Fibromyalgia: Helping Your Patient While Maintaining Your Sanity

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Fibromyalgia has been known by many different names, including fibrositis, muscular rheumatism, and neurasthenia. It is a syndrome characterized by chronic widespread musculoskeletal pain and tenderness on specific areas of the body for at least 3 months.1–3 Although the diagnosis and treatment of fibromyalgia may be daunting and somewhat confusing, in the last decade, pain research has led to a better understanding of fibromyalgia as a chronic pain state with disordered sensory processing and a diversity of clinical presentations.1

The American College of Rheumatology (ACR) published criteria for fibromyalgia in 1990, recognizing fibromyalgia as a chronic, painful, noninflammatory syndrome involving muscles rather than joints.4–6 A range of symptoms could now be diagnosed as fibromyalgia and be distinguished from similar disorders.

Fibromyalgia is defined by the ACR as chronic (>3 months), widespread pain (axial plus upper and lower segment plus left- and right-sided pain), and tenderness in at least 11 of 18 anatomic points.7

INCIDENCE AND EPIDEMIOLOGY

Nearly 2% of the United States population is affected by fibromyalgia.8,9 It is approximately 6 times more common in women (3.4%) than in men (0.5%).10–12 It can occur in any age group, but women 20 to 50 years old are more likely to be affected.10 Prevalence seems to increase with age, from 2% at age 20 years to 8% at age 70 years.11,13

The cost of fibromyalgia is high. In multiple studies, work loss in patients with fibromyalgia showed 20% to 50% of subjects with no or few days lost, 36% with 2 or more
PATHOPHYSIOLOGY

Any discussion of pathophysiology must begin with questions of the existence of fibromyalgia as a distinct clinical entity. Evidence against the existence of fibromyalgia includes a lack of a clear cause and treatment, the absence of specific abnormalities, and the difficulties in assessment of the physical complaints of disability made by patients with fibromyalgia.13 Others attribute the pain, fatigue, and cognitive dysfunction to depression, an inappropriate response to stress, or a somatoform disorder.13 Investigators who supported this belief concluded that it would then be a learned pattern of maladaptive behavior and not a distinctive disorder.3

There are clear data supporting fibromyalgia as a distinct clinical syndrome. There is ample evidence from physiologic and genetic investigations that changes have occurred in patients with fibromyalgia, but causation has not been established. There is a connection between neurobiological, psychosocial, and behavioral factors, and patients with fibromyalgia are no different.5 There are characteristic changes in sleep patterns and alterations in neuroendocrine transmitters suggesting that dysregulation of the autonomic and neuroendocrine system is the basis of the syndrome. The evidence for a physiologic basis for the illness is presented in Table 1.12,14 In addition, there is some overlap with certain metabolic disorders. Fibromyalgia is more prevalent in women with thyroid disease and in men and women infected with human immunodeficiency virus.13 Women with hyperprolactinemia develop fibromyalgia at a rate 15 times that of their nonaffected peers.13 Reports of antecedent infections with hepatitis C, Epstein-Barr virus, parvovirus, and Lyme disease exist but causality has not been established.5,15

PRESENTING SYMPTOMS

Pain is the major symptom of fibromyalgia and has been described as burning, stiffness, contracture, and tension.17 Stiffness tends to be worse in the morning and decreases throughout the day.10 The pain is chronic and persistent in nature with varying intensities and manifests itself throughout the body. It may originate from 1 localized point, such as the neck, spine, or shoulders, and move to other points such as the back, chest, hips, arms, and legs with time.2,17 Tender points are generally positioned over muscles or sites where muscles insert. Two important features are a subjective feeling of a swollen joint or limb without objective swelling, and paresthesias without objective neurologic findings.10

Fatigue is present in more than 90% of cases of fibromyalgia and is occasionally the chief complaint.11,13 Patients complain of feeling exhausted, even on waking. If fatigue is not present, the diagnosis should be held in question.

