Dynamic Chiropractic

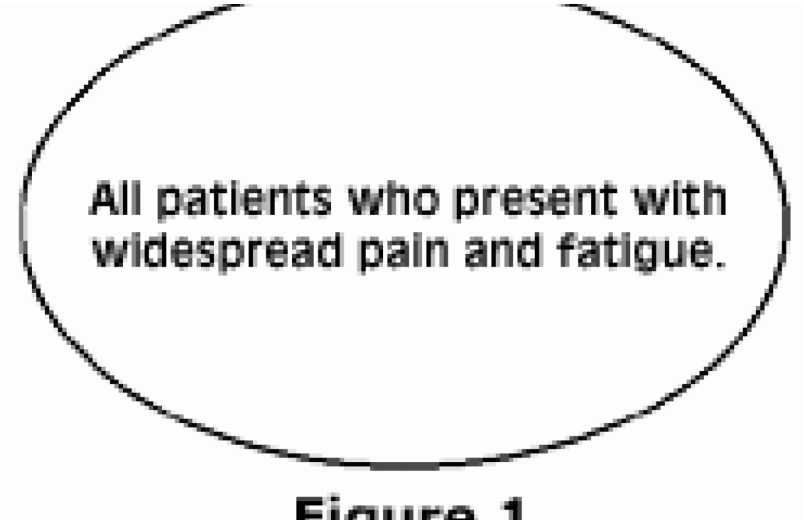

Figure 1

CHRONIC / ACUTE CONDITIONS

Fibromyalgia Syndrome: Reclassification is Definitely Needed

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We recently published an article[1] in the October 2001 issue of the *Journal of Manipulative and Physiological Therapeutics (JMPT)* that proposes a novel way of rethinking the much-maligned diagnosis of fibromyalgia syndrome (FMS). In a recent issue of *Dynamic Chiropractic,*[2] Dr. John Lowe has chosen to criticize our FMS reclassification proposal. The reason we published our article in *JMPT* was deliberate. We wanted to introduce our concepts to the entire biomedical literature. Indeed, as a result of publishing our article in a fully-indexed scientific journal, we have received reprint requests from multiple health care providers around the world. Proper scientific etiquette would call for any criticisms to be written as a letter to the editor to the journal in which the article appeared. However, Dr. Lowe has chosen to sidestep this proper channel for commenting on our article by publishing his views in *Dynamic Chiropractic,* which we now feel obligated to reply. We encourage you to obtain the full text of our original article, which can be viewed on line at www.harcourthealth.com/jmpt in the October 2001 issue.

The Nebulous Nature of FMS Diagnosis

We firmly believe that our proposed reclassification paradigm is extremely useful to chiropractors and other clinicians, because it seeks to clarify many aspects of FMS diagnosis and treatment that have become *fuzzy* and nebulous. FMS has become a dubious diagnostic entity because it is a *syndrome* composed of various nonspecific signs and symptoms, versus a *disease,* which has a known etiology and/or causative agent(s). There are only two criteria necessary to make a diagnosis of FMS; a) history of chronic widespread pain; and b) 11 of 18 predetermined points are "tender" to less than 4 kilograms of pressure. No specific laboratory findings are needed to make a diagnosis of FMS; in fact, there are *no specific diagnostic tests of any kind* that are pathognomonic of FMS (other than algometry to verify tender points). There is literally only one specific physical exam finding that defines a "true FMS" patient, and that is the presence of widespread hyperalgesia or allodynia, terms which we will explain in further detail later in this discussion.

To date there is still no known cause for FMS, yet there are all sorts of published case reports in the chiropractic and natural health care literature (mostly nonpeer-reviewed) in which clinicians are espousing various *cures for FMS*. This includes Dr. Lowe's suggestion that 90 percent of FMS is nothing more than various types of hypothyroidism in disguise. Some people claim the cure for FMS is malic acid and magnesium supplementation, Dr. Lowe says thyroid hormone is the cure, some DCs claim it is an upper cervical adjustment, while others claim cranial misalignments cause FMS. In the medical literature there are also theories abounding about FMS, some claim it is sympathetic hyperactivation, others claim it is a variant form of psychosomatic disease, some talk about the foramen magnum being stenotic, there is the serotonin deficiency hypothesis, and theories about posttraumatic stress syndrome involvement with significant sleep disorders. Some researchers believe there may be a genetic predisposition to FMS.

