

**American Alliance for Medical Cannabis** [http://www.letfreedomgrow.com/cmu/chronic\\_pain\\_6.htm](http://www.letfreedomgrow.com/cmu/chronic_pain_6.htm)

## **Chronic Pain**

### **Adjunctive Therapy with Medical Cannabis**

*Medical cannabis*- Patients have been utilizing adjunctive therapy with medical cannabis for pain control for thousands of years. Unlike the narcotics, which impact primarily on opiate receptors in the brain, cannabis has a broad range of actions including anti-inflammatory, anti-spasmodic, neuroprotective, anti-oxidant, and direct pain relief. The resin of the flowering tops of the female plant (either Sativa or Indica) contain some 60 Cannabinoids of which the best known is the psychoactive chemical delta nine THC. Science is still categorizing what the various components of cannabis do. Research has demonstrated that the range of Cannabinoids in whole cannabis preparations is more effective and less toxic than the single agent pharmaceutical derivatives like Marinol (delta nine THC). Cannabinoid receptors are present in the brain, immune system, and throughout the body. Due to the large number and distribution of receptors, cannabis acts both locally and centrally to relieve pain, inflammation, and muscle spasm.

Cannabis has been demonstrated to be particularly effective in the treatment of migraine, pain from arthritis and other musculoskeletal disorders, and neuropathic pain. Many patients with nociceptive pain have found they achieve better pain control with fewer prescription drugs when they utilize cannabis. One of the primary benefits of cannabis therapy is that the medicine works synergistically with other pain medications improving effectiveness even while reducing the requirement for other drugs.

Cannabis works the most quickly when smoked or inhaled with the aid of a vaporizer (recommended). Symptomatic relief is achieved in seconds to minutes as opposed to 20-45 minutes in the case of most pain pills. Some patients prefer to use a sublingual (under the tongue) tincture of cannabis. Sublingual dosing is also very fast in action. Cannabis can be used orally through a variety of methods including adding tincture to tea or other beverages, or in food products made with cannabis butter or oil. The onset of action when cannabis is used orally is usually 30 minutes up to two hours. Despite this slow onset, orally delivered cannabis is long acting providing a secure "baseline" for patients whose pain is persistent. Recently, an increasing number of topical applications have been identified where an absorbent cream or tincture is applied to the effected joint or localized source of pain and rubbed in. When mixed with creams like Emu or hemp oil and other skin penetrating oils, cannabis can provide direct relief to these sites.

Cannabis has a duration of action of approximately 2-6 hours when inhaled and 4-12 hours when consumed orally. Most patients "self-titrate" their doses which means they use only what they need for pain relief. Titration is most easily accomplished when smoking or vaporization is employed. Accurate doses in food products are harder to accomplish since the Cannabinoids are poorly absorbed in the GI tract over the course of some hours.

It is ironic that some critics have complained that today's medical cannabis is far stronger than the street marijuana of the 60's. Increased potency simply means that the action is quicker and far less medicine is

needed. Particularly with smoking, higher potency cannabis actually minimizes incidents of bronchitis. A clear example of the superiority of current medical cannabis is the fact that patients provided with the less potent and harsher government cannabis under the limited IND (investigational new drug) program, prefer to secure their own supply of medical cannabis rather than suffer from the adverse reactions more common to yesterday's "junk" medicine. Today's medical cannabis is carefully grown, usually in organic conditions, and should be examined before use to insure that no molds or other contaminants are present. Medicine should be stored in light resistant air-tight containers.

Precautions for cannabis use include the possible euphoric effect of the medicine (not exactly a bad thing when depressed over illness), bronchitis from smoking, and possible gastric upset when using poorly processed cannabis food products. Patients who suffer from some anxiety disorders, psychotic disorders, and mania should avoid the use of cannabis except with the expressed approval and supervision of their physician. Like other medicines, patients will develop tolerance to cannabis over time but far more slowly than is the case with narcotics. There is virtually no withdrawal syndrome from the discontinuation of cannabis despite some reports in the propaganda press.

Equally controversial are some reports of cognitive deficit in long-term users, carcinogenicity, and immune suppression. No study to date has documented any real deficit in long-term cannabis users when "confounders" such as prior drug addiction or concomitant use of other drugs were considered. Similarly, cannabis when smoked may provide some carcinogenic chemicals to the lungs but these are far fewer than tobacco. In addition, recent studies demonstrate that cannabis may have an anti-tumor effect. The old canard about immune suppression has been largely discarded. Cannabis has complex effects on the immune system, boosting some portions and suppressing others.

Due to the prohibition of medical cannabis, it has been difficult to scientifically characterize the different medical strains and their biochemical profiles. In general, it is believed the Sativa dominant strains tend to help the most with pain and nausea while Indica dominant strains tend to help more with muscle spasticity and inflammation. This may be because of differing levels of the Cannabinoid known as Cannabidiol (CBD). Regardless, most patients prefer potent medicine despite the strain.

Dosage with medical cannabis has a wide range depending upon a patient's condition, route of delivery, tolerance, and the potency of the medicine. In one study at a medical cannabis clinic it was found that typical doses for seriously ill patients ranged from 5-7 grams/month to 100 grams/month. The average daily dose was one gram. It is important to note that the single medical strain employed in this clinic is particularly potent with THC levels exceeding 20% compared to 10-15% for most medical cannabis. Patients utilizing the oral route will typically have to use 4-6x the inhalation dose for similar effects.

It is important to recognize that most of today's physicians have not been educated about medical cannabis. Many are intimidated by the DEA's prohibition policies. Others scoff at cannabis as being an abused drug that has not been properly characterized or prepared. An integral part of utilizing adjunctive therapy with medical cannabis is to educate a patient's physicians about the extraordinarily safe profile for this medicine along with its demonstrated efficacy. It is suggested that patients bring a caregiver or expert with them to initial physician visits if possible in order to rationally discuss cannabis.

It is also helpful to provide physicians with all of the educational material possible to help them understand. Cannabis is not an unfounded medical treatment like Laetrile. Nor is cannabis nearly as "abusable" as many of the medicines physicians currently prescribe. Medical cannabis can be an important tool in helping manage chronic pain.