CLINICAL GUIDELINES FOR FAMILY PHYSICIANS

Management of Fibromyalgia Syndrome

BY NEIL S. SKOLNIK, M.D., AND MARINA SHTERN, M.D.

Fibromyalgia is the second most common rheumatologic disorder after osteoarthritis, with fibromyalgia having a prevalence of approximately 2%. The optimal management of fibromyalgia syndrome (FMS), however, remains ill defined.

The American Pain Society selected an interdisciplinary panel of 13 experts to review over 500 peer-reviewed articles on FMS therapy and to provide evidence-based guidelines for optimal treatment (JAMA 2004;292:2388-95).

The panel ranked the evidence for treatment efficacy as strong, moderate, or weak based on metaanalyses and randomized controlled trials (RCTs).

Strong evidence supports intensive patient education as an effective component of treatment. In RCTs, educated patients showed improvement in pain, sleep, fatigue, and quality of life as compared with controls. The use of a group format with lectures, written materials, and demonstrations was found to be especially helpful.

Guidelines are most useful when they are available at the point of care. A concise yet complete handheld computer version of this guideline is available for download, compliments of FAMILY PRACTICE NEWS, *at www.redi-reference.com.*

Pharmacologic Treatment

Medications that modulate pain sensation and tolerance have been the most successful in treating FMS, with tricyclic antidepressants (TCAs) having the strongest evidence of efficacy.

The TCA amitriptyline (25-50 mg at bedtime) and the muscle relaxant cyclobenzaprine (10-40 mg at bedtime) have been shown to be more effective than placebo in improving clinical outcomes. Significant clinical response is found in approximately one-third of patients, with the degree of response quantified as "modest." These agents have been shown to improve sleep, fatigue, pain, and general sense of well-being. However, the longest study of TCAs showed that improvement seen 6-12 weeks after the initiation of therapy was lost by 26 weeks.

Moderate evidence supports selective serotonin reuptake inhibitors (SSRIs) as effective treatment for FMS. Fluoxetine (20-80 mg), the only SSRI carefully evaluated, showed no significant benefit in one article; however, a flexible placebo-controlled dose study demonstrated significant improvement in pain, fatigue, and depression. The combination of a TCA with an SSRI was found to be better than either one alone.

Dual serotonin and norepinephrine reuptake inhibitors (SNRIs) have evinced moderate evidence for efficacy. Venlafaxine, milnacipran, and duloxetine have been shown to be better than placebo at higher doses. Duloxetine was better than placebo—independent of its effect on mood—in 207 patients with FMS over 3 months.

Three RCTs demonstrated the moderate efficacy of tramadol, with or without acetaminophen. There is no evidence that other analgesics, such as NSAIDs and opioids, are effective. NSAIDs may cause improvement when used as adjuncts with TCAs. Opioids should be used only after all other treatment options have been exhausted.

Pregabalin, a second-generation anticonvulsant, has shown moderate evidence for efficacy. At high doses (300-450 mg/day) pregabalin generated more than a 50% improvement in pain in a significant number of patients.

Tropisetron, as well as growth hormones and S-adenosyl methionine have shown weak efficacy evidence.

Nonpharmacologic Treatment

Nonpharmacologic treatment has proven to be as effective as drug therapy in managing fibromyalgia. In addition, strong evidence supports cardiovascular exercise as effective treatment. Aerobic and muscle-strengthening training have been shown to be more effective than flexibility training. Water exercise has not only provided improvement in symptoms but has been very well tolerated.

Psychological and behavioral therapy, especially cognitive-behavioral therapy (CBT), is supported by strong evidence as an effective treatment for FMS. Improvement in function and decreased pain were found with meditation, relaxation, and stress management. Biofeedback, hypnotherapy, balneotherapy, and acupuncture have shown moderate efficacy evidence. Weak efficacy evidence was shown by chiropractic, manual, and massage therapies, as well as by electrotherapy and ultrasound. There is no evidence for efficacy with trigger point injections and flexibility exercises.

