

# **What Your Eye Doctor Should Know About FMS and CMP**

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

Fibromyalgia (FMS) may affect eyesight, and many myofascial TrPs can cause optical symptoms. This can confuse diagnosis and treatment, especially if there is body-wide chronic myofascial pain (CMP) in addition to FMS. Fibromyalgia tends to amplify symptoms of co-existing conditions, as the central nervous system is in a state of central sensitization. Not only hyperalgesia but also allodynia may occur. Normally nonpainful stimuli, such as light, can evoke pain. Since the hypothalamic-pituitary-adrenal axis may be one of the first to unbalance in FMS, part of this sensitivity may be due to a connection between the hypothalamus and light sensitivity. Many people with FMS and CMP have difficulty driving at night. The lights of the oncoming cars are painful or distracting. Beta-carotene seems to help this in some cases. It may be due to altered reactivity of the pupils, which is under neurotransmitter control.

FMS patients often have sicca syndrome, or symptoms that mimic Sjogren's syndrome (Price, Venables 2002). Coupled with the FMS sensitivity to and amplification of pain, this may cause intolerance of contact lenses. The dryness, irritation, sensitivity, and the allergies often prove too much to handle. Yet the weight of glasses can aggravate myofascial trigger points (TrPs) in the head and neck area. After a regimen of eye exercises and medication (especially guaifenesin), some people with both FMS and CMP have been able to wear contact lenses for the first time. Thick secretions in the eyes, with accretions at the corner of the eye, may occur in patients with fibromyalgia. Myofascial TrPs may constrict tear ducts as well as nerves and blood vessels. There is a study indicating eye motility dysfunction in FMS (Rosenhall, Johannson and Orndahl 1996). This all needs to be taken into consideration in differential diagnosis.

Fibromyalgia is not homogeneous (Sorensen, Bengtsson, Ahlner et al. 1997; Eisinger, Starlanyl, Blotman et al 2000). The flickering of fluorescent lights as they wear out can be difficult for some FMS patients to tolerate. Patients have reported varying responses ranging from very mild irritation and disquiet to near seizure and petit-mal-type fugue states. This may be similar to "video-game epilepsy", which is not unique to FMS. FMS sensations are simply amplified. One study found that 50% of photosensitive patients are also sensitive to a 50-Hz television flicker (Kasteleijn-Nolst Trenite, da Silva, Ricci et al. 1999). Some people with this sort of sensitivity may do well on Neurontin and other centrally-acting medications.

Sternocleidomastoid (SCM) TrPs can cause redness and tearing of the eye (Simons, Travell and Simons, 1999). Artificial tears may be a big help temporarily, but the patient must have the TrPs treated and the perpetuating factors identified and brought under control. An artificial tears formula that can be safely stored in the refrigerator allows the patient to enjoy the mechanical effect of the cold to help constrict swollen red vessels. Some people with FMS may develop sensitivity to some anesthetic eye drops.

Myofascial TrPs in the SCM muscle may cause sensitivity to patterns of light and dark, such as stripes, checks, or even shadows on the road. Some patients have reported becoming dizzy to the point of falling, just from looking at patterns of light and dark. Some patients even vomit. This can happen in fabric stores, around escalators, or even around conveyor belts. Even certain floor patterns can cause dizziness, or watching airport carousels.

Some of this is due to the proprioception disturbances which are well documented (Simons, Travell and Simons 1999). There may also be a proprioceptive component in many or most cases of FMS. Proprioceptor dysfunction may be associated with *any* TrP. Clumsiness is often due to a combination of internal eye muscle TrPs, FMS lack of optical accommodation, and SCM TrPs. Look for the patterns. SCM TrPs can cause any (or all) of the following problems: dizziness, imbalance, neck soreness, a swollen glands feeling, runny nose, maxillary sinus congestion, tension headaches, eye problems (tearing, bug-eyes, blurred or double vision, inability to raise the upper eyelid, dimming of perceived light intensity), spatial disorientation, postural dizziness, vertigo, sudden falls while bending, unintentional veering while you walk, staggering walk, impaired sleep, nerve impingement, and disturbed weight perception. This last symptom can result in spilling food and drink, and throwing an object across the room when you are just trying to pick it up. These symptoms can include a feeling of continued movement in a car after stopping, and the feeling of tilted "banking" as the car turns corners.

Any of the muscles that hold the eyeballs in place can develop TrPs, causing double vision, blurry vision, or changing vision. They may profoundly influence proprioception (Buttner-Ennever, Horn 2002). The TrPs cause the muscles to contract. If these muscles are being contracted asymmetrically by TrPs, vision irregularities result. The culprits may be TrPs in the extrinsic eye muscles, the SCM, trapezius, temporalis, or cutaneous facial muscles. Simple eye exercises can help relieve this problem. Warn your patients that the eye exercises should be started gently and only done once a day. Repetitive exercises should not be done for TrPs. They will only make the TrPs worse, because the muscle is already contracted physiologically. They must be stretched gently and lengthened before they can be strengthened. The first time your patient tries to roll the eyes upward, looking into each "corner" of the eye and stretching the muscles, s/he may experience pain or headache. That is a sign that the TrPs are present, and must be approached carefully.

Tell your patient to do this: To check the inner eye muscles, stretch them. Put one hand on your head, above your forehead. Then try to look at that hand. This shouldn't hurt. If it does hurt, the TrPs are telling you they are there. With your eyes still looking upward at your hand, look from one upper corner of your eye to the other. If this hurts, the TrPs are there, and that's at least part of what is causing your eye problem. The eye exercises stretch out eye muscle TrPs.

Once your patient does this simple eye exercise regularly, the mysterious changing vision problem often disappears. TrPs in the splenius cervicis muscles can cause blurring of near vision, as well as pain in the side of the head to the eye on same side, and in the eye orbit. It is helpful to discuss your patient's reading habits. Incorrect lighting can give rise to TrPs (Simons, Travell and Simons 1999). Cutaneous facial TrPs can cause pain in your ears, eyes, nose, and teeth. These TrPs are shallow, and can occur anywhere on the face. Teach your patient some gentle pressure-point work for the face. If the TrPs are there, the patient will let you know.

The orbicularis oculi cutaneous facial TrPs refer pain to the nose and cheek and above the eye, and cause jittery letters when you try to read. The words seem to jump off the page or disappear when you stare at them. Putting clear plastic over the page to decrease print contrast may help with this problem.

Asymmetry is a common perpetrator of TrPs. Check to see if your patient's ears are misaligned. Ensure that glasses fit well. Asymmetry may also be caused by myofascial TrPs. Check all of your patients medications. Recent research indicates that the combination of melatonin, Zoloft and a high protein diet may cause optic neuropathy (Lehman, Johnson. 1999). Many patients with these conditions have metabolic syndrome or insulin resistance, and may be eating more protein. They also may be on melatonin for sleep and Zoloft for FMS.

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