# Fibromyalgia

### Excerpt from <a href="http://www.canada-health.ca">www.canada-health.ca</a>:

Understanding fibromyalgia Giancarlo La Giorgia

Fibromyalgia fie•bro•my•AL•ja

The name "fibromyalgia," translated as "fibrous tissue muscle pain," is misleading. While it was once believed that the condition involved the muscles and tissues of the body, scientists and doctors now know that it is actually related to how the brain perceives pain. The preferred description for fibromyalgia today is "chronic widespread pain."

Fibromyalgia can strike out of the blue, and the pain, fatigue and depression associated with it can be debilitating. While treatment options were once limited, research holds new promise for people living with this mysterious and often misunderstood condition.

Fibromyalgia is a central nervous system disorder characterized by pain which seems to be in the muscles, ligaments and tendons throughout the body, accompanied by tenderness to the touch and fatigue. People with the condition may also have trouble sleeping and experience mood disorders. Other associated symptoms can include the following: memory and cognitive difficulties, headaches, weight fluctuations, abdominal or bladder complaints, ear-nose-throat complaints, allergic symptoms, morning stiffness, hearing, vision and balance abnormalities, and heart palpitations. The condition affects about 2%–4% Canadians, most of them women over age 40.

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# Clinical endocannabinoid deficiency (CECD): can this concept explain therapeutic benefits of cannabis in migraine, fibromyalgia, irritable bowel syndrome and other treatment-resistant conditions?

<u>Russo EB</u>. **Source** 

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#### Abstract OBJECTIVES:

This study examines the concept of clinical endocannabinoid deficiency (CECD), and the prospect that it could underlie the pathophysiology of migraine, fibromyalgia, irritable bowel syndrome, and other functional conditions alleviated by clinical cannabis.

#### **METHODS:**

Available literature was reviewed, and literature searches pursued via the National Library of Medicine database and other resources.

#### **RESULTS:**

Migraine has numerous relationships to endocannabinoid function. Anandamide (AEA) potentiates 5-HT1A and inhibits 5-HT2A receptors supporting therapeutic efficacy in acute and preventive migraine treatment. Cannabinoids also demonstrate dopamine-blocking and anti-inflammatory effects. AEA is tonically active in the periaqueductal gray matter, a migraine generator. THC modulates glutamatergic neurotransmission via NMDA receptors. Fibromyalgia is now conceived as a central sensitization state with secondary hyperalgesia. Cannabinoids have similarly demonstrated the ability to block spinal, peripheral and gastrointestinal mechanisms that promote pain in headache, fibromyalgia, IBS and related disorders. The past and potential clinical utility of cannabis-based medicines in their treatment is discussed, as are further suggestions for experimental investigation of CECD via CSF examination and neuroimaging.

## CONCLUSION:

Migraine, fibromyalgia, IBS and related conditions display common clinical, biochemical and pathophysiological patterns that suggest an underlying clinical endocannabinoid deficiency that may be suitably treated with cannabinoid medicines.

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# P02-251 Fibromyalgia and cannabinoids: Emerging issues

N. Madeira, J. Cerejeira, C. Miguel, M. Matos, S. Santo, P. Carriço, M.J. Quartilho Psychiatric Clinic, Coimbra University Hospital, Coimbra, Portugal http://dx.doi.org/10.1016/S0924-9338(09)71174-5, How to Cite or Link Using DOI Permissions & Reprints

Fibromyalgia is a chronic disorder characterized by widespread and longlasting pain, tenderness, and fatigue. It is associated with impaired quality of life, and significant social and health burden.

The etiopathogenesis of this condition is presently undefined, but is probably multifactorial. The hypothesis of a clinical endocannabinoid deficiency has been proposed. In fact, recent studies suggest that synthetic cannabinoids might be an effective therapy in patients with fibromyalgia.

Based on the clinical case of a female patient whose cannabis use was related to symptomatic relief of fibromyalgia, the authors review issues concerning the endocannabinoid system, its possible relation to this challenging pain disorder, and therapeutic possibilities with synthetic cannabinoids.

http://www.sciencedirect.com/science/article/pii/S0924933809711745

Br J Clin Pharmacol. 2011 Nov;72(5):735-44. doi: 10.1111/j.1365-2125.2011.03970.x. Cannabinoids for treatment of chronic non-cancer pain; a systematic review of randomized trials.

Lynch ME, Campbell F. Source

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#### Abstract

Effective therapeutic options for patients living with chronic pain are limited. The pain relieving effect of cannabinoids remains unclear. A systematic review of randomized controlled trials (RCTs) examining cannabinoids in the treatment of chronic non-cancer pain was conducted according to the PRISMA statement update on the QUORUM guidelines for reporting systematic reviews that evaluate health care interventions. Cannabinoids studied included smoked cannabis, oromucosal extracts of cannabis based medicine, nabilone, dronabinol and a novel THC analogue. Chronic non-cancer pain conditions included neuropathic pain, fibromyalgia, rheumatoid arthritis, and mixed chronic pain. Overall the quality of trials was excellent. Fifteen of the eighteen trials that met the inclusion criteria demonstrated a significant analgesic effect of cannabinoid as compared with placebo and several reported significant improvements in sleep. There were no serious adverse effects. Adverse effects most commonly reported were generally well tolerated, mild to moderate in severity and led to withdrawal from the studies in only a few cases. Overall there is evidence that cannabinoids are safe and modestly effective in neuropathic pain with preliminary evidence of efficacy in fibromyalgia and rheumatoid arthritis. The context of the need for additional treatments for chronic pain is reviewed. Further large studies of longer duration examining specific cannabinoids in homogeneous populations are required.

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