What Your Mental Health Worker Should Know About FMS and CMP by Devin J. Starlanyl

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Please read "What Everyone on Your Health Care Team Should Know."

The combination of fibromyalgia syndrome (FMS) and chronic myofascial pain (CMP) can cause diagnostic confusion and complicate treatment. Central sensitization of FMS may be maintained by peripheral stimulation such as myofascial TrPs (Staud, Smitherman 2002; Borg-Stein 2002). Myofascial TrPs may be more painful due to the central sensitization of FMS. It is important that both conditions are addressed so that the cycle is interrupted. "The most aggressive challenges of the FMS concept have been from legal defenses of insurance carriers motivated by economic concerns. Other forms of critique have presented as psychiatric dogma, uninformed posturing, suspicion of malingering, ignorance of nociceptive physiology, and occasionally have resulted from honest misunderstanding" (Rau, Russell 2000). Fibromyalgia is real. Your patient may have multiple hormonal and autonomic imbalances, leading to profound physiological and clinical consequences (Adler, Manfredsdottir, Creskoff 2002). It should not be taken lightly. It's associated with dysautonomia (Raj, Bruillard, Simpson 2000). "Chronic imbalance of the autonomic nervous system is a prevalent and potent risk factor for adverse cardiovascular events, including mortality"(Curtis, O'Keefe 2002).

Myofascial trigger points (TrPs) are associated with autonomic concomitants, as well as proprioceptive disturbances (Simons, Travell, Simons 1999), and these and other TrP symptoms such as eye-twitching may be mistaken as psychogenic. Ask your patients about restricted range of motion with pain at the end of the motion, and the presence of nodules or painful lumps and ropy bands in their muscles. Some TrP symptoms mimic neurological disorders (Simons, Travell, Simons 1999), and FMS symptoms can as well. Patients with specific patterns of referred pain, indication of nerve, lymph, or blood vessel TrP entrapment, or proprioceptive disturbances should be evaluated for CMP. Patients with diffuse body wide aches of long duration, and with allodynia and/or hyperalgesia should be evaluated for FMS (Starlanyl, Copeland 2001).

Think about how you would feel if you were no longer able to practice your profession . . . if you lost the ability to control your muscles, and sometimes even to think clearly . . . if you couldn't function in your family role . . . if you were in severe pain, and your ankles were buckling, and you couldn't even pick up a glass of water without spilling it, and yet your family, your friends and even your doctors thought you were crazy because you looked okay. This is what life is like for many

people with FMS and CMP. Acute pain that diminishes in the course of healing is something most of us can endure. Recurrent or persistent pain, especially when its cause is not recognized, can be intolerable (Gritchnik and Ferrante 1991; Hitchcock, Ferrell and McCaffery 1994). It can lead to frustration, depression, and progressive disability. There is no specific personality type for patients with CMP (Nelson, Novy 1996) or FMS (Johannson 1993). These and many other studies indicate that "emotional disturbance in pain patients is more likely to be a consequence than a cause of chronic pain"(Gamsa 1990).

Cognitive complaints are common in many chronic pain states. In FMS, these deficits are often called "fibrofog" and have been documented (Park, Glass, Minear et al. 2001). Free-floating anxiety, panic attacks, rapid mood swings, irritability without known cause, difficulty concentrating, inability to recognize familiar surroundings can all part of fibrofog and may be due to neurotransmitter imbalance, but may be complicated by many factors. Pain processing eats up thought processing networks and thus interferes with thinking, reasoning, and remembering (Grisart and Plaghki, 1999). Pain can disrupt cognitive performances that depend on intact speed and capacity of information processing (Grigsby, Rosenberg, Busenbark 1995). Fibromyalgia can cause slowed psychomotor speed in tasks that require sustained effort (Landro, Stiles, Sletvold 1997). "Sensory overload" is what I call the sense that information and other stimuli are coming so fast the brain can't handle it. Some patients may go into a fugue state at this point, staring into space until the brain integrates the information. This can even happen during a conversation, mid-sentence. Simple tasks such as putting on socks can be interrupted by fugues, but the patient can often be taught to recognize them and push a mental reset button to resume activities or learn to close down some sensory input such as shutting off the radio or avoiding crowds and cities.

Patients may forget to do tasks they require to minimize physical symptoms. That, plus the additional stress brought about by fibrofog, can lead to flare. Although flare is part of FMS, myofascial TrPs can be activated or new ones can form at this time. Existing symptoms worsen, new symptoms may appear, and patients may require extra support, including bodywork and medication, until the central nervous system calms down. Perpetuating factors must be identified and brought under control. Confusional states may be compounded by coexisting reactive hypoglycemia (RHG) (Hvidberg, Fanelli, Hershey, et al. 1996; Blackman, Towle, Lewis, et al. 1990; McCrimmon, Deary, Huntly, et al. 1996), a common perpetuator of both FMS and CMP. Chronic stimulation of the HPA axis, usually part of FMS, may contribute to the development of insulin resistance (Farias-Silva, Sampaio-Barros, Amaral et al. 2002). Check for the possible presence of RHG, insulin resistance or metabolic syndrome by asking about your patient's diet and response to carbohydrates. If present, these conditions require immediate diet modification. In these cases, ensure sufficient protein intake and avoidance of excess carbohydrates in all meals and snacks.

