selected guidelines agree that FMS diagnosis should be based on well-defined clinical criteria. The 2010 ACR diagnostic criteria, modified in 2011, are considered the most suitable in confirming clinical diagnosis. The guidelines agree in not assigning any diagnostic role to the presence of 'tender points'.

Recommendation/supporting evidence. Emilia-Romagna 2017, Canadian 2013, German 2012.

Evidence to recommendation. Experts consider the diagnostic criteria revised in 2016 by Wolfe et al. (31) better than those proposed by the ACR in 2011 and endorsed by all the selected CPGs (32). Note that the diagnosis of FMS is independent of the presence of any comorbidity.

External reviewers median score 8/10 (82% of scores ≥7).

RECOMMENDATION 4

The pivotal symptoms are:
a) chronic and widespread musculoskeletal pain;
b) fatigue and asthenia;
c) sleep disorders;
d) neurocognitive disorders.

Psycho-affective alterations (anxiety, depression, etc.) may be related with a wide range of somatic and neurovegetative symptoms with different variability (level 5, grade D).

Healthcare professionals should be aware that some medical or psychological conditions may arise with pain and that patients with other medical conditions may have an associated FMS (level 5, grade D).

Summary of guidelines. In the selected guidelines there is a perfect agreement in listing the musculoskeletal and neurovegetative symptoms related to FMS. However, the clinicians should always consider the possibility of association with other pathological conditions (*e.g* vitamin D deficiency).

Recommendation/supporting evidence. Emilia-Romagna 2017, Canadian 2013, German 2012.

Evidence to recommendation. The panel agreed upon the proposed list and does not consider necessary any substantial modification.

External reviewers median score 9/10 (100% of scores ≥7).

RECOMMENDATION 5

FMS should be diagnosed as a clinical construct without any confirmatory laboratory tests (level 5, grade D).
Repeated examinations after diagnosis should be avoided, unless guided by the onset of new symptoms or semeiotic findings (level 5, grade D).
Any further laboratory or radiographic analysis should depend on the individual patient's clinical evaluation, which may suggest some other medical condition (level 5, grade D).

Summary of guidelines. Both selected CPGs based exclusively the diagnosis on clinical manifestations of FMS. However, the diagnosis must be advanced by an expert clinician, who is confident in the differential diagnosis with other diseases (also through adequate laboratory or instrumental tests). These examinations should be repeated whenever there are changes in the clinical scenario that cannot be attributed to FMS.
Recommendation/supporting evidence. Canadian 2013, German 2012.

Evidence to recommendation. The panel agrees to identify in the rheumatologist the decision maker of the examinations to be performed in the context of the overall diagnostic process. Blood tests have a prominent role only for the differential diagnostics. If other diseases in association with FMS are suspected, the following tests should be considered: erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), complete blood count, thyroid stimulating hormone (TSH), creatine phosphokinase (CPK), transaminases and γ-glutamyl transferase. Targeted tests can be required in case of additional signs or symptoms (30). In FMS there is a significant presence of small fiber neuropathy (A delta and C), but skin biopsy should be considered only in selected cases (33).
External reviewers median score 8/10 (91% of scores ≥7).

CANADIAN RHEUMATOLOGY ASSOCIATION | SOCIÉTÉ CANADIENNE DE RHUMATOLOGIE

Canadian Guidelines for the diagnosis and management of fibromyalgia syndrome

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SECTION 1 : The diagnosis

1.1 How is fibromyalgia diagnosed?

FM is a syndrome of diffuse body pain with associations of fatigue, sleep disturbance, cognitive changes, mood disturbance, and other variable somatic symptoms [3]. A diagnosis of FM is made following a clinical evaluation which includes a history of current complaints, attention to past health status and a physical examination, without any confirmatory diagnostic test. Although criteria for the diagnosis of FM were developed for research purposes, they may be used to validate a clinical diagnosis.