Headaches are reported by almost 75% of patients with fibromyalgia, the most common type of headache being migraine.18 Depression is found in approximately half of patients afflicted with fibromyalgia, as is spastic colon and chronic fatigue in 70% of patients.17 Also suggestive of fibromyalgia are a history of environmental sensitivities and restless leg syndrome.

Fibromyalgia symptoms vary in relation with the time of day, the level of activity, weather conditions (specifically cold and humid weather), and levels of sleep and stress.10,17 Symptoms seem to be improved by warm and dry weather, moderate physical activity, adequate sleep, and relaxation.10
RISK FACTORS

Certain life stressors increase the risk of fibromyalgia. These include being divorced, failing to complete high school, and having a lower income.\textsuperscript{10,13,17} In addition, other factors associated with fibromyalgia include the presence of somatization disorder, anxiety disorder, increased global severity of psychiatric illness, history of abuse, history of past or current depression, and family history of depression.\textsuperscript{13,19}

DIAGNOSIS

A comprehensive history and physical are necessary to make an accurate diagnosis of fibromyalgia,\textsuperscript{5} with particular attention to sleep/fatigue, pain, mood, and exercise or

<table>
<thead>
<tr>
<th>System</th>
<th>Evidence Supporting Distinct Pathologic Syndrome</th>
<th>Evidence Against Distinct Pathologic Syndrome</th>
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<tbody>
<tr>
<td>Pain perception</td>
<td>• Lower threshold for nociceptive processing&lt;br&gt;• Persistent excitability of dorsal horn neurons&lt;br&gt;• Altered levels of proprioceptive and antinociceptive compounds&lt;br&gt;• Altered endogenous analgesia system, formerly innocuous stimuli now noxious</td>
<td>• No differences between patients with fibromyalgia and sedentary controls in terms of ATP levels, lactate levels, muscle tension, hypoxia, or intracellular pH on biopsy</td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td>• Increased substance P&lt;br&gt;• Decreased serotonin&lt;br&gt;• Increased cortisol with flattened diurnal pattern&lt;br&gt;• Disrupted dopamine release&lt;br&gt;• Decreased growth hormone production</td>
<td>• Some patients show no altered cortisol response</td>
</tr>
<tr>
<td>Neuroendocrine</td>
<td>• Almost all have $\alpha-\delta$ sleep anomaly with disrupted stage 4 sleep&lt;br&gt;• Longer to initiate sleep&lt;br&gt;• Repeated awakenings</td>
<td></td>
</tr>
<tr>
<td>Sleep disturbance</td>
<td>• Increased incidence in first-degree relatives</td>
<td></td>
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<tr>
<td>Genetics</td>
<td>• Half of all cases have distinct physical or emotional trigger&lt;br&gt;• Gulf War veterans have increased incidence</td>
<td></td>
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<tr>
<td>Environmental triggers</td>
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work intolerance. The fibromyalgia profile includes widespread pain, hypersensitivity at palpation in specific anatomic points, accompanied by the multisystem features of fibromyalgia, especially constant fatigue, sleep problems, and paresthesias. Pain in all 4 body quadrants for at least 3 months should lead a provider to investigate for the presence of tender points, assess for pain, and entertain the diagnosis of fibromyalgia.

The diagnosis is made if a patient has a 3-month history of widespread pain with the presence of 11 tender points among 18 specific anatomic sites. Axial pain should be a constant attribute, and that pain must be present in both the upper and lower quadrants and the right and left sides of the body, and tender points have specific anatomic sites bilaterally (Fig. 1). The clinician must methodically palpate the

![Fig. 1. Anatomic locations of tender points in the diagnosis of fibromyalgia. Definitive diagnosis requires 3 months of pain and the presence of tenderness in 11 of 18 sites. (From Freundlich B, Leventhal L. The Fibromyalgia syndrome. In: Schumacher HR, Klippel JH, Koopman WJ, editors. Primer on the Rheumatic diseases. 10th edition. Atlanta (GA): Arthritis Foundation; 1993; with permission.)](image-url)
18 sites with steady pressure using the thumb of the dominant hand.\textsuperscript{5,10} The pressure should be enough to turn the thumbnail white.\textsuperscript{5} Tender points lack the classic signs of inflammation such as erythema, edema, and warmth in joints and soft tissue.\textsuperscript{5,12} It is common for the most significant areas of pain to shift over time and the number of tender points to change over time.\textsuperscript{12} These criteria provide a sensitivity and specificity of nearly 85\% in differentiating fibromyalgia from other forms of chronic musculoskeletal pain.\textsuperscript{20} Failure to meet these criteria does not absolutely exclude the possibility of fibromyalgia.

