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Cannabis induces a clinical response in patients with Crohn's disease: a prospective placebo-controlled study.

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BACKGROUND & AIMS:

The marijuana plant Cannabis sativa has been reported to produce beneficial effects for patients with inflammatory bowel diseases, but this has not been investigated in controlled trials. We performed a prospective trial to determine whether cannabis can induce remission in patients with Crohn's disease.

METHODS:

We studied 21 patients (mean age, 40 ± 14 y; 13 men) with Crohn's Disease Activity Index (CDAI) scores greater than 200 who did not respond to therapy with steroids, immunomodulators, or anti-tumor necrosis factor- α agents. Patients were assigned randomly to groups given cannabis, twice daily, in the form of cigarettes containing 115 mg of Δ 9-tetrahydrocannabinol (THC) or placebo containing cannabis flowers from which the THC had been extracted. Disease activity and laboratory tests were assessed during 8 weeks of treatment and 2 weeks thereafter.

RESULTS:

Complete remission (CDAI score, <150) was achieved by 5 of 11 subjects in the cannabis group (45%) and 1 of 10 in the placebo group (10%; P = .43). A clinical response (decrease in CDAI score of >100) was observed in 10 of 11 subjects in the cannabis group (90%; from 330 ± 105 to 152 ± 109) and 4 of 10 in the placebo group (40%; from 373 ± 94 to 306 ± 143 ; P = .028). Three patients in the cannabis group were weaned from steroid dependency. Subjects receiving cannabis reported improved appetite and sleep, with no significant side effects.

CONCLUSIONS:

Although the primary end point of the study (induction of remission) was not achieved, a short course (8 weeks) of THC-rich cannabis produced significant clinical, steroid-free benefits to 10 of 11 patients with active Crohn's disease, compared with placebo, without side effects. Further studies, with larger patient groups and a nonsmoking mode of intake, are warranted. ClinicalTrials.gov, <u>NCT01040910</u>.

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STATEMENT FROM THE AMERICAN GLAUCOMA SOCIETY:

Despite the treatments available for lowering the IOP, there are some individuals for whom these treatments are either not tolerated due to side effects or in whom the IOP is not sufficiently lowered. In these situations, both glaucoma patient and physician look for alternative therapies.

One of the commonly discussed alternatives for the treatment of glaucoma by lowering IOP is the smoking of marijuana. It has been definitively demonstrated, and widely appreciated, that smoking marijuana lowers IOP in both normal individuals and in those with glaucoma, and therefore might be a treatment for glaucoma.

Am J Hosp Palliat Care. 2010 Aug;27(5):347-56. doi: 10.1177/1049909110369531. Epub 2010 May 3.

Cannabis and amyotrophic lateral sclerosis: hypothetical and practical applications, and a call for clinical trials.

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Abstract

Significant advances have increased our understanding of the molecular mechanisms of amyotrophic lateral sclerosis (ALS), yet this has not translated into any greatly effective therapies. It appears that a number of abnormal physiological processes occur simultaneously in this devastating disease. Ideally, a multidrug regimen, including glutamate antagonists, antioxidants, a centrally acting anti-inflammatory agent, microglial cell modulators (including tumor necrosis factor alpha [TNF-alpha] inhibitors), an antiapoptotic agent, 1 or more neurotrophic growth factors, and a mitochondrial function-enhancing agent would be required to comprehensively address the known pathophysiology of ALS. Remarkably, cannabis appears to have activity in all of those areas. Preclinical data indicate that cannabis has powerful antioxidative, antiinflammatory, and neuroprotective effects. In the G93A-SOD1 ALS mouse, this has translated to prolonged neuronal cell survival, delayed onset, and slower progression of the disease. Cannabis also has properties applicable to symptom management of ALS, including analgesia, muscle relaxation, bronchodilation, saliva reduction, appetite stimulation, and sleep induction. With respect to the treatment of ALS, from both a disease modifying and symptom management viewpoint, clinical trials with cannabis are the next logical step. Based on the currently available scientific data, it is reasonable to think that cannabis might significantly slow the progression of ALS, potentially extending life expectancy and substantially reducing the overall burden of the disease.

Table 1. Properties of marijuana applicable to ALS symptom management	
ALS symptom	Marijuana effect
Pain	Nonopioid analgesia and anti-inflammatory
Spasticity	Muscle relaxant
Wasting	Appetite stimulant
Dyspnea	Bronchodilation
Drooling	Dry mouth
Depression	Euphoria
Dysautonomia	Vasodilation
Neuronal oxidation	Neuroprotective antioxidant