Fibrofog frustration can be doubly difficult for your patient because under its influence, the art of self-expression may be lost or damaged. Difficulty getting out known words, especially nouns and pronouns, difficulty distinguishing right from left and/or difficulty finding places or following directions and sequencing are common, as well as difficulty multitasking. Myofascial TrPs in the laryngeal muscles can create a slow, "halted" speech pattern, or garble sounds. Activation of other TrPs can cause the patient to appear clumsy, drop objects, or even fall down.

If your patient doesn't show up on time for an appointment, it doesn't necessarily signify that s/he is noncompliant. Your patient may simply be in a confusional state. Try to schedule appointments at the best time of day for the patient, and the same time every time, and teach patients with timing difficulties some memory aids. Patients experiencing fibrofog often take a hefty amount of abuse from people who are unaware of the reason behind their confused state of mind. Neurotransmitters are imbalanced in FMS (Russell 1996) and in the endocrine system as well (Pillemer, Bradley, Crofford, et al. 1997). Too little serotonin may cause depression, but there may be many neurotransmitters, hormones and other informational substances imbalanced in FMS, and each of them can affect many others. Many of these informational imbalances may cause symptoms that appear psychological, and this *may* be part of the picture, but they may have a physiological basis as well.

Many patients with FMS and/or CMP have had repetitive trauma. Emotional symptoms as well as brain function may be affected whenever the cervical spine has been injured (Radanov, Bicik, Dvorak et al.1999). It doesn't take a major auto accident to cause significant damage. Some brain-disconnects are a consequence of the trauma and not psychological at all (Radanov, Begre, Sturzeneggar et al. 1996).

Some researchers believe that impaired mental function in FMS is daytime sleepiness causing fatigue, in addition to the distraction of persistent pain (Cote, Moldofsky, 1997). Waking up feeling tired and unrefreshed may be a symptom of fragmented sleep disorder, which is common in FMS (Drewes, Gade, Nielsen et al.1995). Sleep deficit can further imbalance the HPA axis stress response (Meerlo, Koehl, van der Borght et al. 2002), so it is vital that this perpetuating factor be addressed. It is not enough that your patients spend eight hours in bed. When they wake, they need to have experienced restorative sleep. Question your patients carefully about sleep quality as well as quantity. They may need medication to regain restorative sleep, and it may take a while to find the right combination of medications, good sleep hygiene and diet that will allow this.

Stress *glucocorticoids* affect memory acquisition and consolidation processes, as well as memory retrieval mechanisms (de Quervain, Roozendaal, and McGaugh, 1998). As the stress level goes up, fibrofog may rise. A few days of high cortisol levels at concentrations associated with physical and psychological stress can

reversibly affect specific kinds of memory performance in even healthy individuals (Newcomer, Selke, Melson et al.1999). Stress itself can be a major perpetuating factor for both FMS and CMP. Ask about over-the-counter supplements as well as prescribed medication, as they may have a profound psychological impact. For example, inositol may be of benefit for people with FMS and thyroid resistance but should not be taken patients who also have bipolar disorder because it will reverse the actions of lithium, carbamazepine and valproic acid (Williams, Cheng, Mudge et al. 2002).

Fibromyalgia is a disorder of the central nervous system (CNS). "Treatments for FMS should focus on interventions with direct or indirect effects on CNS functions that influence pain sensitivity" (Bradley, McKendree-Smith, Alarcon et al. 2002). The most intensively studied medications that modulate neurotransmitters are psychoactive drugs. This does not mean that the patient's condition is psychological. Take time to explain this to your patients. A written handout that the patient may show family members may be helpful to promote understanding. Fibromyalgia patients usually need medication to help do what their bodies are not doing by themselves, just as diabetics may need insulin. More central acting medications that may be helpful to FMS patients are under development (Suzuki, Dickenson 2002). Patients with these conditions are often significantly under medicated for pain. The patient may pay for their doctor's lack of current common chronic pain management practice. "Significant knowledge deficits regarding currently accepted principles of pain management practice as well as beliefs that could interfere with optimal care, mandate a need for educational interventions.... Unwarranted fear of addiction is a misunderstood and important concept that needs to be addressed" (Lebovits, Florence, Bathina et al. 1997).

Patients with FMS and CMP have symptoms that may be difficult to unravel and may take time and patience, but you can make a major impact on their lives. This can result in a "take up your bed and walk" phenomenon, and that is a rare enough experience in the medical world. Let's make it more common.

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