What no one seems to question is the diagnostic entity of FMS itself! Our article is chiefly focused on breaking down the taboo to questioning the validity of the construct of this "new syndrome" of FMS. With the lack of any definitive diagnostic tests to verify the presence of a disease or syndrome, other than symptoms, how can we be certain that FMS itself really represents a separate and distinct syndrome? What if some of the supposed "cures" of FMS represent a subset of patients with widespread pain that in reality *never had a separate distinct syndrome of FMS?* These and other questions about the validity and reliability of FMS diagnosis lead us to develop our reclassification hypothesis about FMS in which we propose to differentiate between "true FMS" and "false FMS," or to use our proposed terms, "classic FMS" and "pseudo-FMS," respectively.

Confusing and Inappropriate Terminology

One of the most confusing aspects of the FMS literature has been the erroneous use of terminology and lack of proper differential diagnosis. For example, it is commonplace to see authors incorrectly interchange the terms FMS/tender points with myofascial pain syndrome (MPS)/trigger points, when clearly these are two separate and distinct conditions. The references cited by Dr. Lowe (Yunus, Travell, Simons) are authors who have urged their medical colleagues to differentiate between MPS and FMS, and to be more careful with the use of their respective terms "trigger point" and "tender point". In fact, one of us (MJS) contributed to this literature with an article in the July/August 1995 issue of *JMPT* ("Tender Points/FMS vs Trigger Points/MPS: A Need for Clarity in Differential Diagnosis and Treatment"). Therefore, how ironic it is that Dr. Lowe would criticize us for being ignorant of the very same literature to which we are contributors! In fact, we were keenly aware of the plea of these researchers to properly differentiate MPS from FMS. However our proposal goes beyond this simple distinction, and attempts to advocate broadening the scope of proper differential diagnosis beyond musculoskeletal conditions.

Again, we are acutely aware of the problem with misdiagnosis, and believe that many patients who are told they have FMS really have some other medical problem that is the cause of their widespread pain. One simple example is a patient with cervical and lumbar subluxations/facet syndromes and myofascial trigger points in several different muscles. This patient may present with "widespread pain" to a primary care physician (who is ignorant of musculoskeletal diagnosis), who proceeds to give a diagnosis of FMS. This "pseudo-FMS" patient then sees a DC, who proceeds to provide manual treatment and eliminates the cause of the widespread pain, but is fooled into thinking that he/she "cured" a patient with FMS. Did this patient really have FMS, or did he/she have a musculoskeletal condition?

What if a patient presents to a primary care physician with symptoms of widespread pain and fatigue that is due to subclinical hypothyroidism, which may be the result of a peripheral hormone conversion disorder or thyroid hormone resistance syndrome? Do you think most physicians would bother to perform lab tests to ascertain the true reason for the patient's complaints? If they did

order standard thyroid analysis would it really detect the peripheral thyroid problem? No, in fact this type of patient will probably be dismissed by the busy MD with a diagnosis of FMS and possibly be given antidepressant medications. When this patient fails to get better and gets sick of the treatment by the MD, the patient may seek treatment at an alternative provider's office such as Dr. Lowe's, and finally receive the *appropriate diagnosis*. This is just another case of "pseudo-FMS"; this patient never had true FMS, but really had a *hypothyroid disorder* that was misdiagnosed. Does Dr. Lowe cure patients of FMS, or does he provide appropriate treatment for cases of hypothyroidism that are misdiagnosed as FMS? Dr. Lowe believes that he cures virtually all patients diagnosed with FMS by administering T3 thyroid replacement. Are we supposed to accept this as fact when the major researchers in the field have certainly not arrived at this conclusion? Might this be a case of swinging a hammer so long that everything looks like a nail?

