Fibromyalgia:
A Light at the End of the Tunnel

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After more than two decades of debate, fibromyalgia (FM) can now be definitively categorized as a valid condition that may affect up to 2% of the population.[1,2] FM occurs both in Western and third world countries and is characterized by pain felt throughout the body. Although the syndrome complex of FM is centered on a complaint of pain, symptoms such as sleep disturbance, fatigue, mood disorder and other somatic symptoms occur to variable degree in individual patients.[3] FM, however, remains a clinical challenge because symptoms are subjective and there is still no objective abnormality on physical examination or laboratory testing to validate the diagnosis.

What causes FM?

Although no definitive cause of FM has been identified to date, there is increasing evidence that the pathogenesis is focused in the nervous system. Pain processing mechanisms are dysregulated at multiple levels. There is evidence for hypersensitivity of peripheral input, central nervous system structural changes and reduced descending inhibition from the brain projecting to the spinal cord.[4] Objective abnormalities have been identified at each of these levels in the research setting, but to date there is no single clinical test that can confirm this diagnosis in the clinical setting.

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The clinical presentation

Most patients presenting with FM are women in their mid to late 40s and have frequently experienced pain for a number of years. Some patients report onset of symptoms following a triggering event such as a viral type illness, or a physical or psychological traumatic event. The pain, a deep aching feeling similar to a flu-like illness, may fluctuate from day-to-day, sometimes without any identifiable reason, but at other times be increased with stress and anxiety, poor sleep or changes in the weather. Although pain is the cardinal symptom of this condition,

most patients also experience fatigue, sleep-disturbance, other somatic symptoms such as migraine headaches, irritable bowel symptoms and others and also mood disorders including anxiety and depression. There is often important functional impairment and difficulty fulfilling normal daily tasks.

Patients appear clinically well, without abnormality on physical examination apart from sensitivity to firm pressure that is felt throughout the body. This soft tissue tenderness represents an overall reduction in pain threshold. The tender point count, a subjective measurement, which was part of the criteria established almost 20 years ago, is currently being re-evaluated and may well be discarded in the future.[5]

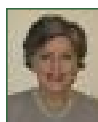
Not a diagnosis of exclusion

In today's world, FM should be positively diagnosed and must no longer be a diagnosis of exclusion at the end of a long line of excessive and unnecessary investigations. Once a diagnosis of FM has been achieved, healthcare utilization and cost of illness reduce substantially.[6] A good clinical history and physical examination go a long way to excluding conditions that might masquerade as FM. It is recommended that only minimal testing including a complete blood count, thyroid function tests and creatinine kinase be done in the first instance and that any other investigations be driven by findings on clinical history and examination.

Illnesses that may present with diffuse pain include hypothyroidism, statin-induced myopathy and polymyalgia rheumatica. Other conditions that may occasionally be confused with FM are multiple sclerosis or the early stages of a connective tissue disease. Always keep in mind that clinical depression may present with body pain likely on the basis of inactivity and muscle deconditioning. A key point is that patients should not be excessively and repeatedly investigated as this leads to uncertainty, sickness behaviour and over medicalization. The primary care physician should be comfortable in making a diagnosis of chronic widespread pain on the basis of patient report and should not require specialist confirmation of this diagnosis, unless specifically questioning the presence of some underlying condition.

Treatment approaches should be multimodal

The primary care physician who is able to approach the patient from the global perspective, taking all comorbidities as well as psychosocial factors into account, is likely to offer patients with FM the most ideal care.[7] Although there is no gold standard of treatment for FM, a multimodal approach that combines pharmacologic and non-pharmacologic treatments is likely to have the best outcome.[8-12] Attention simply to pain with neglect of other symptoms will be less successful. Weighing the impact of individual symptoms will allow the physician to select the best choice of treatment for an individual patient.



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Patients should be encouraged to be active participants in care; they should articulate goals for outcome and should not passively rely on the use of medications only. Although most complimentary treatments have not been subjected to rigorous study, there is limited evidence for efficacy. Psychologic interventions such as cognitive behavioural training have been shown to be effective in the study setting but may not be available to the majority of sufferers.

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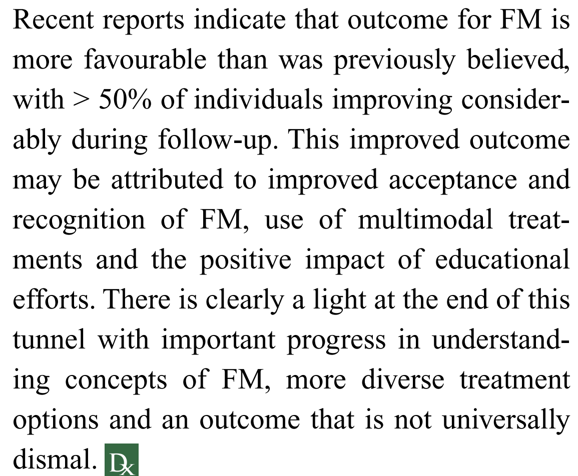
Most patients require some form of pain modulation, which is often used intermittently. Sleep disturbance may be addressed with sleep hygiene practices or the use of a tricyclic antidepressant or one of the antiepileptic agents. To date there is no recommended pharmacologic treatment for fatigue although cautious use of one of the activating agents might be considered. Mood disorder is appreciated as an important component of this syndrome. The use of newer antidepressants that have effect on serotonin as well as norepinephrine have a possibility of dual action on both mood as well as pain and hold considerable promise. All patients should be advised to participate in regular, enjoyable and comfortable physical activity.



Summary

Recent reports indicate that outcome for FM is more favourable than was previously believed, with > 50% of individuals improving considerably during follow-up. This improved outcome may be attributed to improved acceptance and recognition of FM, use of multimodal treatments and the positive impact of educational efforts. There is clearly a light at the end of this tunnel with important progress in understanding concepts of FM, more diverse treatment options and an outcome that is not universally dismal. Dx

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