



Utah Department of Health

Guidance on the Suggested Use of Medical Cannabis Crohn's Disease and Ulcerative Colitis

About this document: The following information on the use of medical cannabis serves as a suggested use guide for those participating in the Utah Medical Cannabis Program. The intended audience for this document includes qualified medical providers, pharmacy medical providers, patients intending to use medical cannabis, and caregivers of patients intending to use medical cannabis.

This document details the guidance on the use of medical cannabis for Crohn's Disease and ulcerative colitis. This document does not include general instructions on the use of medical cannabis, contraindications, warnings, precautions and adverse reactions to using cannabis and drug-to-drug interactions which could be found in the extended guidance document titled *Guidance on the Suggested Use of Medical Cannabis*. The extended guidance document can be found on the Utah Department of Health Center for Medical Cannabis website (www.medicalcannabis.utah.gov).

About the authors: This document was authored by the Utah Cannabinoid Product Board and Utah Department of Health staff.

About the Utah Cannabinoid Product Board: Under Utah Health Code 26-61-201, the Cannabinoid Product Board is a board of medical research professionals and physicians who meet on a voluntary basis to review and discuss any available scientific research related to the human use of cannabis, cannabinoid product or an expanded cannabinoid product that was conducted under a study approved by an Institutional Review Board (IRB) or was conducted and approved by the federal government.

DISCLAIMER

The following information on the use of medical cannabis serves as a suggested use guide for those participating in the Utah Medical Cannabis Program. This document has been vetted and approved by the Utah Cannabinoid Product Board under Utah Health Code 26-61-202.

This document is a summary of available peer-reviewed literature concerning potential therapeutic uses and harmful effects of cannabis and cannabinoids. With the ongoing nature of cannabis and cannabinoid research, it is not meant to be complete or comprehensive and should be used as a limited complement to other reliable sources of information. This document is not a systematic review or meta-analysis of the literature and has not rigorously evaluated the quality and weight of the available evidence. There is a lack of controlled clinical trials yielding high level evidence of predictable therapeutic benefit for any given condition other than those for FDA approved formulations. This document includes warnings and risks related to the use of cannabis including cannabis use disorder, potentially irreversible brain damage/mental illness, and legal liability for DUI and potential for adverse work-related consequences.

All patrons participating in the Utah Medical Cannabis Program are advised to use this document and any such document produced from this original document as informational and educational. The use of medical cannabis is at one's own risk. **Medical cannabis is NOT a first line therapy for most medical conditions.**

The information in this document is intended to help as far as available data allows Utah health care decision-makers, health care professionals, health systems leaders, and Utah Medical Cannabis patients to make well-informed decisions and thereby improve the quality of health care outcomes in patients using medical cannabis use. While patients and others may access this document, the document is made available for informational purposes only and no representations or warranties are made with respect to its fitness for any particular purpose. The information in this document should not be used as a substitute for professional medical advice or as a substitute for the application of clinical judgment in respect of the care of a particular patient or other professional judgment in any decision-making process.

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IMPORTANT NOTE: As always, in the event of significant side effects, stop use of medical cannabis until side effects have resolved, and then reduce to previous, best-tolerated dose. To avoid unwanted psychoactive side effects, “**start low and go slow**” especially when using cannabis products for the first time or using new dosages or types of products.

There is insufficient evidence to support the conclusion that medical cannabis or cannabinoids are effective or ineffective for the general treatment of Ulcerative Colitis and Crohn’s Disease.

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The below mentioned sections on ulcerative colitis and Crohn’s disease is adapted from the Cochrane Database Systematic Reviews (Kafil et al., 2018a & Kafil et al., 2018b).

Cannabis and cannabinoids are often promoted as treatment for many illnesses and are widely used among patients with **ulcerative colitis (UC)**. Few studies have evaluated the use of these agents. Further, cannabis has potential for adverse events, and the long-term consequences of cannabis and cannabinoid use in UC are unknown.

A Cochrane meta-analysis was published in Issue 6, 2019. The primary outcomes were clinical remission and relapse. Secondary outcomes included endoscopic response, quality of life, adverse events, and cannabis dependence and withdrawal effects.

