

Understanding and management of fibromyalgia



***Dr Fahim Khan**
write about the symptoms
and treatment of fibromyalgia.

FIBROMYALGIA (FM): is a painful, noninflammatory condition characterised by a history of widespread pain and diffuse tenderness on examination. Although FM, is defined on the basis of pain and tenderness, most persons with FM, also display a number of non-defining symptoms, including fatigue, sleep disturbances, headaches, and memory difficulties.

In 1990, FM, was redefined by a subcommittee of the American College of Rheumatology. The new definition requires a history of chronic widespread pain (lasting longer than 3 months in all four quadrants of the body plus the axial skeleton) and the finding of tenderness in 11 or more of 18 points on examination.

In many cases, pain is more limited in distribution, or fewer than 11 tender points are noted. The usefulness of “tender points” is presently being debated because it is now clear that the primary problem in FM, is a generalised disturbance in pain processing.

The precise cause of FM, remains unclear. Numerous studies suggest a strong familial aggregation of FM, although none has established whether heridity or shared environmental influences are the cause.

It is also clear that a number of environmental “stressors” including physical trauma, infection, autoimmune disorders, endocrine conditions, and emotional stress, seem capable of “triggering” the development of FM. The hallmark of FM appears to be a central disturbance in pain processing that is largely unexplained by psychological factors.

The evidence for this comes from numerous studies employing various types of experimental paradigms for pain testing. Abnormalities of neurotransmitters (e.g. substance P) in the cerebrospinal fluid of FM patients, and of cerebral areas involved in pain processing, such as the thalamus (seen on single-photon emission tomography), provide further, objective evidence.

A number of abnormalities in both neuroendocrine and autonomic function have also been identified in subgroups of FM patients.

Epidemiologic characteristics: Approximately 2 per cent to 4 per cent of the population in industrialised countries (e.g. the United States, Canada, Israel, and Germany) suffers from FM, as defined by the American College of Rheumatology criteria. Fibromyalgia is more common in women than men.

Other studies have demonstrated that FM frequently coexists with other conditions.

Approximately 25 per cent of patients with rheumatoid arthritis, lupus, ankylosing spondylitis, osteoarthritis, hepatitis C, and a number of other conditions display concurrent FM.

Physical findings: The physical examination findings in FM are classically normal except for the presence of diffuse tenderness. Occasionally, patients will also display mild muscle weakness, perhaps because of pain or disuse.

Symptoms: This condition is characterised by wide variation in the location and intensity of pain. Patients frequently report a worsening of pain in response to activity, weather changes, menstrual status, and stressors.

Subjective weakness, morning stiffness, swelling (especially of the hands and feet), and nondermatomal dysesthesias or paresthesias frequently accompany the pain. Fatigue and difficulties with short term-memory and concentration are also often present.

Diagnostic testing: FM is a diagnosis of exclusion because there are no predictably abnormal findings on laboratory or imaging studies in this entity. Initial testing in a patient suspected of having FM should

include routine haematology and chemistry panels, thyroid function tests and a determination of sedimentation rate or C-reactive protein.

Unless specific signs and symptoms suggest the presence of illness such as rheumatoid arthritis (e.g. synovitis on examination) or systemic lupus, tests for antinuclear antibodies and rheumatoid factor have a very low predictive value and should be avoided.

Treatment: Perhaps the most important role of the physician is to educate the patients that FM is a chronic condition wherein pain occurs even though there is no damage to the body, and that no pill or “magic herb” is available to “cure” their illness.

Three types of treatment have been demonstrated in randomised controlled trials to be of benefit within this spectrum of illness; symptom-based pharmacotherapy, aerobic exercise, and cognitive behavioral therapy.

A. Pharmacotherapy

The class of drugs with established efficacy in FM is the tricyclic compounds; cyclobenzaprine and amitriptyline are the best studied. These medications are tolerated best if they are taken several hours before bedtime (to help pre-

vent the “hung-over” feeling that patients often report).

They must be started at low dose (e.g. half of a 10-mg tablet) and slowly escalated by 5 to 10 mgs every 1 to 2 weeks until efficacy is established or a dose of 50 mg, daily is reached.

Because FM is not an inflammatory condition, “anti-inflammatory” doses of non steroidal anti-inflammatory drugs (NSAIDs) are neither necessary nor of much benefit.

In addition to tricyclics, analgesics (e.g. low doses of NSAIDs, acetaminophen, or tramadol) may be helpful. In some instances, other classes of antidepressants, such as those acting on the adrenergic or dopaminergic systems (venlafaxine, bupropion) or on serotonin receptors may be effective.

B. Aerobic exercise therapy

This can be extremely beneficial in FM and related conditions. Patients should be instructed to begin with 5 to 10 minutes of low-impact exercise (e.g. water exercise, stationary bike, treadmill, walking) three to four times weekly and to increase this by 1 to 2 minutes a week, beginning at high levels of exercise or escalating more rapidly is poorly tolerated and frequently will make the patient feel worse.

C. Cognitive behavioural therapy

This is an education-based programme that has been successful used to treat FM. These programmes focus on teaching techniques that reduce symptoms (e.g. biofeedback, relaxation exercises).

Maladaptive illness behaviors that the patient (usually unknowingly) displays and that make the illness worse are identified and explained.

Prognosis: Although FM is typically a chronic illness lasting for several years, life expectancy is not affected. Most afflicted persons can expect to lead a relatively normal life with appropriate management.

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References available on request.