1.1.2 The symptom complex in persons with fibromyalgia

a) Pain

Pain is the primary complaint in persons with FM and should have been present for at least 3 months. Pain onset is usually insidious, sometimes beginning in a localized area, may initially be intermittent, and then progressively becomes more persistent. Although pain is felt in muscle or joint areas, there is no physical abnormality of these tissues. A neuropathic mechanism to the pain may be suggested by report of a burning quality to the pain [14, 15]. Pain may vary in location and intensity from day to day, and can be modulated by factors such as weather or stress [16]. Cold and humid weather tends to be associated with increased symptoms [16, 17]. Although the most frequently reported sensory symptom in FM is pressure induced pain, this was only reported to be severe in 58% of FM patients [14].

b) Other associated symptoms present in FM

Symptoms other than pain are common in FM and can contribute to one third of the global suffering [2, 3, 18].

b.I Fatigue

Fatigue, reported to be present in over 90% of FM patients, is the most common associated complaint [3]. Fatigue may even be more disabling than pain for some, and contributes to subjective report of functional impairment. Fatigue is challenging to measure, with reliance on subjective patient report to gauge severity. Overlap with chronic fatigue syndrome has been described, although pain is more prominent in patients with FM [19].

b.II Nonrestorative sleep

Nonrestorative sleep is associated with FM [20]. Abnormal components of sleep that have been measured include sleep latency, sleep disturbance, and fragmented sleep leading to impaired daytime function [21, 22]. Poor sleep negatively impacts fatigue, affect, and pain, with improvement in these parameters when sleep specifically is addressed [23-26]. Other sleep disorders such as restless leg syndrome or sleep apnoea may also occur in patients with FM.

b.III Cognitive dysfunction

Cognitive dysfunction which includes poor working memory, spatial memory alterations, free recall, and verbal fluency associates with pain in FM as well as other pain patients and is different from healthy controls [27-30].

b.IV Mood disorder

Mood disorder, including depression and/or anxiety, is present in up to three quarters of persons with FM, but mood disorders and FM are likely distinct [31]. Anxiety commonly coexists with depression, but is also independently increased in FM patients [32, 33]. Depression is influenced by low family cohesion, high pain and helplessness, and passive coping skills [34]. First-degree relatives of individuals with either FM or major depressive disorder (MDD) demonstrated similar rates of MDD suggesting that these two conditions share similar risk factors which may be genetically driven [35].

b.V Pain-related somatic symptoms

Somatic symptoms, including irritable bowel syndrome, migraine headaches, severe menstrual pain, lower urinary tract symptoms, myofascial facial pain, and temporomandibular pain have all been associated with FM [36-39].

b.VI Non-pain related symptoms

Sexual dysfunction has recently been reported to occur in 97% of FM patients [40]. FM patients may be more vulnerable to posttraumatic stress disorder (PTSD), with depressed FM patients having a three-fold increase in PTSD compared to those with chronic fatigue only [41]. Breast implants, at one time implicated in FM, are not associated with FM [42, 43]. Similarly, cigarette smoking has been associated with more severe FM symptoms, rather than FM per se, and should be discouraged for global health reasons [44].

Recommendations:

1. **Fibromyalgia, a condition that can wax and wane over time, should be diagnosed in an individual with diffuse body pain that has been present for at least 3 months, and who may also have symptoms of fatigue, sleep disturbance, cognitive changes, mood disorder, and other somatic symptoms to variable degree, and when symptoms cannot be explained by some other illness [*Level 5 [2, 12, 45, 46], Grade D*].**

1.2 What physical abnormalities may be present in fibromyalgia?

The physical examination, specifically musculoskeletal and neurological, is usually within normal limits except for tenderness of soft tissues. Soft tissue tenderness can include pain report on examination of the tender points, however, as described in the 2010 ACR diagnostic criteria, specific tender point count is no longer required for a diagnosis of FM [2].

