

## **Hello from UK Fibromyalgia.com**

We receive a lot of feedback about the need for an information sheet on fibromyalgia to give to our doctors and medical practitioners.

I thought it might be useful to see the Devin Starlanyl information sheet- whilst aimed at an American audience, it has many useful points.

Martin Westby

Excerpted from "The Fibromyalgia Advocate:

Getting the Support You Need to Cope with Fibromyalgia and Myofascial Pain Syndrome", by Devin J. Starlanyl, ©

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Please be aware that we cannot hope to put all the information from ours and several other books for patients on these disorders. Please get additional information from one of these sources. We have listed some in the bibliography.

## **What Everyone on Your Health Care Team Should Know**

You have seen patients with fibromyalgia (FMS) and Myofascial Pain Syndrome (MPS), and you will see more of them. It is important that you understand the concepts behind the diagnosis of each of these conditions. Fibromyalgia is a systemic, biochemical condition with tender points that hurt in specific areas (Russell 1996)

Myofascial Pain Syndrome is a mechanical, physical condition with nodules and ropy bands that not only hurt, but also cause muscular weakness, decreased range of motion, and referred pain. In some cases there are autonomic concomitants (Travell and Simons 1992; 1983).

Each of these syndromes is an authentic and well-documented medical condition. They are very different from each other, although they frequently occur together and are often confused. People with FMS and/or MPS may look very healthy and are often discriminated against for having an "invisible" chronic pain condition. It is to your advantage to become as educated as possible on these topics.

Fibromyalgia is a specific systemic dysregulation of the neuroendocrine system. It is the most common cause of widespread pain (Bennett 1995a). It is not just a term for achy muscles; it is a diagnosis of inclusion, not exclusion. It has, among other things, a disrupted hypothalamus-pituitary-adrenal- (HPA) axis. It is nonprogressive (although it may seem to be progressive), nondegenerative, and noninflammatory. It is responsible for diffuse body wide pain, tender points that hurt but don't refer pain elsewhere in the body, and sleep disturbances. The central nervous system can be profoundly affected.

In FMS, studies indicate that there are biochemical abnormalities requiring metabolic adjustment (Eisinger, Plantamura and Ayavou 1994; Samborski, Stratz, Schochat, et al. 1996). The "eleven out of eighteen" tender points "test" for FMS is intended to be used to identify FMS patients who meet the criteria for inclusion in research studies. It was never intended for use in clinical settings. (Scudds 1998). In people with FMS, there are neurohormonal changes that can significantly diminish the normal repair of muscle tissues (Neeck and Riedel 1994). This must be taken into account when prescribing exercise.

Neither FMS nor MPS is inflammatory, although secondary inflammation of the joints may sometimes occur in long-standing untreated MPS. This occurs because contracted muscles harboring trigger points (TrPs) can pull bones slightly out of alignment. This may lead to osteoarthritis. NSAIDS make handy analgesics, but they do contain components that are unnecessary for noninflammatory conditions.

Furthermore, NSAIDS often disrupt the deepest stage of sleep and can contribute to permeable gastric mucosa. Your patient probably already suffers from severe sleep disruption and may also have multiple allergies and chemical sensitivities. Pain is a perpetuating factor, and you need to work closely with your patient to find a medication that will relieve pain without causing undue side effects. There are studies showing that people with FMS have aberrant central pain mechanisms (Bendtsen, Norregaard, Jensen, et al. 1997) and abnormalities in

regional blood flow to some areas of the brain, which are associated with low pain thresholds (Mountz, Bradley, Modell, et al. 1995). The pain stimulus itself may contribute to long-lasting changes in central nervous system excitability (Dubner 1991a). Sleep deprivation is also a perpetuating factor and a medication will be needed for this, as well. Care must be taken to address all perpetuating factors with a combination of diet, physical therapy, exercise, mindwork, and medication.

Your patient will need a lot of help at first, while the perpetuating factors are brought under control. Don't expect results overnight. It took a long time for your patient to get in this position, and it will be a long, slow path to healing. Both fibromyalgia and myofascial pain syndrome are verified medical conditions (Wolfe, Smythe, Yunus, et al. 1990; Bennett 1987; Travell and Simons 1992; 1983, Simons, Travell and Simons 1998). There are no acceptable reasons for disbelief, and there are many therapies and treatments.

