CHIROPRACTIC NEUROLOGY RESEARCH BRIEF

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Fibromyalgia Syndrome

Fibromyalgia Syndrome (FMS) can be a very difficult condition to diagnose. It was not commonly recognized until the 1980's when it was believed to be a primary muscle disorder. Later, researchers disregarded this theory when muscle biopsies of tender points were inconclusive for any tissue abnormalities.²⁻⁴ Further studies cast doubt that FMS is an inflammatory disorder of soft tissues as neither NSAIDS nor corticosteroids had an effect on reducing the number of tender points found in FMS patients.^{5, 6}

It is most plausible that FMS is caused by a neurochemical imbalance in the CNS⁷ which results in allodynia- pain produced by a stimulus such as light touch which normally does not cause pain. Studies <u>have</u> shown that increased CSF levels of Substance P and decreased serum levels of serotonin could be the cause.⁸⁻¹⁰

According to Schneider,¹¹ the misdiagnosis of FMS is a common problem in the U.S. with one study finding the misdiagnosis rate to be as high as 38 percent.¹² The reason, possibly, lies in the fact that there are numerous conditions whose symptoms can mimic the symptoms of FMS.

Classifications

In 1990, the American College of Rheumatology (ACR) established two criteria for classifying FMS: 1) chronic, widespread (bilateral, axial and appendicular) pain that has been present for more than three months, and 2) pain produced by relatively light digital palpation (up to four kilograms of pressure) of a minimum of 11 of 18 predetermined tender sites.¹

With many other symptoms associated with FMS: anxiety, depression, headache, bruxism, irritable bowel and/or bladder, dysmenorrhea, fatigue, unrestorative sleep, cold sensitivity, paresthesia, and exercise intolerance, it is no wonder that a patient presenting with widespread pain and fatigue could be easily misdiagnosed.

According to the ACR guidelines, a diagnosis of FMS should only be made when all other diseases have been ruled out.¹ Therefore, blood testing, musculoskeletal assessment, and any other clinically indicated tests may be necessary to make an accurate diagnosis. **FMS affects women 10 to 20 times more often than men.**

Drs. Schneider Brady suggest classifying FMS as either "Classic FMS" or "Pseudo FMS". "Classic FMS" includes all the signs and symptoms set forth by the ACR in addition to alterations of brain and CNS chemistry. The musculoskeletal disorders that can <u>mimic</u> "Classic FMS" include multiple myofascial trigger points, joint dysfunction, muscle imbalances, spinal disc and facet lesions and abnormal posture.

"Pseudo FMS" consists of organic diseases, [i.e. anemia, Lyme disease, hyperthyroidism, sero-negative rheumatoid arthritis, occult carcinoma, and multiple sclerosis] and functional disorders. Functional disorders can include improper diet, nutritional deficiencies, intestinal dysbiosis, abnormal liver function and musculoskeletal disorders which can mimic "Classic FMS".¹¹

Chiropractic Management of FMS

The safety and effectiveness of chiropractic treatment of various musculoskeletal disorders has been established and is well documented in scientific literature. ¹³⁻¹⁵

In a study by Wolf, ¹⁶ 45.9 percent of the patients who sought chiropractic treatment for fibrositis, a.k.a. FMS, reported moderate to great improvement. A 1997 study found that chiropractic management improved cervical and lumbar ranges of motion, straight leg raise, and pain. The authors concluded, "*It seems reasonable to suggest that chiropractic management should be included (in some capacity) in the treatment of the fibromyalgia patient. A short course of treatment (4-8 weeks) may offer the fibromyalgia patient some pain relief, increased ranges of the motion in their cervical and lumbar spines and an improvement in their overall level of flexibility."¹⁷*

A more recent study sought to determine if 30 chiropractic treatments which combined ischemic compression (sustained point pressure) of tender points and spinal manipulation would help respondents. Although this study was small, 60 percent were classified as respondents, based on their percentage of improvement in pain intensity, and they demonstrated a mean percent decrease in pain intensity of 77.1 percent, a decrease in fatigue of 74.8 percent and an increase in sleep quality of 63.5 percent.¹⁸

Hiemeyer found that poor (flexed) posture has an adverse influence on the tender points associated with FMS, of which, the majority were in postural muscles. These tender points were diminished or completely eliminated after correct posture was obtained.¹⁹

Correcting the mobility and alignment of the spine and its surrounding structures with hands-on soft tissue and spinal manipulative, physiologic therapeutic, stretching and strengthening is part of the chiropractic approach in the management of FMS. The focus on muscles, ligaments and tendons to rebalance the muscles involved allows for fewer spinal manipulations than those used by regular doctors of chiropractic.

In summary, approximately 50 percent of patients diagnosed with FMS, from Schneider's suggestion that the patients have the musculoskeletal variety of "Pseudo FMS"¹¹ responded favorably to chiropractic management.

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