396 Fibromyalgia

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DEFINITION

Fibromyalgia (FM) is characterized by chronic widespread musculoskeletal pain and tenderness. Although FM is defined primarily as a pain syndrome, patients also commonly report associated neuropsychological symptoms of fatigue, unrefreshing sleep, cognitive dysfunction, anxiety, and depression. Patients with FM have an increased prevalence of other syndromes associated with pain and fatigue, including chronic fatigue syndrome (Chap. 464e), temporomandibular disorder, chronic headaches, irritable bowel syndrome, interstitial cystitis/painful bladder syndrome, and other pelvic pain syndromes. Available evidence implicates the central nervous system as key to maintaining pain and other core symptoms of FM and related conditions. The presence of FM is associated with substantial negative consequences for physical and social functioning.

EPIDEMIOLOGY

In clinical settings, a diagnosis of FM is made in ~2% of the population and is far more common in women than in men, with a ratio of ~9:1. However, in population-based survey studies worldwide, the prevalence rate is ~2–5%, with a female-to-male ratio of only 2–3:1 and with some variability depending on the method of ascertainment. The prevalence data are similar across socioeconomic classes. Cultural factors may play a role in determining whether patients with FM symptoms seek medical attention; however, even in cultures in which secondary gain is not expected to play a significant role, the prevalence of FM remains in this range.

CLINICAL MANIFESTATIONS

Pain and Tenderness At presentation, patients with FM most commonly report "pain all over." These patients have pain that is typically both above and below the waist on both sides of the body and involves the axial skeleton (neck, back, or chest). The pain attributable to FM is poorly localized, difficult to ignore, severe in its intensity, and associated with a reduced functional capacity. For a diagnosis of FM, pain should have been present most of the day on most days for at least 3 months.

The clinical pain of FM is associated with increased evoked pain sensitivity. In clinical practice, this elevated sensitivity may be determined by a tender-point examination in which the examiner uses the thumbnail to exert pressure of ~4 kg/m^2 (or the amount of pressure leading to blanching of the tip of the thumbnail) on well-defined musculotendinous sites (Fig. 396-1). Previously, the classification criteria of the American College of Rheumatology required that 11 of 18 sites be perceived as painful for a diagnosis of FM. In practice, tenderness is a continuous variable, and strict application of a categorical threshold for diagnostic specifics is not necessary. Newer criteria eliminate the need for tender points and focus instead on clinical symptoms of widespread pain and neuropsychological symptoms. The newer criteria perform well in a clinical setting in comparison to the older, tender-point criteria. However, it appears that when the new criteria are applied to populations, the result is an increase in prevalence of FM and a change in the sex ratio (see "Epidemiology," earlier).

Patients with FM often have peripheral pain generators that are thought to serve as triggers for the more widespread pain attributed to central nervous system factors. Potential pain generators such as arthritis, bursitis, tendinitis, neuropathies, and other inflammatory or degenerative conditions should be identified by history and physical examination. More subtle pain generators may include joint hypermobility and scoliosis. In addition, patients may have chronic myalgias triggered by infectious, metabolic, or psychiatric conditions that can also serve as triggers for the development of FM. These conditions are often identified in the differential diagnosis of patients with FM, and a major challenge is to distinguish the ongoing activity of a triggering condition from FM that is occurring as a consequence of a comorbid condition and that should itself be treated.

Neuropsychological Symptoms In addition to widespread pain, FM patients typically report fatigue, stiffness, sleep disturbance, cognitive dysfunction, anxiety, and depression. These symptoms are present to varying degrees in most FM patients but are not present in every patient or at all times in a given patient. Relative to pain, such symptoms may, however, have an equal or even greater impact on function and quality of life. Fatigue is highly prevalent in patients under primary care who ultimately are diagnosed with FM. Pain, stiffness, and fatigue often

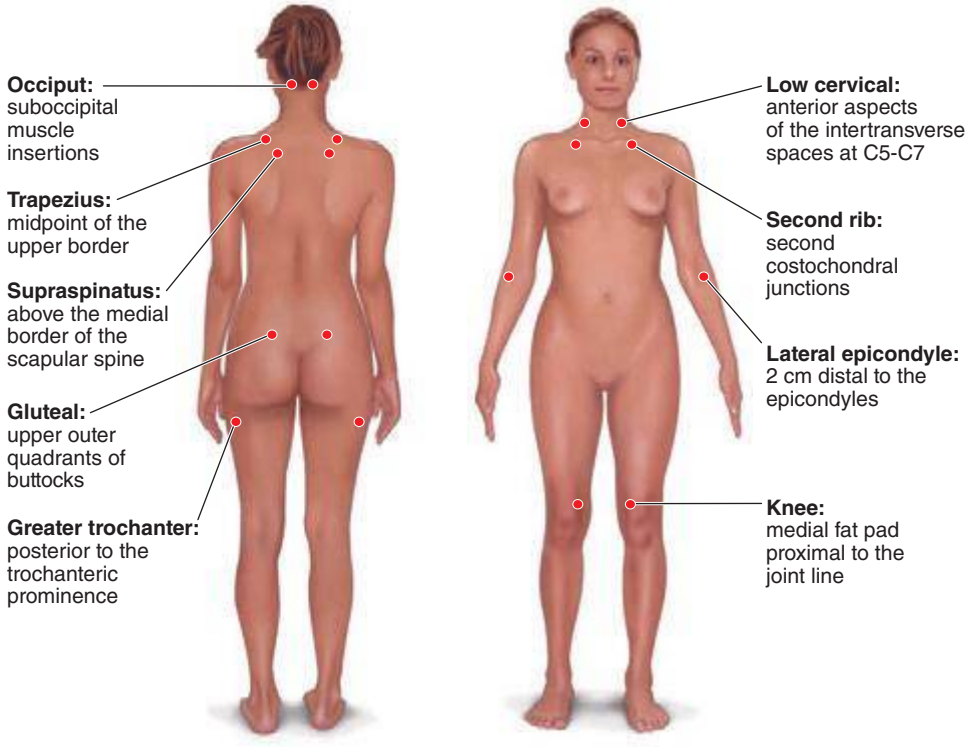

FIGURE 396-1 Tender-point assessment in patients with fibromyalgia. *(Figure created using data from F Wolfe et al: Arthritis Care Res 62:600, 2010.)*