

What Your Pharmacist 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."

Every patient with fibromyalgia (FMS) and/or chronic myofascial pain (CMP) needs a trustworthy pharmacist to coordinate medications and keep her/him informed. FMS 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 the patient's condition is psychological. Explain this to your patients. FMS patients need medication to help do what their bodies are not doing, just as some diabetics need insulin. Many patients with FMS and CMP look healthy, but their suffering may be great. People with FMS may have to try many medications before they find the most effective combination with the least objectionable side-effects. These patients need medical team members who are willing to keep trying until an acceptable symptom relief level is reached and as much function as possible is restored.

The Central sensitization of FMS may be maintained by peripheral stimulation, such as pain from myofascial TrPs (Staud, Smitherman 2002; Borg-Stein 2002). Myofascial TrPs may be more painful because of amplification from FMS. FMS patients often have multiple hormonal and autonomic imbalances leading to profound physiological and clinical consequences (Adler, Manfredsdottir, Creskoff 2002). "Chronic imbalance of the autonomic nervous system is a prevalent and potent risk factor for adverse cardiovascular events, including mortality"(Curtis, O'Keefe 2002). Dysautonomia is associated with FMS, and medications may target that component (Martinez-Lavin 2002). Central action drugs may be effective for multiple FMS symptoms (Suzuki, Dickenson 2002).

Patients with one or both conditions often have other co-existing conditions that act as perpetuating factors. To control the symptoms of FMS and/or CMP, the perpetuating factors must be brought under control. Health care team members often don't always communicate with each other, and your role is critical. Most of these patients are on many medications, and they may also be taking many OTC medications and supplements. Some of these medications can interact unpleasantly. For example, Soma (carisoprodol) can react with niacin if taken at the same time, producing nausea and a painfully hot flush and rash. Inositol may be of benefit for people with FMS and thyroid resistance, but should not be taken by patients who also have bipolar disorder, because it reverses the actions of lithium, carbamazepine and valproic acid (Williams, Cheng, Mudge et al. 2002).

People with FMS tend to react unusually to medications. In some cases, especially if the new medication is expensive, you may want to suggest the option of filling a partial prescription to see if it can be tolerated.

Each FMS patient may have different imbalances in hormones, neurotransmitters, peptides and other informational substances. There is no "cookbook recipe" for FMS. What works well for one can be ineffective for another. A medication that puts one person to sleep may keep another awake. There is a subset of patients who find medications such as Benadryl, Ultram, Pamelor and Paxil stimulating and can only take them in the morning, if at all.

Some generic medications may not work for FMS patients. One generic brand may work for one patient, and another may not. "The FDA considers two formulations as bioequivalent when the rate of adsorption varies no more than -20% or +25% (Banahan, Kolassa 1997). The CNS is hypersensitive in FMS, so these differences may be magnified. The differences between generics and brand names may be significant. Ask these patients about multiple chemical sensitivities. Some may be lactose intolerant and can't deal with even lactose fillers. Some patients may have malabsorption problems and do better with topical medications. These may need prescriptions filled by a compounding pharmacist. The prescribing doctor may be unaware of these options. FMS patients may appear confused at times due to cognitive deficits that come with chronic pain. They may need written clarification about dosage times and amounts and may need to use aids such as pill holders to remember what pills they have taken each day.

Patients with FMS and/or CMP may need stronger pain medications during an FMS "flare." In flare, existing symptoms worsen, new symptoms may appear, and patients require extra support, including bodywork and medication, until the CNS calms down. Any stressor, such as infection, overwork or trauma, can bring on flare. Flare is part of FMS, but myofascial TrPs can be activated or new ones can form at this time. Extra medications may be needed during stressful times, such as travel, during infections, or for medical procedures or therapies that may be painful, to avoid sensitizing an already over-sensitized CNS. Once the CNS calms down, medications and other support should return to former levels.

