

### Fibromyalgia

[Fibromyalgia](#) (FM) is a chronic pain syndrome of unknown etiology. The disease is characterized by widespread musculoskeletal pain, fatigue and multiple tender points in the neck, spine, shoulders and hips. An estimated 3 to 6 million Americans are afflicted by fibromyalgia, which is often poorly controlled by standard pain medications.

Fibromyalgia patients frequently self-report using cannabis therapeutically to treat symptoms of the disease,<sup>1-4</sup> and physicians – in instances where it is legal for them to do so – often recommend the use of cannabis to treat musculoskeletal disorders.<sup>5-6</sup> To date, however, there are few clinical trials assessing the use of cannabinoids to treat the disease.

Writing in the journal *Current Medical Research and Opinion*, investigators at Germany's University of Heidelberg evaluated the analgesic effects of oral THC in nine patients with fibromyalgia over a 3-month period. Subjects in the trial were administered daily doses of 2.5 to 15 mg of THC and received no other pain medication during the trial. Among those participants who completed the trial, all reported a significant reduction in daily recorded pain and electronically induced pain.<sup>7</sup>

Another study published in *The Journal of Pain* reported that the administration of the synthetic cannabinoid nabilone significantly decreased pain in 40 subjects with fibromyalgia in a randomized, double-blind, placebo-controlled trial. "As nabilone improved symptoms and was well-tolerated, it may be a useful adjunct for pain management in fibromyalgia," investigators concluded.<sup>8</sup> A separate 2010 trial performed at McGill University in Montreal reported that low doses of nabilone significantly improved sleep quality in patients diagnosed with the disease.<sup>9</sup> However, a recent literature review has criticized these papers as being relatively low quality.<sup>10</sup>

A 2011 observational, case-control trial reported that the use of whole-plant cannabis is associated with beneficial effects on various symptoms of fibromyalgia, including the relief of pain and muscle stiffness. Investigators at the Institut de Recerca Hospital del Mar in Barcelona, Spain assessed the associated benefits of cannabis in patients with fibromyalgia compared with FM patients who did not use the substance. Twenty-eight users and non-users participated in the study.

Authors reported: "Patients used cannabis not only to alleviate pain but for almost all symptoms associated to FM, and no one reported worsening of symptoms following cannabis use. ... Significant relief of pain, stiffness, relaxation, somnolence, and perception of well-being, evaluated by VAS (visual analogue scales) before and two hours after cannabis self-administration was observed." Cannabis users in the study also reported higher overall mental health summary scores than did non-users. Investigators concluded: "The present results together with previous evidence seem to confirm the beneficial effects of cannabinoids on FM symptoms."<sup>11</sup>

Literature reviews of various types of cannabis preparations report that cannabinoids are efficacious in alleviating various types of pain, including pain due to neuropathy, musculoskeletal disorders, fibromyalgia, and other chronic conditions.<sup>12</sup> (Please see the '[Chronic Pain](#)' section of this book for

further details.) Further, cannabinoids' immune-modulating effect also make them promising agents for the treatment of fibromyalgia and other related conditions.<sup>13-16</sup>

### REFERENCES

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<sup>15</sup> Smith and Wagner. 2014. [Clinical endocannabinoid deficiency \(CECD\) revisited: can this concept explain the therapeutic benefits of cannabis in migraine, fibromyalgia, irritable bowel syndrome and other treatment-resistant conditions?](#) *Neuroendocrinology Letters* 35: 198-201.

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