Sensitivity to light touch, interpreted as dysaesthesia or touch allodynia (unpleasant sensation or pain after a non-painful stimulus), may occur, but without other objective neurological findings. Expression of pain or pain behaviours may be present but should not imply faking of symptoms [47].

Recommendations:

2. **All patients with a symptom complaint suggesting a diagnosis of fibromyalgia should undergo a physical examination which should be within normal limits except for tenderness on pressure of soft tissues (ie. hyperalgesia which is increased pain following a painful stimulus) [*Level 4 [2, 3, 66], Grade D*].**
3. **Examination of soft tissues for generalized tenderness should be done by manual palpation with the understanding that the specific tender point examination according to the 1990 ACR diagnostic criteria is not required to confirm a clinical diagnosis of fibromyalgia [*Level 5 [1, 2], Grade D*].**

1.3 What investigations should be done in a patient presenting with widespread pain?

No laboratory investigation confirms a clinical diagnosis of FM and unnecessary investigations which may be detrimental to patient well-being should be avoided. FM is not a diagnosis of exclusion [67]. Simple laboratory testing should be limited to a complete blood count (CBC), erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), thyroid stimulating hormone (TSH), and creatine kinase to rule out conditions that can present similarly to FM. These may include endocrine disease (hypothyroidism), rheumatic conditions (early inflammatory arthritis or polymyalgia rheumatica) or neurological disease (myopathy, or multiple sclerosis), depending upon the clinical

evaluation. Appropriate additional testing, which might include referral for sleep evaluation, or formal psychological evaluation may be required in selected patients.

Reduced levels of vitamin D or vitamin D supplementation have no effect on pain in FM [68-70]. A positive antinuclear antibody (ANA) in low titre, present in 8-11% of FM patients, similar to healthy controls, does not predict future connective tissue disease [71-73]. As no consistent abnormality has been identified in immune function, any screening should only be driven by clinical findings [74-76].

Recommendations:

4. **Fibromyalgia should be diagnosed as a clinical construct, without any confirmatory laboratory test, and with testing limited to simple blood testing including a full blood count, erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), creatine kinase, and thyroid stimulating hormone (TSH). Any additional laboratory or radiographic testing should depend on the clinical evaluation in an individual patient that may suggest some other medical condition [*Level 5 [75, 76], Grade D*].**

1.4 How should the diagnosis of fibromyalgia be confirmed?

The responsibility for the diagnosis and management of FM should be shifted away from the specialist and concentrated in the primary care setting. Specialist confirmation or fulfilling diagnostic criteria is not required [1, 77-79]. Most physicians rely on a combination of symptoms and normal blood testing to diagnose FM with less than 10% using criteria [80]. Questionnaires used in the research setting are also not clinically useful in daily practice [81].

Early diagnosis will avoid lengthy, costly and unnecessary investigations, a cause for patient uncertainty that will prolong healthcare behaviours and foster medicalization [6, 82, 83]. An early diagnosis will allow attention to be focused towards symptom management, attainment of optimal health and maintenance or improvement of function.