There are no confirmatory laboratory tests. Limited laboratory testing should be used to broaden the differential diagnosis. Tests should include a complete blood count, erythrocyte sedimentation rate, tests of thyroid function, hepatitis C antibodies, and creatinine phosphokinase.\textsuperscript{5,21} Further testing should be based on clinical indications.\textsuperscript{10} As with other rheumatologic disorders, symptoms exist on a continuum and the diagnosis is best established with observation over time.\textsuperscript{12} The time between onset of fibromyalgia until diagnosis and treatment typically ranges from months to years.

**DIFFERENTIAL DIAGNOSIS**

Fibromyalgia symptoms may mimic many other diseases such as rheumatoid arthritis, hypothyroidism, sleep apnea, depression, and vitamin D deficiency.\textsuperscript{8} Additional possibilities include mononucleosis, diabetes mellitus, multiple sclerosis, Sjogren disease, and Lyme disease.\textsuperscript{5}

Diagnostic criteria of chronic fatigue syndrome (CFS) are similar to those for fibromyalgia, and most patients with CFS meet tender point criteria for fibromyalgia. Similarly, about 70\% of patients with fibromyalgia meet the criteria for CFS.\textsuperscript{12} However, patients with CFS typically have continuous subclinical inflammatory process and associated low-grade fever, lymph gland enlargement, and acute onset of illness.\textsuperscript{12}

Confusion between fibromyalgia and polymyalgica rheumatica (PMR) often occurs with elderly patients.\textsuperscript{8} PMR is characterized by stiffness in the sacrohumeral and pelvic girdle.\textsuperscript{17} The erythrocyte sedimentation rate is increased in 80\% to 90\% of patients with PMR, and symptoms disappear with the use of corticosteroids, neither of which is seen in fibromyalgia.\textsuperscript{12,17} The diagnosis for PMR, CFS, myofascial syndrome, and fibromyalgia often overlap and care should be taken to assign the correct diagnosis. These similarities and differences are summarized in Table 2.

Other diagnoses include drug-induced myopathies seen with colchicine, statins, corticosteroids, or antimalarials. In addition, connective tissue, autoimmune, and rheumatologic disorders such as spondyloarthropathy, dermatomyositis, and systemic lupus erythematosus can present in this manner but can usually be distinguished from fibromyalgia based on clinical criteria.\textsuperscript{5,12} The characteristic synovitis and systemic features of connective tissue disorders are usually not features of fibromyalgia.\textsuperscript{12} In the absence of findings characteristic of these illnesses, routine serologic testing should not be performed.