Begin therapies slowly. Due to the variations in FMS (many hormones and neurotransmitters are affected to different degrees) and MPS (there are many different trigger points), your patient will need time and attention. Initially, the patient may be able to tolerate nothing more than moist heat and passive stretching, and many pain medications. Because bodywork promotes the release of trapped toxins and wastes, feelings of fatigue and nausea may arise. These are indications that the patient must go slowly. At first, bodywork may not be tolerable more than once a week. The body must be given time to detox, with gentle, brief, non-repetitive stretching (when tolerated). Once restorative sleep has been regained, with adequate pain control and a proper diet, healing may proceed faster (Moldofsky 1994).

## Medication

Once you have found medications that adequately control your patient's pain symptoms, please don't withhold those medications. There is at present no cure for FMS. Once you find medications and therapies that successfully deal with the factors that are perpetuating your patient's symptoms, it is appropriate to allow them to remain on those medications and therapies, or the symptoms will reoccur (Andersen and Leikersfeldt 1996; Fishbain, Goldberg, Rosomoff, et al. 1991; Garcia and Altman 1997a).

Proper medication can give your patient the "breathing space" needed for body and mind to return to healthier states. Only after the perpetuating factors have been brought under control, the body has been detoxed, and the autonomic nervous system has returned from its hyperirritable state should you begin decreasing the dosages of the medications— one at a time—as the patient begins to feel that s/he can make do with less support.

## Myofascial Pain Syndrome (MPS)

Chronic Myofascial Pain Syndrome (MPS) is a musculoskeletal chronic pain syndrome. It is nonprogressive (although it may seem so), nondegenerative, and noninflammatory. It is composed of trigger points (TrPs), which refer pain and other symptoms in precise patterns. It seems progressive because each TrP can develop satellite and secondary TrPs, which can form secondaries and satellites of their own. With treatment of TrPs and the underlying perpetuating factors, the TrPs can be minimized or eliminated. Two excellent medical texts on MPS are available: *Myofascial Pain and Dysfunction: The Trigger Point Manual, Volume I* edition 2: The Upper Body (Simons, Travell and Simons 1998) and *Myofascial Pain and Dysfunction: The Trigger Point Manual, Volume II: The Lower Body* (Travell and Simons 1992). These texts tell you how to diagnose and treat MPS.

## FMS and MPS

FMS and MPS are separate and unique conditions that can form a synergistic, mutually perpetuating FMS & MPS Complex. This is a condition of interconnected symptom spirals that become increasingly worse until the spiral is interrupted. That is, the pain causes muscle contraction, which causes more pain, which causes more contraction, and so forth. Sometimes, due to myofascial splinting, the patient's muscles can feel like hardened cement. Each hard lump is a contraction knot. This consists of contracted sarcomeres. Compensating elongated sarcomeres most probably creates the ropy, taut band that forms. They produce a palpable tension to educated fingers (Simons 1997).

## Trigger Point (TrP) Pain

Trigger point pain is rarely symmetrical. If perpetuating factors exist, secondary TrPs may develop in muscles that must compensate for those muscles that have already been weakened by primary TrPs. In addition, satellite TrPs can occur in the pain referral zones of the primary TrPs. These secondary and satellite TrPs can then form secondaries and satellites of their own, giving the impression that the condition is progressive. The patient usually presents with complaints from the most recently activated TrP. When this is eliminated, the pain pattern may shift to an earlier TrP, which also must be inactivated. Trigger points are directly activated by acute overload, overwork fatigue, direct trauma, and chilling. Other TrPs, visceral disease, arthritic joints, and emotional distress also activate them indirectly. Active TrPs vary from hour to hour and day to day. The signs and symptoms of TrP activity long outlast the precipitating event. The chronic stress of the resultant sustained contraction, or excessive fatigue during repeated contractions, may cause a vulnerable region of the muscle to become strained, repeating this same process. One factor often initiates a TrP and another perpetuates it. Expect allodynia or hyperesthesia. Allodynia is a noxious response to nonnoxious stimuli, like feeling pain from light, cold, heat, touch, vibration, or sound. Hyperesthesia is an amplified sensation, especially of pain.

## Nerve Entrapment

When a nerve passes through a muscle between taut bands of myofascia, or when a nerve lies between the taut band and bone, the unrelenting pressure exerted on the nerve can produce neuropraxia, loss of nerve conduction, but only in the region of compression. The patient often has two causes of pain: aching pain, which is referred from the TrPs in the muscle, and the painful effects of nerve compression—numbness, tingling hypoesthesia, and, sometimes, hyperesthesia. Patients suffering from nerve entrapment prefer cold on the painful region. Patients with myofascial muscle pain prefer heat and report that cold aggravates their pain. Limitation of range of motion is worse in the morning, and recurs after periods of immobility or over activity during the day.

