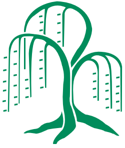

An approach to managing fibromyalgia

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There are now real treatment options available to help patients with fibromyalgia. Dr Guymer and Professor Littlejohn discuss their latest management strategies.

Fibromyalgia is the most common chronic musculoskeletal pain syndrome, affecting 3 to 5% of the population.[1] It presents a spectrum of severity, with over 80% of patients having 'simple' fibromyalgia, which usually has a good response to management and a high potential for reversibility.

Some therapeutic strategies for fibromyalgia are clearly helpful; in addition, promising new treatments exist. A multidisciplinary and flexible approach is best because the symptoms are diverse and fluctuating. Management must incorporate ongoing patient education about the essential nature of the disorder being a potentially reversible change in function of the pain-related part of the nervous system. Patients should be encouraged to access other reliable sources of information, such as the Arthritis Foundation, and relevant support groups. It is important to emphasise that patients should have an active role in management in order to better control the impact of symptoms on their lives.

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The simple type of fibromyalgia is discussed in this article, but basic management principles are similar in all types of fibromyalgia. The different problems will be addressed separately, but multiple symptoms often occur, and patients usually require global and overlapping management approaches. The diagnosis and assessment of fibromyalgia will not be discussed.

Pain

Musculoskeletal pain is the characteristic feature of fibromyalgia and a major problem for most sufferers.

Graded low impact aerobic exercise has been shown to be beneficial for reducing the pain of fibromyalgia.[2-6] Patients need to choose the type of exercise that suits them best. The intensity should be built up slowly over a period of months: the starting regimen may involve as little as a few minutes of aerobic exercise (e.g. brisk walking) between warm-up and cool-down periods several times a week and increase to a longer routine performed daily. Note that an unfit person with fibromyalgia may take up to three times longer to achieve fitness than a person without fibromyalgia. Exercising in a warm pool can be gentle and minimise impact on potential pain-generating components of the muscle–tendon units, often providing patients with an easy way to initiate the conditioning process.[7] High intensity exercise therapy is often poorly tolerated and may aggravate symptoms.

Psychological therapies have been shown to improve features of many chronic pain conditions, including fibromyalgia.[8] Simple advice about stress management is beneficial to many patients but may not be sufficient to cause change. Cognitive behavioural therapy and similar formal approaches include relaxation training, setting goals, and developing coping strategies and a personal sense of control – these approaches can translate into significant improvements in pain, functional impairment and other features of fibromyalgia.[9-12]

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A graded regimen of low impact aerobic exercise, such as brisk walking, can be beneficial in reducing symptoms of fibromyalgia.

Pharmacological options for pain management are only partially helpful, at best. Tricyclic antidepressants, particularly amitriptyline (Endep, Tryptanol), have a definite but moderate effect;[13,14] these agents should be administered before bedtime, starting with a low dose (say, 10 to 20 mg of amitriptyline) and slowly increasing if required. It is important to remember that analgesic and sleep-related benefits may not occur for two to three weeks and that up to two-thirds of patients may not respond.[14]

The evidence supporting the role of selective serotonin reuptake inhibitors (SSRIs) in fibromyalgia is less strong. These agents may have some analgesic effect in addition to their influence on depressive symptoms, particularly when combined with a tricyclic antidepressant, but the evidence is conflicting.[15,16] In a recent randomised controlled study, fluoxetine (at an average dose of 45 mg per day) showed benefit for pain but not tenderness.[17] Venlafaxine (Efexor), a

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serotonin and noradrenaline reuptake inhibitor (SNRI), may hold minor benefit for some patients.[18]

Other agents that have been effective in providing pain relief in fibromyalgia include 5-hydroxytryptamine-3 receptor antagonists, for example, tropisetron (Navoban), but side effects are reported in about 15% of patients and they are currently not licensed for this use in Australia.[19,20] Pregabalin, which is a membrane stabiliser that has not yet been released, has recently shown promising results.[21]

