

Cannabis Alleviates Symptoms Of Crohn's Disease

Patients in a pilot study report wide-ranging benefits and reduced reliance on drugs with adverse effects.

By Jeff Hergenrather, MD

A pilot study of the effect of cannabis on Crohn's disease was conducted in California this summer by physicians in the Society of Cannabis Clinicians. Crohn's is an inflammatory bowel disease which is disabling and difficult to treat. The cause has not been established.

With co-authors Tod Mikuriya, MD, and David Bearman, MD, and statistical support from Milton Harris, PhD, I developed a questionnaire to assess the changes that Crohn's patients experience when they use cannabis on an "ad lib" basis. We and SCC colleagues identified 32 Crohn's patients. Eighteen expressed willingness to participate and 12 completed questionnaires.

Our results were reported at the International Association for Cannabis as Medicine conference at Leiden University in the Netherlands in September.

For all signs and symptoms evaluated in the study, the patients described marked improvements with the use of cannabis. Beneficial effects were reported for appetite, pain, nausea, vomiting, fatigue, activity, and depression. Patients also reported that cannabis use resulted in weight gain, fewer stools per day and fewer flare-ups of less severity.

Each patient rated all of these signs and symptoms on a 0-10 scale both on and off of the use of cannabis. The average or mean values were then compared with paired T tests to show the average improvement patients report for each category of study. A probability value was recorded for each measurement to show how likely or unlikely these results could be expected to occur randomly. All probability values, P values, reported were found to be significant ($P < .05$) for the categories measured.

Crohn's disease remains a disease of unknown etiology. It occurs in about seven out of 100,000 population, typically in people of European descent. What can be said about it is that the immune system in the GI tract is

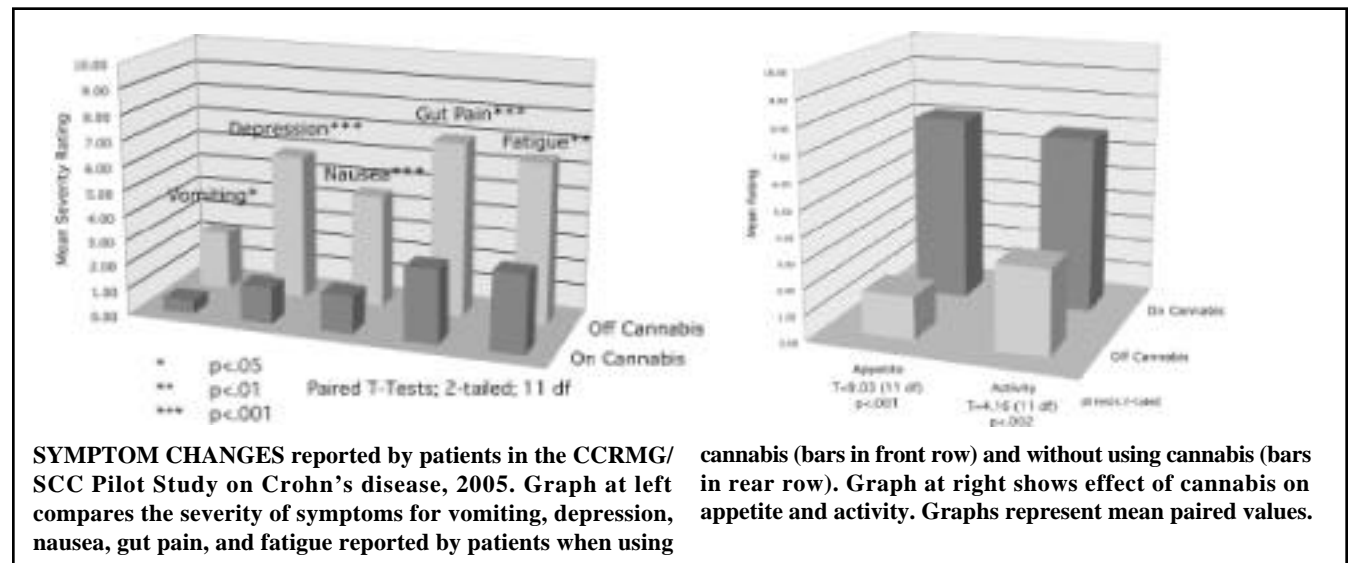


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have to understand the mechanism of hypothermogenesis.

If there is a hypothermia, what influence is there on the HPA (Hypothalamus Pituitary Adrenal networks) and all of the interactions affecting levels of circulating cortisol and epinephrine, etc.? With management of diabetes, cannabis decreases blood sugar by diminishing gluconeogenesis, which plays out in decreased insulin requirement and improved stability.

This hypothermogenic effect appears to be dose-related and could contribute to a neuroprotective effect after trauma. The optimum delivery method will require study. Hopefully, we will see a vaporizer on ambulances for treatment of head injury and seizures, and at the bedside of pre- and post-neurosurgery patients.



overreactive, misguided and destructive to the intestine. Components in cannabis are thought to exert some of their beneficial effects by interacting with cannabinoid receptors in the intestine.

