

CANNABINOID THERAPY IN HIV

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Cannabis serves as a therapeutic option for managing symptoms related to HIV/AIDS and the adverse effects of treatment, such as anorexia/cachexia, nausea/vomiting, and neuropathic pain. "Because cannabinoids interact with the ENS, which manages the appetite, nausea and vomiting triggered by HIV/AIDS, cannabis can be therapeutic in treating these symptoms. Occasional cannabis use is also positively linked with increased ART adherence"(Cannabis, 2017).

In 1992 the labeled indications for dronabinol, a synthetic form of THC, were expanded to include treatment of anorexia associated with weight loss in patients with aids (National, 2017). Cannabinoids can also alleviate anxiety, potentially boosting appetite. Oral cannabis is effective for stimulating the appetite and a dose as small as 2.5 to 5 mg taken an hour before meals can be effective (Cannabis, 2017). Nausea and vomiting are common side effects of HIV/AIDS treatment medications. Cannabinoids stimulate CB1 receptors in the emetic area of the brain, reducing nausea and potentially increasing appetite by suppressing fullness signals (Hempel, 2023). "In preclinical studies published in 2014, Canadian researchers discovered that the cannabinoids, CBD and CBDA were effective in treating nausea and vomiting". Starting with the smallest dose of 2.5mg THC can produce antiemetic relief (Cannabis, 2017).

"In 2007, Dr. Donald Abrams conducted a small-scale human trial showing that inhaled THC dominant cannabis cultivars were effective in treating painful HIV-related neuropathy." Cannabinoids, especially CBD, also act as an additional neuroprotectant (Cannabis, 2017). Oral dosing produces a longer lasting analgesic effect. 2.5 to 7.5mg THC can be taken orally every 3-4 hours for pain.

Although there is evidence supporting the use of cannabis for treating HIV/AIDS symptoms and medication side effects, further research is necessary to establish its efficacy as a treatment for HIV/AIDS itself.

References

Backes, M., Weil, A., & McCue, J. D. (2017). Glaucoma. In *Cannabis Pharmacy: The practical guide to medical marijuana*. essay, Black Dog & Leventhal Publishers.

This reference provided dosing strategies for the treatment of HIV/AIDS symptoms including nausea/vomiting, anorexia/cachexia and neuropathy. It also gave details on which cannabinoids can be beneficial in the treatment of certain symptoms.

National Academies of Sciences E and M, Health and Medicine Division, Board on Population Health and Public Health Practice, Committee on the Health Effects of Marijuana: An Evidence Review and Research Agenda. *The Health Effects of Cannabis and Cannabinoids : The Current State of Evidence and Recommendations for Research.* Washington, DC: National Academies Press; 2017. Anorexia and Weight Loss. Pages 94-97.

This reference validated the efficacy of THC for the treatment of anorexia cachexia by providing information regarding an FDA approved medication incorporating anorexia/cachexia into its labeled indications.

Hempel, Dr. C. (2023, July). MCST 605 Module 3 Clinical Perspectives Video.

This reference detailed the physiological processes associated with increasing your appetite by stimulating the CB1 receptors.