**TREATMENT**

Current treatment goals for patients with fibromyalgia are focused on symptom relief. Generally, this includes controlling pain, increasing restorative sleep, and improving physical function, well-being, and adjustment.\textsuperscript{5}
<table>
<thead>
<tr>
<th>Disorder</th>
<th>Diagnostic Criteria</th>
<th>Inflammatory Signs</th>
<th>Sedimentation Rate</th>
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<tbody>
<tr>
<td>Fibromyalgia</td>
<td>Local tenderness, occurring in multiple specific locations that do not cause referred pain, but often cause a total body increase in pain sensitivity</td>
<td>Pain may get worse in response to activity, stress, weather changes</td>
<td>Normal ESR</td>
</tr>
</tbody>
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| Polymyalgia rheumatica           | ≥3 of the following, or ≥1 of the following plus positive results on temporal artery biopsy:  
  • Bilateral shoulder pain and/or stiffness  
  • <2 weeks from onset of symptoms to maximal symptoms  
  • ESR>40 mm/h  
  • Morning stiffness >1 h  
  • Patient>65 y  
  • Depression and/or weight loss  
  • Bilateral upper arm tenderness | Pain and stiffness in shoulder and pelvic girdle greatest in morning and lasting 30–60 min after patients arises | Increased ESR               |
| Chronic fatigue syndrome         | ≥4 of following symptoms for ≥6 mo:  
  • Impaired memory or concentration  
  • Postexertional malaise  
  • Unrefreshing sleep  
  • Muscle pain  
  • Multijoint pain without swelling or redness  
  • Headaches of new type or severity  
  • Frequent or recurring sore throat  
  • Tender cervical or axillary nodes | Myalgias, arthralgias, sore throat, lymphadenopathy, headaches                         | Normal ESR                 |
| Myofascial pain syndrome          | Local tenderness, taut band trigger points, singular or multiple, may occur in any skeletal muscle, may cause a specific referred pain pattern | Regional, persistent pain (especially of postural muscles) that usually results in decreased range of motion of muscle in question | Normal ESR                 |

Abbreviation: ESR, erythrocyte sedimentation rate.

Pharmacologic Antidepressants

There is good evidence supporting the use of antidepressants in the treatment of patients with fibromyalgia to reduce symptoms.10,11 In 2004, the American Pain Society issued fibromyalgia treatment recommendations that include tricyclic antidepressants (TCAs), selective serotonin reuptake inhibitors (SSRIs), and tramadol.3,22 Updated guidelines suggest the use of serotonin-norepinephrine reuptake inhibitors (SNRIs), such as venlafaxine or duloxetine, and also recommend gabapentin or pregabalin (Lyrica).3 Similarly, the United States Food and Drug Administration (FDA) has approved tricyclics, SNRIs, and pregabalin.12 Most of the evidence for efficacy has been developed using amitriptyline and the muscle relaxant cyclobenzaprine (structurally similar to the TCAs), but there is no evidence of superiority of one class of antidepressants over another.15,20

TCAs

TCAs act by increasing serotonin and norepinephrine.15 The efficacy of the tricyclic, amitriptyline, in fibromyalgia has been well documented.4,20,22 Low dosages of 25 to 50 mg at bedtime, provide an analgesic effect and improve sleep and mood disorders.10 Approximately one-third of patients with fibromyalgia show moderate short-term improvements in pain, disturbed sleep, patient and physician global assessments, physical status, psychological status, and capacity for activities of daily living with amitriptyline.12

Anticholinergic and sedative side effects of TCAs are the limiting factor in treating some patients. Tolerance can be improved by starting low (5–10 mg) and titrating up slowly (5-mg increase every 2 weeks), with the final dose set by the patient based on efficacy and side effects.12,15 Desipramine (Norpramin) is less studied than amitriptyline, but has fewer anticholinergic side effects and may be a reasonable alternative.12 A tricyclic should be used at least 6 weeks before a trial is considered unsuccessful.5

Cyclobenzaprine (Flexeril)

Although usually marketed as a muscle relaxant, cyclobenzaprine is structurally a tricyclic compound.20 The benefits of treatment typically substantially outweigh the potential risks and clinicians should discuss the use of this medication with eligible patients. Evidence suggests using cyclobenzaprine at 10 to 30 mg at bedtime improves sleep quality and pain symptoms for patients with fibromyalgia.2,4,10,20

SSRIs

This class of antidepressants can help relieve pain and depression for patients with fibromyalgia and may be better tolerated than tricyclics.2,23 One study found that increasing doses of paroxetine (Paxil) significantly improved the overall symptoms of fibromyalgia.2,23 The trial used the Fibromyalgia Impact Questionnaire (FIQ) to measure symptoms. Items on the FIQ measure work status, depression, anxiety, morning tiredness, pain, stiffness, fatigue, and well-being.4,10,20,24