Studies indicate that "emotional disturbance in pain patients is more likely to be a consequence than a cause of chronic pain"(Gamsa 1990). Maintenance with mild narcotics (Darvocet, Tylenol #3, Vicodin-Lorcet-Lortab) for nonmalignant chronic pain conditions is a logical, humane alternative if other reasonable attempts at pain control have failed. The main problem with raised dosages of these medications is not with the narcotic components per se, but with the aspirin or acetaminophen that is often compounded with them. There can be serious side effects with NSAID usage (Gardner and Simpkin 1991). Narcotic analgesics are sometimes more easily tolerated than NSAIDs (Reidenberg and Portenoy 1994). Neither FMS nor CMP is inflammatory. Anti-inflammatory medications may contribute to malabsorption in the gut, a common perpetuating factor. NSAIDs

may disrupt stage 4 sleep, and many FMS patients already have fragmented sleep. Prolonged use of narcotics may result in physiological changes affecting tolerance or physical dependence (withdrawal), but these are not the same as psychological dependence (addiction). "The trend to increasing medical use of opioid analgesics to treat pain does not appear to contribute to increases in the health consequences of opioid analgesic abuse"(Jornason, Ryan. Gilson et al. 2000).

Patients with these conditions are often significantly under-medicated for pain. "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). These patients are taking the medications to increase function and for symptom relief. The level of medication should not be rising steadily. That is a sign that the perpetuating factors are not being treated properly and/or that the level of pain relief is not adequately treated with the current medication.

References

- Adler G.K, Manfredsdottir V.F., Creskoff F.W. 2002. Neuroendocrine abnormalities in fibromyalgia. *Curr Headache Rep* 6(4):289-98.
- Banahan, B.F. 3rd and E.M. Kolassa. 1997. A physician survey on generic drugs and substitution of critical dose medications. *Arch Intern Med* 157(18):2080-2088.
- 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.
- Borg-Stein J. 2002. Management of peripheral pain generators in fibromyalgia. 2002. *Rheum Dis Clin North Am* 28(2):305-17.
- Bradley L. A., McKendree-Smith N.L., Alarcon G.S. et al. 2002. Is fibromyalgia a neurologic disease? *Curr Pain Headache Rep* 6(2):106-14.
- Curtis B.M., O'Keefe J.H. Jr. 2002. Autonomic tone as a cardiovascular risk factor: the dangers of chronic fight or flight. *Mayo Clin Proc* 398-9; 77(1):7-9.
- Gamsa, A. 1990. Is emotional disturbance a precipitator or a consequence of chronic pain? *Pain* 42(2): 183 195.
- Gardner, G.C. and P.A. Simpkin. 1991. Adverse Effects of NSAIDs. *Pharm Ther* 16:750-754.
- Jones, R.C. 1996. Fibromyalgia: misdiagnosed, mistreated and misunderstood? *Am Fam Phys* 52(1):91-92.
- Jornason D.E., Ryan K.M. Gilson A.M. et al. 2000. *JAMA* 283(13):1710-4.
- Lebovits, A.H., I. Florence, R. Bathina, et al.1997. Pain knowledge and attitudes of healthcare providers: practice characteristic differences. *Clin J Pain* 13(3):237-243.
- Martinez-Lavin M. 2002. Management of dysautonomia in fibromyalgia. *Rheum Dis Clin North Am* 28(2):379-87.
- Reidenberg, M.M. and R.K. Portenoy. 1994. The need for an open mind about the treatment of chronic nonmalignant pain. *Clin Pharmacol* 55(4):367-369.
- Staud R., Smitherman M.L. 2002. Peripheral and central sensitization in fibromyalgia: pathogenic role. *Curr Pain Headache Rep* 6:259-266.

Suzuki R., Dickenson A.H. 2002. Neuropharmacologic targets and agents in fibromyalgia. *Curr Pain Headache Rep* 6(4):267-73.

Williams R.S., Cheng L., Mudge A.W. et al. 2002. A common mechanism of action for three mood-stabilizing drugs. *Nature* 417(6886):292-295.