Two studies met the inclusion criteria. One study compared 10 weeks of cannabidiol capsules containing up to 4.7% delta-9-tetrahydrocannabinol (THC) with placebo capsules in participants with mild to moderate UC. The starting dose of cannabidiol was 50 mg twice daily increasing to 250 mg twice daily if tolerated. Another study compared 8 weeks of therapy with two cannabis cigarettes per day containing 0.5 g of cannabis, corresponding to 23 mg THC/day to placebo cigarettes in participants with UC who did not respond to conventional medical treatment. The effect of cannabidiol capsules (100 mg to 500 mg daily) compared to placebo on clinical remission and response is uncertain. Clinical remission at 10 weeks was achieved by 24% of the cannabidiol group compared to 26% in the placebo group. Clinical response and Serum CRP levels were similar in both groups after 10 weeks of therapy. There may be a clinically meaningful improvement in quality of life at 10 weeks. Adverse events were more frequent in cannabidiol participants compared to placebo. One hundred per cent of cannabidiol participants had an adverse event, compared to 77% of placebo participants. However, these adverse events were considered to be mild or moderate in severity. Common adverse events included dizziness, disturbance in attention, headache, nausea and fatigue. More participants in the cannabidiol group withdrew due to an adverse event than placebo participants. Withdrawals in the

cannabidiol group were mostly due to dizziness. Withdrawals in the placebo group were due to worsening UC. The effect of cannabis cigarettes (23 mg THC/day) compared to placebo on mean disease activity, CRP levels and mean fecal calprotectin levels is uncertain. After 8 weeks, the mean disease activity index score in cannabis participants was 4 compared with 8 in placebo participants. After 8 weeks, the mean change in CRP levels was similar in both groups. No serious adverse events were observed. This study did not report on clinical remission, clinical response, quality of life, adverse events or withdrawal due to adverse events.

***Conclusions.** The effects of cannabis and cannabidiol on UC are uncertain, thus no firm conclusions regarding the efficacy and safety of cannabis or cannabidiol in adults with active UC can be drawn. There is no evidence for cannabis or cannabinoid use for maintenance of remission in UC. Further studies with a larger number of patients are required to assess the effects of cannabis in UC patients with active and quiescent disease. Different doses of cannabis and routes of administration should be investigated. Lastly, follow-up is needed to assess the long term safety outcomes of frequent cannabis use.*

Crohn's disease (CD) is a chronic immune-mediated condition of transmural inflammation in the gastrointestinal tract, associated with significant morbidity and decreased quality of life. The endocannabinoid system provides a potential therapeutic target for cannabis and cannabinoids and animal models have shown benefit in decreasing inflammation. However, there is also evidence to suggest transient adverse events such as weakness, dizziness and diarrhea, and an increased risk of surgery in people with CD who use cannabis.

Cochrane meta-analysis was published in Issue 6, 2019. The primary outcomes were clinical remission and relapse. Secondary outcomes included endoscopic response, quality of life, adverse events, and cannabis dependence and withdrawal effects.

Three studies met the inclusion criteria. Participants in two of the studies were adults with active Crohn's disease who had failed at least one medical treatment. One small study compared eight weeks of treatment with cannabis cigarettes containing 115 mg of delta-9-tetrahydrocannabinol (THC) to placebo cigarettes containing cannabis with the THC removed in participants with active CD. The effects of cannabis on clinical remission were unclear. A difference was observed in clinical response rates. Ninety-one per cent of the cannabis group achieved a clinical response compared to 40% of the placebo group. More AEs were observed in the cannabis cigarette group compared to placebo. These AEs were considered to be mild in nature and included sleepiness, nausea, difficulty with concentration, memory loss, confusion and dizziness. One small study compared cannabis oil (5% cannabidiol) to placebo oil in people with active CD. There was no difference in clinical remission rates. Forty per cent of cannabis oil participants achieved remission at 8 weeks compared to 33% of the placebo participants. There was no difference in the proportion of participants who had a serious adverse event. One small study compared cannabis oil (15% cannabidiol and 4% THC) to placebo in participants with active CD. Differences in quality of life scores were observed. The mean quality of life score after 8 weeks of treatment was 96.3 in the cannabis oil group compared to 79.9 in the placebo group. This study did not report on clinical remission, clinical response, CRP or AEs.

Conclusions. *The effects of cannabis and cannabis oil on Crohn's disease are uncertain. Thus no firm conclusions regarding the efficacy and safety of cannabis and cannabis oil in adults with active Crohn's disease can be drawn. The effects of cannabis or cannabis oil in quiescent Crohn's disease have not been investigated. Further studies with larger numbers of participants are required to assess the potential benefits and harms of cannabis in Crohn's disease. Future studies should assess the effects of cannabis in people with active and quiescent Crohn's disease. Different doses of cannabis and delivery modalities should be investigated.*

References

1. Kafil, T. S., Nguyen, T. M., MacDonald, J. K., & Chande, N. (2018a). Cannabis for the treatment of Crohn's disease. The Cochrane Database of Systematic Reviews. doi: 10.1002/14651858.CD012853.pub2
2. Kafil, T. S., Nguyen, T. M., MacDonald, J. K., & Chande, N. (2018b). Cannabis for the treatment of ulcerative colitis. The Cochrane Database of Systematic Reviews. doi: 10.1002/14651858.CD012954.pub2