

Fibromyalgia: Continued Perspectives for the Manual-Massage Therapist - Part One

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This is Part One of a three-part series of theoretical, pathophysiological presentations and practical applications for treating fibromyalgia. Part One focuses on the historical context of fibromyalgia and the difficulty clinicians have had with identifying the clinical diagnosis for fibromyalgia.

Introduction: Historical Context

A good deal of information and advice continues to be written regarding the treatment and management of this difficult syndrome. If you are new to treating fibromyalgia, it will appear complicated by virtue of its presenting symptoms and difficult to manage and treat. Imagine a person who is in considerable pain but no physician can identify why the pain is occurring and often cannot find anything specifically wrong with the person. Until 1990, when the American College of Rheumatology, following the work of Dr. Frederick Wolfe, set criteria that described the syndrome; it was mismanaged, misdiagnosed and misrepresented.⁽¹⁾

For many years, lack of a unifying etiology and a universal terminology hindered the understanding and recognition of fibromyalgia. An Edinburgh physician, William Balfour, suggested that an inflammatory process that affected connective tissue was responsible for the occurrence of pain in what was then called muscular rheumatism that involved fatigue, stiffness, aches, pains and disturbed sleep.⁽²⁾ In 1880, a US psychologist named Beard wrote about a collection of symptoms consisting of fatigue, widespread pain, and psychological disturbances. He called it 'neurasthenia' and attributed the problems to the stress of modern life.⁽³⁾ In 1904, a pathologist, Ralph Stockman, reported (erroneously) that he had discovered evidence of inflammatory changes occurring in the fibrous, intramuscular septa of biopsies from afflicted patients.⁽⁴⁾

This led Sir William Gowers (1904) to introduce the term "fibrositis" to describe the condition, believing - again erroneously - that inflammation was a key feature of 'muscular rheumatism'.⁽⁵⁾ Numerous subsequent studies of similar biopsies failed to replicate the inflammatory changes found by Stockman and the term "fibrositis" is no longer considered an accurate descriptor for the pathology.

Many studies have been done since these early studies and among the most important are those of Lewis and Kellgren who, in the 1930s, investigated referred pain.⁽⁶⁾⁽⁷⁾ It was that work, and the research of Smythe, a rheumatologist, and Moldofsky, a psychiatrist in Toronto, Canada, who conducted electroencephalographic studies on a group of patients suffering generalised muscle pain and disturbed sleep, that finally determined the etiology of fibromyalgia.⁽⁸⁾⁽⁹⁾

Studies by Robert M. Bennett, Frederick Wolfe, and Muhammad B. Yunus have also been critical in categorising symptoms and tender points.⁽¹⁰⁾⁽¹¹⁾⁽¹²⁾⁽¹³⁾

Hench was the first to document the term fibromyalgia in the early 1970s.⁽¹⁴⁾

Hench noted that muscle as well as ligamentous and tendinous connective tissues are usually subjectively involved. Later, in the 1980s, Yunus proposed a unified classification system, and the first diagnostic criteria.⁽¹⁵⁾⁽¹⁶⁾ As mentioned above, in 1990 the American College of Rheumatology first established criteria for the classification and diagnosis of the disease.

Nonetheless, the 1990 ACR classification which follows is fraught with inconsistencies and controversy: Frederick Wolfe's 'criteria' was originally intended as a diagnostic tool, and is not necessarily 'diagnostic criteria'.

Wolfe's 'diagnostic tool' was differentiated from 'diagnostic criteria', when in 1990, for the first time, the clinicians performing studies, Wolfe, Yunus, et. Al., noticed that the 'tender point' count was significantly greater in FM sufferers than any healthy control group.⁽¹⁷⁾

The ACR criteria for fibromyalgia (FM) require that patients have a history of chronic pain for ≥ 3 months and pain in ≥ 11 of 18 tender point sites on digital palpation.⁽¹⁸⁾



Figure 1. The 18 tender points of fibromyalgia.

Confusion arises when clinicians and physicians who want to simplify use tender point criteria as a tool to differentiate FM. Wolfe felt the inconsistencies in tender point count could not allow it to be consistent as 'criteria'.

Yet another important problem beset fibromyalgia diagnosis. Patients who improved or whose symptoms and tender points decreased would not fall within the ACR's 1990 classification criteria. It was not clear how to categorise or assess these patients.

In addition, the ACR classification criteria set such a high bar for a diagnosis of FM that there was little variation in symptoms among fibromyalgia patients. These two considerations suggested the need for the development and use of a broad-based severity scale that could differentiate among patients according to the level of fibromyalgia symptoms.⁽¹⁹⁾

One of the consistent problems with FM is the plethora of presenting symptoms that, for massage therapists, can make assessment difficult.