Proper terminology is critical to our understanding of FMS, and inappropriate terminology is at the heart of the problem of FMS misdiagnosis. That is precisely why we have chosen to differentiate the population of patients with widespread pain into two large categories; "classic" and "pseudo" FMS. These terms are indeed novel, and represent a new way of looking at the whole issue of FMS from another perspective. However, our purpose was not to be "hung up" on the proposed names. It is the idea of taking the time to conduct a proper patient workup in order to arrive at a proper differential diagnosis that we are trying to express to the profession. It was also our goal to further an appreciation in clinicians of the many disorders that can produce a laundry list of symptoms that may result in an improper diagnosis of FMS.

Classic vs. Pseudo-FMS

Not all patients who present with the nonspecific symptom of "widespread pain" and tender points fit the true criteria for a diagnosis of FMS. However, the literature does reveal the existence of a characteristic FMS patient profile that we propose to call "classic FMS." This is a patient who literally "aches all over"; he/she describes pain on both sides of the body, upper and lower extremities, and in the axial skeleton/torso. This patient typically has a significant sleep disorder, and does not fall into the deeper stages of sleep. Additional symptoms that are found in over 80 percent of these classic FMS patients include; anxiety/depression, TMJ disorders, including grinding and clenching behaviors, irritable bowel/bladder syndromes, headaches, atypical patterns of paresthesia/numbness, and cognitive deficits/memory problems ("fibro-fog"). It is very important to note that all attempts to find a peripheral cause of these symptoms have failed, including multiple biopsy studies of the tissues located within the tender points.

What is the common denominator of all these associated symptoms? It appears to be hyperactivation of the sympathetic nervous system and/or hypothalamic-pituitary-adrenal axis. It has been shown conclusively in the FMS literature that classic FMS patients have profound alterations in the amounts of *serotonin* (decreased) and *substance P* (increased) circulating within the *cerebrospinal fluid (CSF).* These findings have led modern researchers in FMS circles, including one of the foremost researchers in the field, Dr. Jon Russell, to put forth a *CNS dysfunction model of FMS.* This model implicates dysfunction of the descending anti-nociceptive system, such that sensory stimuli that are normally not painful are perceived at the cortical level as being "painful." This leads to a state of widespread hyperalgesia (lowered pain threshold) or allodynia (feeling pain to nonpainful stimuli).

This state of widespread hyperalgesia or allodynia is clearly what defines the classic FMS patient from normal controls. Recent studies have shown that these FMS patients actually experience pain to subthreshold electrical stimuli *all over their bodies, not just at the 18 tender point sites.* This data clearly indicates some type of central or systemic process is at the root cause of this condition of abnormal pain perception that has been called *primary FMS* when no other medical condition

can explain the situation. If the lowered pain threshold occurred in association with another known disease process, such as Lyme disease, then the patient is said to be manifesting *secondary FMS.*

Our term, "classic FMS," therefore, could be considered synonymous with either of the standard terms "primary" or "secondary" FMS. *Yet we strongly challenge the notion of "secondary FMS."* If a patient develops widespread pain after contracting Lyme disease, why is it necessary to confuse the clinical picture with another diagnostic term, "secondary FMS?" Why not call it what it is; i.e. widespread pain secondary to Lyme disease? Likewise with hypothyroidism, do these patients have "secondary FMS," or are they simply tired, fatigued, and have sore muscles secondary to the hypothyroidism? Most any chiropractic patients who have experienced chronic musculoskeletal pain could be said to be suffering from "secondary FMS," because they have developed nonspecific, widespread pain patterns!

Hence the birth of our second term, "pseudo-FMS." We have attempted through our reclassification to take into account the large number of patients who do not fit this "classic FMS" profile outlined earlier. Our clinical experience lead us to propose three subcategories of "pseudo-FMS":

1. Patients with *organic diseases* that mimic FMS: These cases include Lyme disease, rheumatoid arthritis, multiple sclerosis, overt hypothyroidism, anemias, etc.

2. Patients with *functional problems* that mimic FMS: These cases include intestinal dysbiosis, systemic toxicity, heavy metal load, vitamin or mineral deficiencies, enzyme abnormalities, reactive hypoglycemia, and functional hypothyroidism, such as the peripheral resistance disorders reported by Dr. Lowe.