Studies have found greater improvement when TCAs and SSRIs are used together. Fluoxetine (Prozac) 20 mg/d and amitriptyline 25 mg/d were more effective when administered together than when administered separately.23 As with other patients, there may be an increased suicidal tendency associated with SSRIs, and these patients should be monitored accordingly.12

SNRIs

Although similar to tricyclics, the SNRIs exhibit fewer side effects. The doses needed for fibromyalgia are generally higher than those required to treat depression.12
Venlafaxine (Effexor) increases serotonin at low doses and norepinephrine at higher doses (typically at doses of more than 100 mg). Another SNRI, milnacipran (Savella), lacks anticholinergic, antihistaminic and α-adrenergic receptor blockade, improving the side effect profile. Milnacipran exhibits a threefold greater efficacy in inhibiting norepinephrine reuptake compared with serotonin reuptake (in vitro), seems to be safe and well tolerated, and has shown a modest improvement in symptoms of fibromyalgia (pain, global impressions of change, and physical functioning).

Duloxetine (Cymbalta), a potent SNRI with virtually no cholinergic, histaminic, or adrenergic activity, is approved by the FDA for the treatment of fibromyalgia, depression and diabetic neuropathy. Relief of pain and tenderness was demonstrated with a dose of 60 mg twice daily.

**Anticonvulsant drugs**

Antiseizure medications have shown efficacy in neuropathic pain syndromes and are often used as analgesics. Although their anticonvulsant activity occurs through slowing electrical signals in the brain, these drugs also subdue the transmission of pain signals. Pregabalin (Lyrica), 450 mg/d, shows benefit in diffuse pain, sleep disturbances, and fatigue associated with fibromyalgia, and has been shown to significantly reduced the average severity of fibromyalgia pain (up to 50%) compared with placebo. Improvements in sleep, fatigue, and health-related quality of life were also seen among those receiving 300 and 400 mg/d.

**Analgesics**

Tramadol has shown benefit in fibromyalgia pain. Effectiveness of tramadol may be to the result of its weak µ-agonist activity combined with serotonin-norepinephrine reuptake inhibition. Tramadol at 200 to 300 mg/d has a modest efficacy in treating fibromyalgia. Because there is no inflammatory process found in fibromyalgia, nonsteroidal antiinflammatory drugs (NSAIDs) alone have not been effective. Therapeutic doses of naproxen, ibuprofen, and prednisone (20 mg/d) were found to be no better than placebo in clinical trials. However, NSAIDs may have a synergistic effect when combined with medications such as antidepressants or anticonvulsants.

**Sedative hypnotics**

Benzodiazepines and sedatives have proven ineffective. Nonbenzodiazepine hypnotics, such as zopiclone and zolpidem, can improve sleep patterns and fatigue of patients with fibromyalgia, but there has been no significant improvement on pain modulation.

**Opioid analgesia**

Because of the augmented central pain processing, opioid medications, which are commonly used to treat peripheral pain, are not as effective in fibromyalgia. The use of opioids has been associated with worsening of certain types of chronic pain. Pharmacologic agents that downregulate central sensory processing are preferred for disease states such as fibromyalgia. Many patients were started on long-term narcotic therapy before pharmacologic agents that improved central pain syndrome were available. These patients need to have medications added to treat the central pain syndrome with the goal of reducing or eliminating the use of narcotic analgesia.

Even with the newer medication, there are patients in whom the use of long-term opioid therapy cannot be avoided. Although beyond the scope of this discussion, these medications should only be initiated in consultation with a specialist in the field.
The patient should be made aware that long-term use of moderate to high opioid doses will likely result in physical dependence. In addition, tolerance typically develops, necessitating increasing dosages over time. For these patients, a multidisciplinary team approach should be used.

**Other**

The efficacy of human growth hormone was studied in a small trial that showed significant improvement compared with placebo, but the benefit was lost when the therapy was stopped. The costs of such treatment were considered to be excessive and further investigation was not pursued.27 One small study demonstrated improvement in patients with a borderline high erythrocyte sedimentation rate (ESR) using low-dose naltrexone. There is a more extensive trial underway at this time.28

**Nonpharmacologic**

Guidelines from the American Pain Society recommend cognitive behavioral therapy (CBT) and moderate aerobic and muscle strengthening exercises in the treatment of fibromyalgia.22 Other nonpharmacologic strategies include mind-body cognitive therapy, and complementary and alternative therapies.