Simple analgesics such as paracetamol have a role in easing minor pain but usually do not offer significant long term control. Nonsteroidal anti-inflammatory drugs, benzodiazepines and opioids all lack evidence for efficacy. Tramadol (Tramal) may be helpful, but further studies are required and its use may be limited by side effects.[22]

Fatigue

Chronic fatigue affects approximately 80% of fibromyalgia sufferers and contributes greatly to subsequent impairment and disability.[23] Many patients also meet criteria for chronic fatigue syndrome, and useful treatment options could be gained from research in this area.[24-27]

Efforts to address sleep disturbance often result in reduced fatigue. Graded exercise programs have been shown to specifically improve fatigue as well as pain in fibromyalgia patients.[3,5] Cognitive behavioural therapy may be useful in the fatigue of fibromyalgia, with definite benefits found in patients with chronic fatigue syndrome.[28,29]

Fatigue in patients with fibromyalgia is reduced by tricyclic antidepressants, but this symptom is generally less responsive than pain or disturbed sleep.[30,31] Moclobemide, a monoamine oxidase A inhibitor, can improve the symptoms of chronic fatigue syndrome, but there is little evidence of benefit in fibromyalgia.[32,33] SSRIs are not helpful in this situation. In preliminary studies, tropisetron has also been found to relieve fatigue in both fibromyalgia and chronic fatigue syndrome.[19,20,34]

Central nervous system stimulants such as methylphenidate (Attenta, Ritalin 10) and modafinil (Modavigil) are effective in conditions such as narcolepsy, and in advanced cancer and sleep deprivation situations. However, use of these agents in fibromyalgia needs to be evaluated before use can be recommended.[35-38]

Sleep disturbance

Sleep disturbance is a key problem for many people with fibromyalgia. Unrefreshing sleep results in increased fatigue and distress levels.

Proper sleep hygiene is important. This includes relaxing before bedtime, setting and adhering to regular bedtimes and avoiding exercise, caffeine or alcohol before retiring for the night. Administering tricyclic antidepressants several hours before bedtime often improves sleep quality and is of greater benefit than long term use of sedatives.[14,30,31,39] Patients with any evidence of obstructive sleep apnoea may require referral to a sleep laboratory for formal testing.

Distress

Levels of anxiety and emotional distress are often high in patients with fibromyalgia, further compounding problems with daily functioning.

The initial step of recognising fibromyalgia and providing information about its potential reversibility and the treatment options often helps to reduce stress by validating patient concerns and showing that there is hope for symptomatic improvement. Educating the patient about the importance of self-management allows a sense of control that eases tension and the sense of helplessness. Further aid can be gained from cognitive behaviour therapy, which provides skills for dealing with the effects of symptoms and stress on everyday life; meditation and other relaxation techniques are also helpful. Anxiolytic medications, however, should be used with caution.

Depression

Depression is often coexistent with fibromyalgia, and may be a result of chronic pain and disability. Appropriate antidepressant medication is required, and drugs with proven benefits in other aspects of fibromyalgia are the obvious initial choices.

Related problems

There are many other conditions associated with fibromyalgia, such as irritable bowel syndrome, migraine headaches, vulvodynia, multiple chemical sensitivity, postural hypotension and temporomandibular joint dysfunction. All of these have specific management approaches, irrespective of concomitant fibromyalgia.

Final comments

There are now real treatment options for patients with fibromyalgia, and research is providing hope of even more effective and useful therapies. It is important to continue to manage fibromyalgia in a multidisciplinary fashion and to remember that some symptoms benefit from a 'layered' approach – for example, it may be necessary to start medication for pain relief before an effective graded exercise program can be initiated. Use of other therapies such as massage or acupuncture may provide relief in some individuals.

Primary care practitioners are well placed to develop an understanding of each patient's family, circumstances and stressors,[40] and are therefore in the best position to guide long term management, interacting with specialists (e.g. rheumatologists and neurologists) and other therapists (e.g. physiotherapists and psychologists) as required. The patient's own involvement augments the effectiveness of treatment. MT

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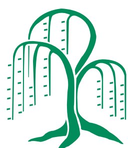

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