3. Patients with *musculoskeletal problems* that mimic FMS: These cases include myofascial trigger points, facet syndromes, disc lesions, subluxation, etc.

The common denominator in these three types of "pseudo-FMS" is that the patient in each case is *not suffering from primary FMS.* They are all experiencing widespread pain and fatigue, however, in each case there is a *known cause* for the symptoms. In each of these cases, the patient will respond to a specific treatment applied to a specific dysfunction or disease state. If the patient has hypothyroidism causing their widespread pain, thyroid hormone treatment will cure their complaints. If the patient has reactive hypoglycemia, it is likely that diet modification and avoidance of carbohydrate binging will "cure" their problem. And likewise, patients with muscle and/or joint dysfunction can be successfully treated with standard manual adjustive techniques utilized by chiropractors.

Therefore, our proposed terms "classic" and "pseudo" FMS are not meant to replace the more standard terms of primary and secondary FMS, but rather to differentiate between the patients who fit the true criteria of primary FMS from those who have other medical conditions. Dr. Lowe criticizes us for reinventing the wheel, by stating that pseudo and secondary FMS are synonymous terms. We disagree, and believe that Dr. Lowe has completely missed one of our major assertions; i.e., that many patients who are told they have either primary or secondary FMS in fact *do not have any type of FMS at all!* We use the term "pseudo-FMS" when referring to patients who have any specific problem *other than* FMS as the cause of their symptoms of widespread pain and fatigue. Optimally, the term "pseudo-FMS" would not be used and the disorder would just be called exactly what it actually is (i.e., anemia, hypoglycemia, hypothyroidism, etc.). However, since many patients present with these disorders already convinced by previous clinicians that they have FMS, and the providers are also confused, this terminology may appease the patient and serve as a vehicle to change the thinking of the treating clinician and prompt proper diagnostic investigation.

It is ironic that Dr. Lowe criticizes our proposed terms of classic and pseudo-FMS, because our reclassification scheme actually gives more credibility to his theory than the current "failed rheumatological model" of FMS. Our category of pseudo-FMS accounts for all of the metabolic disorders that result in widespread pain and fatigue, including the subclinical hypothyroid cases about which Dr. Lowe writes. In fact, our idea for this reclassification scheme came from our clinical experience with seeing "primary FMS" patients supposedly "cured" with metabolic type treatments, including diet, vitamins, herbs, and even thyroid hormone supplementation. We reasoned that "primary FMS" would not respond well to these interventions, because it represented a central nervous system (CNS) dysfunction of pain processing pathways.

Conclusion

We do not believe that our proposed reclassification scheme for FMS is perfect or cast in stone. However, we do feel that it provides a conceptual framework for more adequately explaining the cases of patients who respond to natural health care methods, versus those that do not respond. Figure 1 depicts a circle representing the large group of patients who present with the vague symptoms of widespread pain and fatigue. The problem, in our opinion, is that ignorant physicians *assume* that this circle is full of primary FMS patients, when in reality there are some smaller circles that represent various subsets and subtypes of this larger group as shown in Figure 2. One of these smaller circles represents the "classic FMS" patient, who does not typically do well with *any* type of manual or metabolic treatment, because he/she is suffering from some type of CNS dysfunction of pain processing. The other three small circles represent the various subcategories of "pseudo-FMS" outlined above, which as a whole represent all the cases of widespread pain and fatigue that are caused by some other *specific disease or functional problem.* These cases do respond to specific treatment applied to their specific diseases or dysfunctions.

