

Can Medical Marijuana Help Treat Lyme Disease? A Doctor's Perspective



I have a confession to make. I proposed a talk at ILADS on medical marijuana because it would force me to learn everything I could on the topic. I live in Colorado, where it seems there is a dispensary on every corner, and many of my patients have been using medical cannabis. But the huge assortment of products is confusing, and I wanted to give specific recommendations to help patients get the most benefit. Here is what I learned.

Marijuana has 483 phytocannabinoids, which are naturally occurring compounds that can

affect many body processes such as appetite, mood, and sleep. Most people have heard of one of them: THC, or tetrahydrocannabinol—the psychoactive component of marijuana. THC can make you high, giddy, or euphoric and provide seemingly awesome universal insights that may appear quite trivial the next day.



The strains of marijuana now available are not your father’s weed—they generally have a much higher THC content. It’s important to choose the appropriate strain for your needs, and some people may want to avoid THC entirely. However, it has been clearly established that THC is quite beneficial for pain, sleep, nausea, appetite, and PTSD, so there are medically valid reasons for choosing it.

Most of the non-THC phytocannabinoids fall into the category of cannabidiols, or CBDs. CBDs were once considered physiologically inactive unless paired with THC, but it turns out that is not the case. There is a compelling amount of scientific research documenting its independent activity, and now there is extensive clinical experience as well.

When I started selling it in my office, it went flying off the shelf.

Did you know that we make our own CBDs? All vertebrates going back 600 million years on the evolutionary tree have an endocannabinoid system, which modulates immune and nervous system function. CBDs are potent anti-inflammatory agents, they regulate neurotransmitters, and they may enhance immune competence. CBDs decrease neuroinflammation and are neuroprotective. They can significantly reduce pain and anxiety.

Marijuana is not the only product that supplies CBDs. Hemp, a variety of cannabis that is used to make rope, fabric, and paper, contains CBDs. Hemp has less than 0.3% THC, and is therefore not psychoactive.

There are two strains of cannabis: indica and sativa. Indica is great for pain but is sedating, so it is best used at nighttime. Sativa is activating, can increase energy, and is better suited for daytime use. The difference between indica and sativa is another ingredient, terpene. Terpenes modify the activity of CBD and THC. There are also a number of hybrid strains now available that essentially cross categories.



If your problem is pain, consider taking CBDs in the form of hemp oil in the daytime. My patients have had excellent responses to a liposomal sublingual extract, and it is activating, not sedating. In the evening, you can take a marijuana extract with equal parts THC and CBD, since these together will have additive pain-relieving effects. There are a number of delivery systems available, including smoking, vaping, edibles, and sublingual extracts (taken under the tongue). I recommend the extracts since the onset is reasonably quick, usually in about 30 minutes, and the dose can be easily titrated by the number of drops under the tongue.

Both hemp-derived CBD as well as marijuana are available as balms that can be applied topically to relieve pain. Whether taken systemically or applied locally, many patients are able to significantly decrease the need for pain medication. In fact, states that have legalized medical marijuana have experienced a 25% decrease in opiate overdose deaths. That's right—this scourge, which took 42,000 lives in 2016 (66,000 including all drug

overdose deaths) was significantly reduced by the availability of marijuana.



For sleep, take a THC-dominant indica strain. THC is not only sedating, it increases the time spent in the deeper stages of sleep, so sleep is more restorative. If your problem is difficulty falling asleep, use a short-acting vehicle like vaping, which kicks in within 15 minutes. Vaping is high-tech smoking without the ill effects of the smoke. Alternatively, use a sublingual extract, which has an onset within 30 minutes. Both of these will hang around for up to an hour.

If your problem is staying asleep, then take an edible. It takes 60-90 minutes to get into the circulation, and hangs around for an average of 3-4 hours. I don't recommend cookies or candy, as they usually have a lot of junk in them—you can take pure THC tablets. The average dose is 10mg, but start with 2.5mg to see how well you tolerate it.

If you have problems with both sleep initiation and maintenance, you can take sublingual

extract or vape to fall asleep, and a THC tablet to stay asleep. The table below includes some considerations for choosing among the available options.

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While THC is available in states that have legalized medical marijuana, CBD from hemp oil is available everywhere—although the attorney general in Nebraska seems to be confused about that. You can buy it on the Internet, travel across state lines, and I have even taken it out of the country when I traveled to Israel to visit my daughter.

CBD lessens anxiety without any of the psychoactive giddiness of THC. CBD is anti-inflammatory—it not only decreases pain, it can also improve energy, cognitive function, and general well-being. When I started selling it in my office, it went flying off the shelf. The full effects of CBD from hemp oil do not kick in for 2-3 weeks.

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While properly administered marijuana has been extremely effective in helping people with PTSD, in some people it will make anxiety worse. Similarly, THC can help depression in some people, but in others can make depression worse, particularly if it is abused by chronic users. If you develop tolerance to the benefits of cannabis because of chronic use, it is important to take a drug holiday. Pregnant women should not take marijuana.

The legal status of marijuana is dicey. It is unjustifiably classified as a Class I controlled substance by the FDA, in the same category as heroin, and the Obama administration declined to enforce federal laws regarding marijuana in states where it was legalized and properly regulated. The current administration is trying to change that, but I predict it will be like trying to put toothpaste back in the tube.

The analgesic, anti-inflammatory, and neuroprotective properties of cannabis make it extremely valuable as an adjunct to the treatment of tick-borne diseases. There is a lot of research available on the medical uses of cannabis, and a couple of good resources are

listed below.

Kowal MA et al. Review on clinical studies with cannabis and cannabinoids 2010-2014. *Cannabinoids* 2016;11(special issue):1-18

[Project CBD User's Manual](#)

Dr. Daniel Kinderlehrer specializes in the treatment of tick-borne disease in Denver, Colorado. He has found that properly administered medical marijuana and CBD from hemp oil have been extremely beneficial for many of his patients.

Editor's note: Any medical information included is based on a personal experience. For questions or concerns regarding health, please consult a doctor or medical professional.