Cannabis-using Crohn's patients not only report significant relief of their symptoms, they are also able to reduce the amount of immunosuppressive medications that have been a mainstay of conventional treatment. Imuran, methotrexate, 6 MP, and Remicade (an anti-TNF drug) are greatly reduced. Asacol and Pentasa brands of Mesalamine, an anti-inflammatory medication with immunomodulating properties is also reduced in many cases. Steroids are noted to be reduced and often eliminated.

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The immunosuppressives cause the same side effects that the disease causes: nausea, vomiting, abdominal pain, and diarrhea. Mesalamine frequently was reported to cause rash, itching, and photosensitivity. Steroids have a host of common side effects including anxiety, depression, irritability, nausea, vomiting, abdominal pain; and, with chronic use, bone thinning, glucose intolerance, peptic ulcers, and the Cushingoid state.

Though our results are reliable and sta-

In addition to external cooling, cannabis quiets the irritable CNS. A combination of inhaled and oral cannabis would be appropriate for acute CNS trauma from internal or external etiology. I predict this will become accepted and mainstream in the future.

Raphael Mechoulam's lab published a paper in 2003 showing that hypothermia appears to be an important factor as to why the synthetic THC analog HU-210 was protective in an animal model of stroke. [Leker, R.R., Gai, N., Mechoulam, R. and Ovadia, H. (2003) Drug-induced hypothermia reduces ischemic damage: effects of the cannabinoid HU-210. Stroke 34, 2000-2006]... If a patient presents to an ER with a stroke, the first thing they will do is put the patient's head in a cooler and pump them full of antioxidants (vitamin E).

California doctors are in a situation where the natural medicine is available now. Many of us feel we don't need chemists from the pharmaceutical industry to reinvent these molecules.

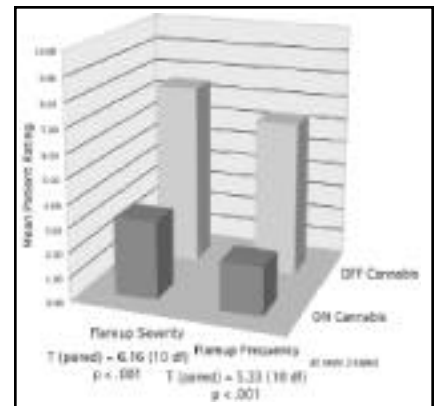
tistically significant, they could be ignored as invalid because of the nature of the study. The patients were self-selected, presenting to their doctor for approval to legalize their use of cannabis. They all used their own cannabis of unknown quality and quantity. There were no control groups of Crohn's patients who did not use cannabis; nor were there any placebo-controlled trials with a group of patients using cannabis stripped of its active ingredients.

Despite the fact that this pilot study deviates from the "gold standard" study involving a treated group matched to a control group of untreated patients double-blinded (where neither the researcher nor the patient knows if they are getting the "real medicine" or not), the patients who responded nonetheless, unequivocally report improvement in their symptoms and quality of life.

Some of the patients' responses include these telling remarks:

- "A terrific reliever of Crohn's symptoms."
- "A more easily controlled medication than offered by pills."
- "Alcohol has been a big problem for me that I don't have with cannabis."
- "Only positive effects, no negative effects."
- "Best appetite stimulant, very good calming effect."
- "Cannabis provides relief without knocking me out or other bad side effects that I had with steroids."
- "I've committed myself to this form of therapy, and my quality of life has improved by leaps and bounds."
- "I've struggled for years with opiate addiction from chronic pancreatitis—cannabis lets me control my pain without being a slave to opiates."
- "Marinol bothered my stomach—I don't get sick, constipated, or vomit with cannabis."

Our results are supported by a study published in the August 2005 issue of the journal *Gastroenterology*. Researchers at the University of Bath determined that cannabinoids activate the CB1 and



FLARE-UPS in Crohn's disease are graphed with respect to severity (bars at left) and frequency (bars at right) with and without the use of cannabis. Bars in front row are with cannabis; bars in rear row are without cannabis.

CB2 receptors in the gut lining, promoting it to heal the inflamed lining of the gastrointestinal tract.

Whereas the researchers in England are looking to synthesize cannabis-like drugs that have these therapeutic benefits, California doctors are in a situation where the natural medicine is available now. Many of us feel we don't need chemists from the pharmaceutical industry to reinvent these molecules. Cannabis works very well to relieve suffering. Patients using it show significant improvement in their symptoms, weight, and the frequency of stools.

Crohn's disease is so debilitating and life-threatening and so difficult to manage with conventional medications it is very encouraging to find that cannabis is proving to be an effective treatment for it right now.

We hope to continue beyond the pilot study as more Crohn's patients become aware of the beneficial effects of cannabis. Continuing to pretend that cannabis has no health benefits, that it is addictive and dangerous to society as portrayed by the Controlled Substances Act of 1970, should be and is an embarrassment to civilized human beings. Cannabis should be removed from scheduling and prescribed as any other medication.