## Therapies

A muscle with active trigger points cannot be strengthened. The TrPs must be deactivated first. This can be accomplished by careful galvanic electrical stimulation, spray and stretch techniques using Travell and Simons' methods (1992; 1983), trigger point acupressure, and other modalities. These therapies often work well in concert. Work hardening and weight training will do nothing but create more pain and disability.

## Perpetuating Factors of Trigger Points

Common TrP perpetuating factors are:

- Skeletal asymmetry and disproportion
- Nutritional inadequacies
- Reactive hypoglycemia
- Paradoxical breathing
- Pain
- Impaired sleep
- Conditions impairing
- Muscle metabolism
- Head-forward posture
- Chronic infections
- Habits such as chronic gum chewing
- Other TrPs
- Visceral disease
- Arthritic joints
- FMS and other chronic illnesses
- Vitamin and mineral insufficiency
- Adhesions• previous surgeries
- Previous traumas
- Allergies
- Poor posture

Poor body mechanics  
Poor coping behaviours  
Lifestyle  
Smoking  
Alcohol consumption  
Stress  
Morton's foot  
FMS/MPS foot  
Short upper arms  
Short lower legs  
Unequal leg length  
Hypothyroid  
Psychological stress  
Ill-fitting shoes  
Ill-fitting furniture and car seats  
Hyper-mobility  
Repetitious exercise and work  
Overwork  
Immobility  
Inappropriate physical therapy

#### Autonomic Reactions and TrPs

Some trigger points may produce autonomic reactions, such as sweating, blanching, dizziness, and nausea. Treating the trigger point may relieve these autonomic responses. To become adept at the diagnosis and treatment of trigger points, you must become familiar with referral patterns and autonomic concomitants, as well as the trigger points (Simons 1987). Autonomic effect zones are not necessarily the same as pain referral zones. Trigger point sites can vary slightly from patient to patient. Many muscles have multiple TrP locations. The major factor in TrP pain is always mechanical, even if it was triggered by stress.

Each patient has a unique combination of neuroendocrine disruption and connective tissue disturbance. All patients need professionals who are willing to work with us until an acceptable symptom relief level is reached. For a clear and brief synopsis of myofascial trigger points, contact the Gebauer Company at 9419 St. Catherine Avenue, Cleveland, OH 44104, (800) 321-9348, and ask for the monograph Myofascial Pain Syndrome Due to Trigger Points by David Simons, M.D. For more information on FMS and/or MPS, you may contact Devin Starlanyl at <http://www.sover.net/~devstar>

#### References

- Andersen, S. and G. Leikersfeldt. 1996. Management of chronic non-malignant pain. *Br J Clin Pract* 50(6):324–330.
- Bendtsen, L., J. Norregaard, R. Jensen and J. Olesen. 1997. Evidence of qualitatively altered nociception in patients with fibromyalgia. *Arth Rheum* 40(1):98–102.
- Bennett, R. M. 1995. Fibromyalgia the commonest cause of widespread pain. *Comp Ther* 21(6):269–275.....1987. Fibromyalgia *JAMA* 257(20):2802–2803.
- Bennett, R. M., D. M. Cook, S. R. Clark, C. S. Burckhardt and S. M. Campbell. 1997. Hypothalamic-pituitary-insulin-like growth factor-I axis dysfunction in patients with fibromyalgia. *J Rheumatol* 24(7):1384–1389.
- Branco, J., A. Atalaia and T. Paiva. 1994 . Sleep cycles and alpha-delta sleep in fibromyalgia syndrome. *J Rheumatol* 21(6):1113–1117.

Crofford, L. J., N. C. Engleberg and M. A. Demitrack. 1996. Neurohormonal perturbations in fibromyalgia. *Baillieres Clin Rheumatol* 10(2):365–378.

Dubner, R. 1991. Basic mechanisms of pain associated with deep tissues. *Can J Physiol Pharmacol* 69(5):607–609.

Eisinger, J., A. Plantamura and T. Ayavou. 1994. Glycolysis abnormalities in fibromyalgia. *J Am Col Nutri* 13(2):144–148.

Fishbain, D. A., M. Goldberg, R. S. Rosomoff and H. Rosomoff. 1991. Completed suicide in chronic pain. *Clin J Pain* 7(1):29–36.

Garcia, J. and R. Altman. 1997. Chronic pain states: pathophysiology and medical therapy. *Semin Arth Rheum* 27(1):1–16.