**Exercise**

Supervised aerobic exercise training has beneficial effects on increasing physical capacity and decreasing fibromyalgia symptoms.4,10 Reduction of pain was the primary benefit seen in patients who participated in an structured exercise program that included strength, aerobic conditioning, flexibility, and balance,10 which are dimensions that should be included in any exercise program. The exercise program should be low impact and of sufficient intensity to change aerobic capacity. In addition, improvement in mood and physical function was documented.29 In a 2009 Cochrane Review of a moderate-intensity aerobic training for 12 weeks, including cardiorespiratory endurance, muscle strengthening, and/or flexibility using the American College of Sports Medicine guidelines, found benefits in global outcome measures, physical function, and possibly pain and tender points.14,30 Strength training can also reduce pain, tender points, and depression in patients with fibromyalgia.10,14,30

Patients should start slow and exercise at their own pace because exacerbation of pain may reduce compliance.12 If exercisers experience increased symptoms, they should cut back until symptoms improve, although no serious side effects of exercise have been documented.14,30 A controlled exercise program may ameliorate the cycle of pain that perpetuates a lack of physical activity, related depression, and more pain.14,31 Better muscular blood flow, less susceptibility to muscular microtrauma, and an improvement in sleep as a result of regular training contribute to improved symptoms.14,31 The type and intensity of exercise should be patient specific according to abilities, preferences, and goals.2,14,32 For example, water exercise has been well tolerated and is especially helpful because these exercises are low impact and warm water may help reduce stiffness and pain.2,20 Although the benefit of exercise persisted even after cessation, ongoing exercise is recommended for sustained benefit.20,33 The type and intensity of exercise should be patient specific according to abilities, preferences, and goals.2,14,32,34 In Germany, continuous pool- and land-based exercises and support groups are reimbursed by health insurance companies.7

**CBT**

CBT teaches patients to understand the effects that negative thoughts, beliefs, and expectations have on their symptoms.10,35 Patients often have counterproductive
ways of thinking and acting that only make their symptoms worse. CBT should be considered as an adjunctive therapy in the management of patients with fibromyalgia, particularly those who present with an emotionally distressed and/or dysfunctional profile. The rationale for use of CBT in the management of patients with fibromyalgia is based, in part, on the physiologic links between chronic pain and depression. CBT can help teach patients how to manage anger, stress, and anxieties that may be contributing to, and may result from, fibromyalgia symptoms. Patients can learn how to “adapt daily activities to prevent flare-ups caused by doing too much or lethargy caused by doing too little.”

CBT has been shown in small trials to positively affect pain severity, life interference, sense of control, affective distress, depression, perceived physical impairment, fatigue, and anxiety. The benefit of CBT can be achieved in 10 to 20 sessions.

Patient education and self-efficacy
A diagnosis of fibromyalgia may lead to increasing disability and can facilitate a state of learned helplessness, or it can be a turning point, allowing the patient to focus on managing the syndrome. Evidence is limited, but patients who have been diagnosed have significant improvements in health satisfaction and symptoms, and use fewer health resources. The diagnosis of fibromyalgia should be coupled with patient education, which may be as effective as CBT. High self-efficacy (patient’s sense of personal control in the management of their symptoms) before beginning an exercise program predicts positive changes in disease severity, increased physical activity, and better pain outcomes. The goal of education should be to shift the patient’s perception from one of helplessness, frustration, and sometimes anger to a positive sense of self-efficacy and hope. The Arthritis Self-help Course has been highly successful in changing patient self-efficacy and health behavior, and in reducing physician visits and health care costs. A fibromyalgia -specific self-help course is now available through the Arthritis Foundation at www.arthritis.org.