Figure 1

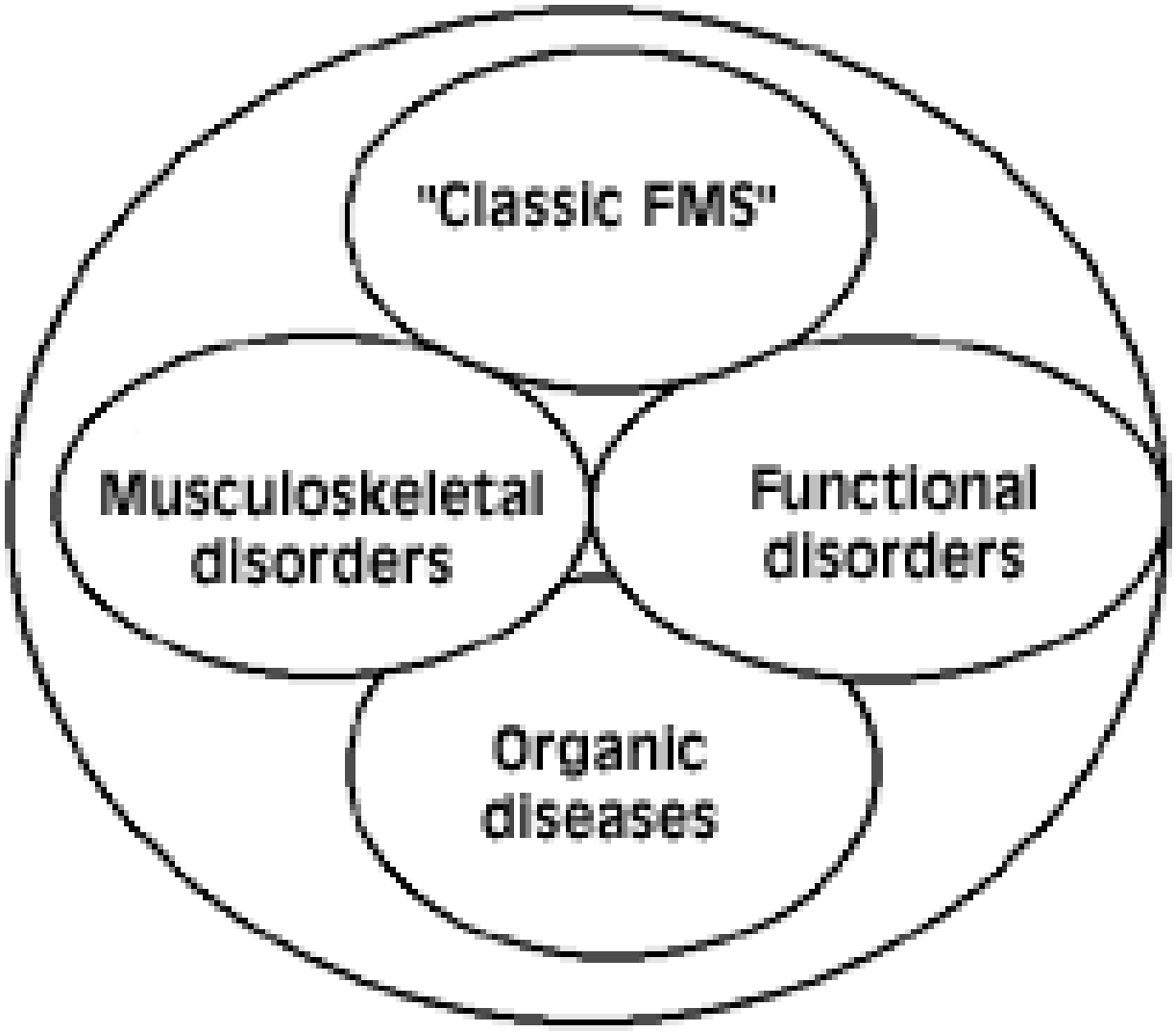

Figure 2

We believe that our paradigm and proposed classification scheme serves somewhat as a "unified theory" for looking at FMS diagnosis and treatment. It is our opinion that too many patients are labeled with a diagnosis of FMS, when in fact, they have some other simple explanation for their symptoms that would respond to appropriate medical and/or chiropractic treatment. In many cases of classic FMS, we believe patients are suffering from a variant form of posttraumatic stress disorder that may respond to psychological counseling and medications, such as those that mediate serotonin levels and enhance proper sleep patterns. Only time and further research can help to remove the cloud that hangs over this diagnostic entity we call FMS. Our article was merely an attempt to help shed some light on this subject, and to provide a pathway to navigate through the jungle of vague terminology and confusion.

References

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2. Lowe J. The Brady/Schneider proposal: a misdirected reclassification of fibromyalgia. *Dynamic Chiropractic* 2002;20(4), pp. 12,14,25,26,27.

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