Moldofsky, H. F. 1994. Chronological influences on fibromyalgia syndrome. Theoretical and therapeutic influences. *Baillieres Clin Rheumatol* 8(4):801–810.

Mountz, J. M., L. A. Bradley, J. G. Modell, R. W. Alexander, M. Triana-Alexander, L. A. Aaron, K. E. Stewart, G. S. Alarcon and J. D. Mountz. 1995. Fibromyalgia in women. Abnormalities of regional cerebral blood flow in the thalamus and the caudate nucleus are associated with low pain threshold levels. *Arthritis Rheum* 38:926–938.

Neeck, G. and W. Reidel. 1994. Neuromediator and hormonal perturbations in fibromyalgia syndrome: results of chronic stress? *Baillieres Clin Rheumatol* 8(4):763–775.

Russell, I. J. 1996. Neurochemical pathogenesis of fibromyalgia syndrome. 1996. *J Musculoskel Pain* 4(½):61–92.

Samborski, W., T. Stratz, T. Schochat, P. Mennet and W. Muller. 1996. Biochemical changes in fibromyalgia. *Z Rheumatol* 55(3):168–173 (German).

Scudds, R. A. 1998. Lecture: Fibromyalgia and Myofascial Pain: Differential Diagnosis and Differences. *Travell Seminar: Focus on Pain 1998, San Antonio, TX, March 13–15.*

Simons, D. G., J. G. Travell and L. S. Simons. 1998 *Travell and Simons Myofascial Pain and Dysfunction: The Trigger Point Manual vol I edition II, The Upper Body* Baltimore: Williams and Wilkins.

Simons, D. G. 1997. Myofascial trigger points: the critical experiment. *J Musculoskel Pain* 5(4):113–118

Travell, J. G. and D. G. Simons. 1992. *Myofascial Pain and Dysfunction: The Trigger Point Manual, Volume II: The Lower Body.*

....1983. *Myofascial Pain and Dysfunction: The Trigger Point Manual, Volume I: The Upper Body.* Baltimore: Williams and Wilkins (revision in process).

Wolfe, F., H. A. Smythe, M. B. Yunus, R. M. Bennett, C. Bombardier, D. L. Goldenberg, P. Tugwell, S. M. Campbell, M. Ables, P. Clark, et al. 1990. The American College of Rheumatology 1990 Criteria for the Classification of Fibromyalgia. Report of the Multicenter Criteria Committee. *Arth Rheum* 33(2):160–172.

Health care should be free to all the citizens. It is precious for us to be healthy because it will be difficult to prevail in the society if we are fragile. As you know, not everyone can afford medical/insurance. Think about all of the children out there who are sick, and the parents can't afford to take them to the hospital, they are buying them over the counter medicine, which isn't working, that child is getting deathly ill. Health care should be provided to those who do not have income, are homeless, and cannot support themselves, but if you want to add more taxes to the ballot, paying for your health care, firemen, law enforcement services, and so much more, let's do it! Also, when health care is free, people are more inclined to take their health for granted and not make any effort to take care of themselves. After all, why should they "inconvenience" themselves when if their unhealthy lifestyles leads to an illness, someone will just give them a magic, free pill and they can go back to their old habits. Yes and no. Not many health problems can't be avoided, but people do have a lot of influence over their health based on actions and choices they make. And many people go to the doctor for every little ache and pain and use more healthcare than they should, so there needs to be some burden on the individual. That's the problem with. Some people say that health care and education should be the responsibility of the government but others think that it is the responsibility of the individuals themselves. Discuss both views and give your opinion. Give reasons for your answer and include any relevant examples from your own knowledge or experience. You should write at least 250 words. Further, without proper education and sufficient health care system, a country can't develop. However, the government has the responsibility to create a healthy nation. For example, obesity, diabetes etc. Further, from the young age everyone should concern about their health. Especially people not only should think about the physical health but also consider the mental health. Teams working in health care and provide recommendations for practitioners for improving the effectiveness of health care teams. Salas\_5890\_c17\_main.indd 332 3/7/2013 4:37:37 PM. We begin by outlining the context of health care teams and their. We then review what we know about facilitating high performance in health care teams and key processes important for overcoming the complex challenges health care teams face, as well as some specific interventions and practical guidelines that have shown to enable team effectiveness. Health care organizations should therefore seek to create a culture of cooperative interdependence and collaboration between teams, emphasizing the shared nature of a superordinate.