



**Libyan International Medical University**  
**Faculty of Basic Medical Science**



**The Effect of Fibromyalgia on Vision**

**Submitted by:** Hadil Khaled Ellafi, Student, Faculty of Basic Medical Sciences, Libyan International Medical University.

**Supervisor:** Dr. Mustafa El-Sewi, Tutor, Faculty of Basic Medical Sciences, Libyan International Medical University.

**Date of Submission:** 25/3/2017.

Report submitted to fulfil the requirements of the musculoskeletal block in the 2<sup>nd</sup> year of Basic Medical Sciences in the Libyan International Medical University.

## **Abstract:**

Fibromyalgia is a syndrome characterized by chronic widespread pain at multiple tender points, joint stiffness, and systemic symptoms (e.g., mood disorders, fatigue, cognitive dysfunction, and insomnia) without a well-defined underlying organic disease. One of the areas that is commonly overlooked in fibromyalgia patients is the eye. The eye contains six muscles and therefore it should come as no surprise that it is commonly affected leading to visual problems in most patients. Even though it is agreed that visual problems are a common symptom in fibromyalgia, the chronicity and the causes are still debatable. Most have agreed that due to fibromyalgia affecting the nervous system, it will also affect the nerves in the eyes; causing them to deteriorate and leading to symptoms like diplopia and dry eyes. These symptoms may only be simple but will certainly be aggravated by another underlying condition or medication. Others have argued that these symptoms only exist as a side effect of the medication prescribed to the patients to relieve the other symptoms associated with fibromyalgia. This report is aimed to compare between these three different opinions.

## **1. Introduction:**

**1.1 Definition:** Fibromyalgia is a clinical syndrome characterized by chronic widespread pain in the muscles, tendons and ligaments of the body. Despite this well-known symptom, fibromyalgia patients often complain from further problems associated with sleep, fatigue, clear thinking (fibro-fog), and psychological distress. Fibromyalgia patients also complain from multiple problems concerning their vision as the syndrome affects the muscles of the eyes also, leading them to have blurry vision, diplopia, dry eyes and photosensitivity.

**1.2 Causes:** The etiology of fibromyalgia is still unclear: if central sensitization is considered to be the main mechanism involved, then many other factors, genetic, immunological, and hormonal, may play an important role.

**1.3 Clinical Examination:** The diagnosis is typically clinical (there are no laboratory abnormalities).<sup>(1)</sup>

## **2. The Effect of Fibromyalgia on the Eye:**

Symptoms of fibromyalgia extend to affect the eyes, in some researches the symptoms in the eyes are considered simple and can sometimes be overlooked. One may experience blurred or impaired vision and double vision can occur while one is trying to focus on one object. Another symptom of fibromyalgia is dry eyes. When the eye muscles cannot properly function, the eye cannot properly lubricate itself. These vision problems could start just at night while driving in the dark, one may feel their eyes straining to see road signs, or squinting to see the lines on the road.<sup>(2)</sup>

However, in other researches, they are considered to be extreme. Patients can commonly experience symptoms of eye pain, sensitivity to light, blurred vision and fluctuating visual clarity, difficulty focusing, visual overload, and dry eyes.

Another more unusual symptom, but one which can be extremely frightening, is the sudden appearance of flashing lights or zigzag patterns across your vision. However, flashing

symptoms are more common in patients who experience migraines but can still occur without the headache 'aura'.<sup>(3)</sup>

### **There is a debate about the reasons as to why these symptoms occur:**

Dr. Devin Starlanyl explained in her book *The Fibromyalgia Advocate*, that in order for vision to be clear, both eyes must take the same picture at the same time. When this doesn't happen, double vision, blurry vision, and/or changing vision can result. Misalignment of the eyes can be caused by trigger points interfering with the muscles that hold the eyeballs in place. Trigger points can be responsible for contracting these muscles at different tensions. Muscle fatigue would make things worse.

The commonly reported symptom of dry eyes by people with fibromyalgia has led to the suggestion of a possible link with the autoimmune disorder, Sjögren's syndrome. Here the body's immune system attacks the moisture producing glands, like the tear glands and salivary glands, leading to symptoms of dry eyes, that can feel itchy, gritty or burning, and a dry mouth, which can affect talking, chewing and swallowing.<sup>(4)</sup>

However, a research study carried out at Eberhard-Karls University in Tübingen, Germany by Dr Koetter and colleagues assessed a group of 285 people with fibromyalgia for the symptoms of dry eyes and the possible presence of Sjögren's syndrome. They reported that 40 of these participants experienced dry eyes (sicca) but only 15 could be shown to have Sjögren's. The research group suggested that it could be the presence of chronic blepharitis (inflammation of the eyelids) and the use of tricyclic antidepressants that may play a role in developing sicca symptoms.

Dr Mark Pellegrino -a medical expert in fibromyalgia who's based in Canton, Ohio and has diagnosed and treated over 20,000 people with fibromyalgia- argues that tricyclic antidepressants can certainly aggravate a pre-existing problem, but dry eyes are unlikely to be a medicine side effect. Secondly, he suggests that within the fibromyalgia spectrum there is a subset of patients who have autoimmune dysfunction and therefore are more likely to experience 'autoimmune' symptoms like allergies, chemical sensitivities, frequent infections and dry eyes.<sup>(3)</sup>

### **Conclusion:**

Finally, from the previous studies it has been concluded that even though the chronicity and causes of visual problems in fibromyalgia are still up to debate, they certainly do exist. Most probably these are caused by defects that happen to the nervous system affecting the muscles and nerves of the eyes and contradicting with their functions. These symptoms will certainly be aggravated by any other underlying disease and the medication prescribed to relieve the other fibromyalgia symptoms.

### **Recommendation:**

- Before treating the patient for fibromyalgia, the doctor should check for any other underlying conditions and work to relieve them.
- In addition, they continue to check up with their patients to see if their medication is helping them, or causing other problems.

## References:

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