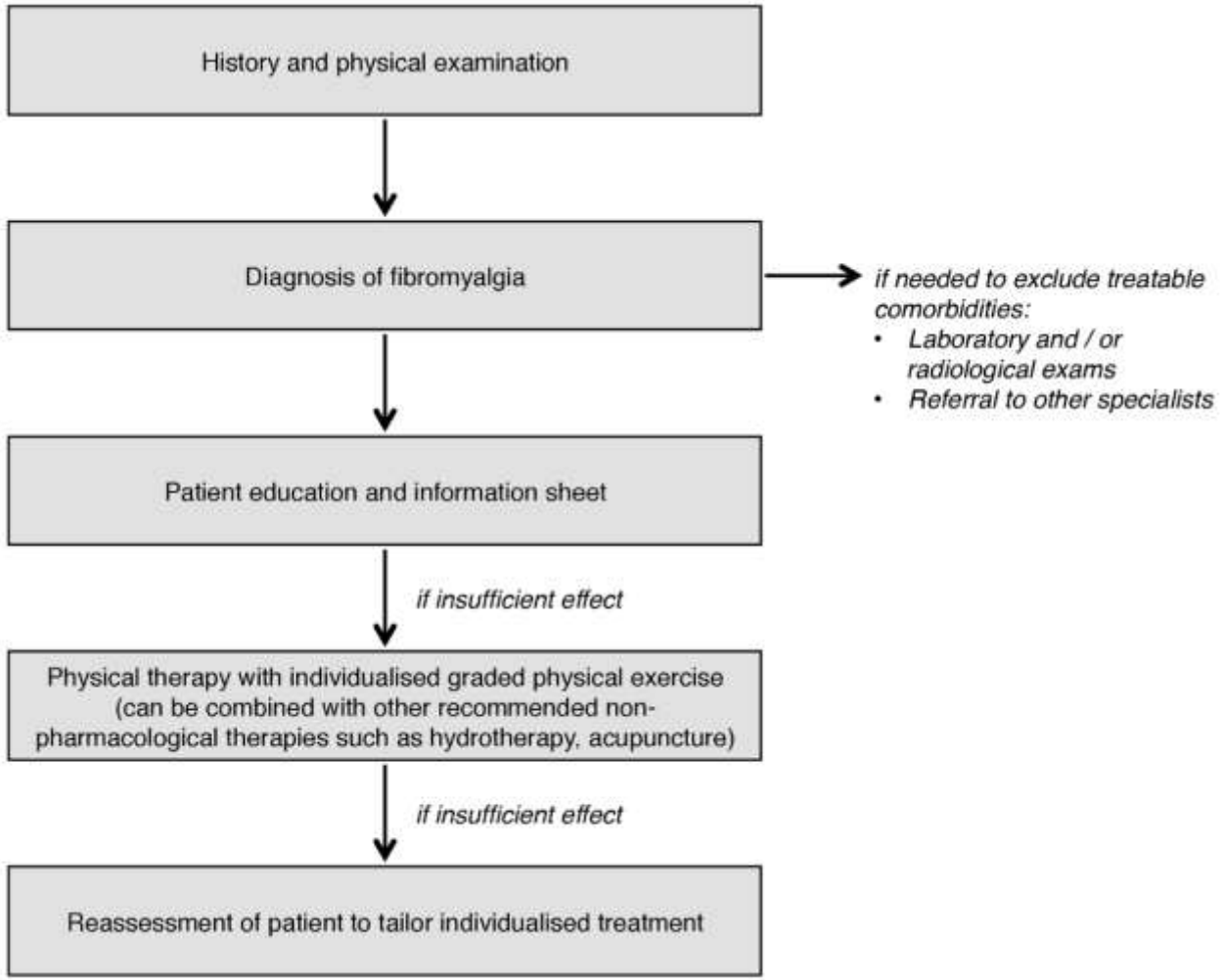
New symptoms should be evaluated on merit. Seldom does FM herald some other disease with only 2 of 91 patients developing some other condition over a 4 year period [84].

Recommendations:

5. **The primary care physician should establish a diagnosis of fibromyalgia as early as possible, without need for confirmation by a specialist, and communicate this diagnosis to the patient. Repeated investigations after diagnosis should be avoided unless driven by the onset of new symptoms, or signs on physical examination [*Level 5[6, 77, 82, 83], Grade D*].**

NUMBER OF FIBROMYALGIA SYMPTOMS EXPERIENCED								
Base = All Patients	UK	France	Germany	Italy	Spain	Netherlands	Mexico	S. Korea
Mean number of symptoms	6	7	7	7	8	6	11	8

european Network of Fibromyalgia Associations e Pfizer Inc, 2008)(



EULAR revised recommendations for the management of fibromyalgia
G J Macfarlane, et al, 2016.

Grazie

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