For instance, Wolfe's recent study states: "We also asked patients to indicate which of the following symptoms they experienced in the last three months: blurred vision or problems focusing; dry eyes; ringing in ears; hearing difficulties; mouth sores; dry mouth; loss of or change in taste; headache; dizziness; fever; chest pain; shortness of breath; wheezing (asthma); loss of appetite; nausea; heartburn; indigestion or belching; pain or discomfort in the upper abdomen (stomach); liver problems; pain or cramps in the lower abdomen (colon); diarrhea (frequent, explosive watery bowel movements, severe); constipation; black or tarry stools (not from iron); vomiting; joint pain; joint swelling; low back pain; muscle pain; neck pain; weakness of muscles; tiredness (fatigue); depression; insomnia; nervousness (anxiety); seizures or convulsions; trouble thinking or remembering; easy bruising; hives or welts; itching; rash; loss of hair; red, white, and blue skin color changes in fingers on exposure to cold or with emotional upset; sun sensitivity (unusual skin reaction, not sunburn); yellow skin or eyes (jaundice); fluid-filled blisters; numbness/tingling/burning; swelling of the hands, legs, feet, or ankles (not due to arthritis); irritable bowel syndrome; faintness; frequent urination; painful urination; pain, fullness, or discomfort in the bladder region; sensitivity to bright lights, loud noises, or odors; fatigue severe enough to limit daily activity; tender lymph nodes; or frequent sore throats. We summed the positive replies to create a 0–56 count of somatic symptoms scale."⁽²⁰⁾

Given the great number and wide variety of accompanying conditions, is it any wonder fibromyalgia was so difficult to diagnose and treat for physicians or allied health care professionals? Hailed with great relief, a new ACR classification came into effect in 2010.⁽²¹⁾

New 2010 ACR Classification for Fibromyalgia

Prior to the publication of the 2010 American College of Rheumatology preliminary fibromyalgia diagnostic criteria, diagnosis was straightforward as long as the examiner ignored the temptation of analysing the accompanying conditions as indicators of the problem and applied the tender point examination. The examiner simply identified that the patient was experiencing widespread pain and then performed a 60-second examination of tender points as described by the 1990 ACR Classification Criteria.

The 2010 ACR Diagnostic Criteria has eliminated the tender point examination and made diagnosis more difficult by requiring evaluation of symptoms. The 2010 criteria altered the case definition of fibromyalgia by recognising that **symptoms were a central part of the syndrome**. In so doing, the new criteria imposed a special burden on the examiner: the necessity to interview the patient in detail sufficient to identify the extent and severity of the symptoms. The ACR 2010 criteria provided rules for categorising symptom severity in order to make a diagnosis, but didn't precisely define how symptom severity was to be ascertained, leaving this to the clinician. The ACR criteria committee was purposeful about this: clinicians now were provided with symptom guidelines, but they could use ascertainment methods that were appropriate for their clinical setting and manner of practice. In general, the committee felt that a comprehensive patient interview and a physical examination are required to provide the requisite diagnostic information.

The new criteria indicates two distinct but combined diagnostic pathways using a scoring system that clients subjectively indicate in respect of, first, a WPI Widespread Pain Index and, second, a SS Symptom Severity scale.

The WPI Widespread Pain Index charts 19 areas of the body where the patient might feel pain: shoulder girdle, hip, jaw, upper arm, upper leg, lower arm, and lower leg on each side of the body, as well as upper back, lower back, chest, neck, and abdomen over the past week, with each painful or tender region scoring 1 point.

The first part of SS Symptom Severity scale scoring is broken into three sections: fatigue, waking unrefreshed and cognitive symptoms suffered by the client during the previous week. Each section is scored: 0 - no problem; 1 - slight or mild problems: generally mild or intermittent; 2 - moderate: considerable problems, often present and/or at a moderate level; 3 - severe: pervasive, continuous life-disturbing problems. The section yields a 0 to 12 score. The second part of the SS Symptom Severity scale is calculated using a checklist of 41 associated symptoms.

A patient is diagnosed with FM if:

1. The WPI is at least 7 and the SS scale score is at least 5 or the WPI ranges between 3 to 6 and the SS scale score is at least 9.
2. The symptoms have been present at a similar level for at least three months.
3. The patient does not have another disorder that otherwise explains his or her pain.

The differential diagnosis of widespread pain is broad and includes numerous psychological, hematologic, endocrinologic, autoimmune, infectious, and neurologic disorders; cancer; and vitamin and mineral deficiencies.

The Fibromyalgia Client

The next article in this series – Fibromyalgia Syndrome: The Causative Factors - will examine the causes of fibromyalgia syndrome and the confusing client presentations a practitioner may encounter.

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