The severity of fibromyalgia symptoms seems to correlate with less deep restorative sleep. Sleep quality seems to be an indicator for controlling the symptoms of fibromyalgia, especially muscle pain and fatigue symptoms. Circumstances interfering with stage 4 deep sleep (such as drug use, pain, or anxiety) seem to worsen the symptoms associated with fibromyalgia. Good sleep quality may moderate the relationship between affect and pain such that a good night’s sleep increases the ability to resist bouts of pain; alternatively, poor sleep, especially when chronic, may increase vulnerability to fibromyalgia symptoms.

Alternative therapies
There is limited evidence for the effectiveness of alternative therapies. These therapies are summarized in Table 3.

Multicomponent treatment
The doctor-patient relationship is important. The degree of patient satisfaction at the conclusion of a physician-patient encounter is a significant determinant of overall patient compliance. The generally accepted approach to treating fibromyalgia is a multimodal regimen that includes patient education, CBT, gentle exercise, and medications to help with sleep and pain. Multidisciplinary rehabilitation is typically included despite a Cochrane Review conclusion that there seems to be little scientific evidence for the effectiveness. Combining education, CBT, or both with exercise produces beneficial effects on patient self-efficacy, pain, and on 6-minute walk testing.
PROGNOSIS

Most patients with fibromyalgia continue to have chronic pain and fatigue. Despite little change in symptoms in 14 years, two-thirds of patients reported that they were working full time and that fibromyalgia interfered only modestly with their lives.\(^\text{12}\) If the patient has a sense of control over pain, a belief that he or she is not disabled, and understands that pain is not a sign of damage, the prognosis is better.\(^\text{12}\) Other behaviors associated with better outcomes included seeking help from others, decreasing guarding during examination, exercising more, and pacing activities.\(^\text{12}\)

MANAGEMENT STRATEGY

A stepwise approach to fibromyalgia management has been suggested. First, confirm the diagnosis, explain the condition, and evaluate and treat comorbid illness. Second, begin a trial with low-dose TCAs or cyclobenzaprine. Instruct the patient on how to begin a cardiovascular fitness exercise program. Then, refer for CBT or stress reduction with relaxation training. Lastly, consider trying an SSRI, SNRI, or tramadol. Also consider a combination medication trial or anticonvulsant. If the patient is not responding well to these steps, refer to a rheumatologist, physiatrist, psychiatrist, or pain management specialist.\(^\text{20}\)

SUMMARY

The primary care provider plays an important role in the diagnosis and treatment of patients with fibromyalgia. The clinician should have a low index of suspicion for the syndrome in patients who have complaints of myalgias and fatigue. There is no single, effective treatment of fibromyalgia. Pharmacologic and nonpharmacologic treatment must be individualized to each patient, and a trial of a variety of different therapeutic methods may be necessary. Ideally, the practitioner will collaborate with the patient to construct a unique treatment plan for the patient’s circumstances that includes a team-based approach.

Table 3: Alternative therapies in fibromyalgia

<table>
<thead>
<tr>
<th>Alternative Therapy</th>
<th>Proposed Benefits</th>
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<tbody>
<tr>
<td>Stress reduction via meditation</td>
<td>Eases pain, improves sleep and concentration, alleviates depression</td>
</tr>
<tr>
<td>Acupuncture</td>
<td>Increased pain thresholds</td>
</tr>
<tr>
<td></td>
<td>Decreased pain ratings</td>
</tr>
<tr>
<td>Hypnotherapy</td>
<td>Eases pain, improves sleep and concentration, alleviates depression</td>
</tr>
<tr>
<td>Biofeedback</td>
<td>Reduced pain ratings</td>
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<tr>
<td>Balneotherapy</td>
<td>Increased pain thresholds</td>
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<tr>
<td></td>
<td>Decreased pain ratings</td>
</tr>
<tr>
<td>Transcranial direct current stimulation</td>
<td>Decreased pain ratings</td>
</tr>
</tbody>
</table>

2. The best way to treat fibromyalgia. It may require more than one strategy, but you can get some pain relief and feel a lot better about life. Harv Women’s Health Watch 2004;11:4–5.