Multidisciplinary treatment combining education, CBT, and exercise was strongly associated with improvement in pain severity, physical activity, and physician rating of disease severity. The studies evaluating multidisciplinary treatment collected data for about 2 years, illustrating the sustained effect of the therapy.

The Bottom Line

Patient education, tricyclic medications, cardiovascular exercise, and cognitive behavioral therapy have the firmest evidence base in the treatment of fibromyalgia. There is moderate evidence that tramadol, SSRIs, SNRIs, and certain anticonvulsants are effective, with further trials and reviews under way. Moderate evidence also supports strength training, acupuncture, hypnotherapy, biofeedback, massage, and warm water baths as treatments.

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Joint Problems Usually Involve Multiple Sites

BY BRUCE JANCIN
Denver Bureau

VIENNA — Multiple joint problems are the rule, not the exception, in individuals with joint pathology, Anne-Maree Keenan reported at the annual European congress of rheumatology.

She presented the results of a large British primary care practice survey showing that the prevalence of one or more chronic joint problems was high in individuals older than 55 years—and that the median number of such problems in affected individuals was four.

Moreover, the degree of associated functional impairment in activities of daily living rose exponentially rather than additively as the number of joint problems increased, said Ms. Keenan, a podiatrist and research fellow in the academic unit of musculoskeletal disease and rehabilitation, University of Leeds, England, at the meeting sponsored by the European League Against Rheumatism.

These findings highlight the drawbacks of the typical assessment and treatment algorithms for joint pathology. Busy physicians often focus on a single major joint, thereby ignoring the true extent of the patient's problems.

Ms. Keenan reported on 16,222 community-dwelling British adults older than 55 years who completed a postal questionnaire about joint problems sent to them by their primary care physician. The research, funded by the U.K. Arthritis Research Campaign, was conducted under the auspices of the Leeds West Primary Care Trust. The response rate was 86%, which American researchers would consider excellent for a mailed questionnaire.

Participants were asked to report any joint problems involving pain, swelling, and/or stiffness that lasted more than 6 weeks during the prior 3 months, and to rate the effect of such problems on activities of daily living.

The knee was the joint most frequently involved, with a prevalence of 220 per 1,000 population. However, the knee was the sole joint involved in only 1 of 11 affected individuals. More commonly, knee pathology was reported in combination with other joint problems.

Individuals with single joint pathology restricted to the knee were 3.7-fold more likely than respondents without problems to report significant difficulty in standing and walking. But individuals with multiple problems involving the knees and feet were 14.5-fold more likely to have difficulty in standing and walking. And in those with problems affecting the knee, back, feet, and hip, the odds of difficulty in standing and walking shot up to 39-fold greater than in individuals without joint problems. ■

Tender-Point Criteria For Fibromyalgia Flawed

BY KERRI WACHTER
Senior Writer

DESTIN, FLA. — The tender-point criteria commonly used to diagnose fibromyalgia are not useful and in fact may even explain why the disease appears to disproportionately affect women, Daniel Clauw, M.D., said at a rheumatology meeting sponsored by Virginia Commonwealth University.

According to the American College of Rheumatology's 1990 classification criteria, patients must have both widespread pain and tenderness in 11 of 18 tender points to be diagnosed with fibromyalgia.

Yet "tender points merely represent areas of the body where everyone is more tender," explained Dr. Clauw, the executive director of the Chronic Pain and Fatigue Research Center at the University of Michigan in Ann Arbor.

Fibromyalgia patients and healthy individuals were found to have different thresholds of pain in those tender points. The two groups also had different thresholds of pain in areas not thought to be tender. In addition, the cutoff of 11 out of 18 tender points is arbitrary, he said.

In the past, the disorder was considered a discrete illness with pain and focal areas of tenderness. In more recent years, fibromyalgia has been appreciated as part of a larger continuum, with many somatic symptoms and diffuse tenderness all over the body.

Study findings suggest that the number of tender points correlates better with a patient's general stress than with pain, he said.

Women are 10 times more likely to have achy and tender points, so the higher incidence of fibromyalgia among them may be due to a selection bias created by the criteria, Dr. Clauw noted. ■