CLEAR INSIGHT

THE BENEFITS OF MEDICAL MARIJUANA

Many people may not realize it, but Hawaii has allowed the medical use of Marijuana within the state since June 14, 2000, when Governor Ben Cayetano signed Hawaii's Medical Marijuana bill into law. Since that time, fifteen other states, including the District of Columbia, have legalized the use of Marijuana for certain medical conditions.[1]

There are a couple of steps necessary in order to use Marijuana legally in Hawaii. Patients first need a recommendation from a registered medical doctor and have a qualifying medical condition. Patients are then registered with the Department of Public Safety. This gives patients the legal right to grow seven plants in their home for their own use. Alternatively, patients may have a single caregiver grow plants for them.

However, Hawaii's law has no provisions for a person to legally obtain seedlings in order to grow their own plants. There are also no legal Marijuana dispensaries in Hawaii. The result is that patients must turn to the black market for their medicine, which means that patients have no way of knowing the potency or purity of the marijuana they are obtaining

MEDICAL MARIJUANA AND GLAUCOMA

There are several real uses for Medical Marijuana, including the treatment of glaucoma, which causes elevated pressure inside the eye. There has already been a surprising amount of research in this field. Studies have shown that about 60% of people will respond to the inhaled effects of Marijuana with a decrease in the pressure inside their eyes. Intraocular pressure is reduced, on average, by 25% and this reduction last for approximately 3 to 4 hours.[2]

In the United States, due to federal restrictions, patients do not have access to pharmaceutical grade Marijuana and usually smoke the dried flower in order to receive its pressure lowering effects. However, in other countries, such as Jamaica, patients have access to a pharmaceutical medication called Canasol, which is a Marijuana eye drop developed specifically for the treatment of glaucoma.

Actually, we should be referring to Marijuana as Cannabis, since this is its correct botanical name. In fact, this is how most people referred to Marijuana before its prohibition in the 1930's, when a cleaver smear campaign branded Cannabis as the evil "marihuana" and created an image of this medicinal plant as a dangerous drug destined to destroy the fabric of American society.[3]

OTHER USES: PROTECT THE RETINA

When most people think of Cannabis, they think of tetrahydrocannabinol, or THC, the psychoactive compound in Cannabis that is responsible for the "high" that most recreational users desire. But the fact is that over 80 different compounds, known as cannabinoids, have been identified in Cannabis and have been shown to have a variety of medical properties. There are even compounds that have been shown to protect other parts of the eye, the retina in particular.

One of these cannabinoids called Cannabidiol, or CBD for short, is such a compound that has some very interesting chemical properties. It does not cause the "high" associated with THC, but instead has powerful anti-oxidant, anti-inflammatory, and neuroprotective effects that make it a potential therapy for a number of different diseases.

The human retina, the inside back lining of the eye that allows us to see, is prone to all kinds of oxidative and inflammatory stressors. In fact, it is believed that inflammation within the retina is one of the key instigators of such vision threatening diseases as diabetic retinopathy and macular degeneration. Currently, most of the therapies we have for these diseases are like trying to use a mop to dry up a river. They are treatments

that are designed to eliminate inflammatory cytokines and proteins that are downstream from the inciting disease process, and often require repeat treatments in order to keep things under control.

The interesting thing about CBD is that it is not only able to scavenge free radicals, but it also blocks the re-uptake of adenosine. This is an important effect since adenosine directly interacts with the macrophages and microglial cells within the retina that are responsible for the production of pro-inflammatory cytokines and free radicals.[4] More adenosine within the retina means less production of these harmful chemicals and leads to arrest of the inflammation that is at the heart of diseases such as diabetic retinopathy, macular degeneration and retinal vein occlusions.[5]

What is desperately needed is more research in this area. Unfortunately, CBD is not something you can buy at your local drug store. Even though it has no psychoactive effects, and even buffers the "high" from THC, CBD is still considered a Schedule I controlled substance along with Marijuana, Heroin and LSD, because of the fact that it's not that difficult to turn CBD into THC using simple chemistry.

One solution to the prohibition of Cannabis research would be to legalize its research at the state level, since the State of Hawaii has already legalized the medical use of Cannabis for certain patients. Such sanctioning by the State would make it possible for researchers to pursue this line of research with less fear of federal prosecution, and open the way for strains of Cannabis that are endemic to Hawaii to be studied in a controlled clinical environment. A bill for this very purpose, SB113, was recently introduced into the State Legislature, and is currently making its way through the Senate and House of Representatives.

In the meantime, Hawaii's Medical Marijuana patients can enjoy their locally-grown medicine in the safety of their own homes, grateful for another day in paradise, and remember that their eyes are thanking them just the same.

References

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4. LIOU, GI, AUCHAMPACH JA, HILLARD CJ, ET AL. MEDIATION OF CANNABIDIOL ANTI-INFLAMMATION IN THE RETINA BY EQUILIBRATIVE NUCLEOSIDE TRANSPORTER AND A2A ADENOSINE RECEPTOR. INVEST OPHTHALMOL VIS SCI. 2008;49:5526-5531.

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IN THE LAW

CURRENTLY, TWO BILLS OF LEGISLATION ARE BEING CONSIDERED

in the Hawaii State Senate and House of Representatives that propose further research into the therapeutic effects of medical marijuana.

STATE BILL 113 BEGINS:

The legislature recognizes that the use of medical marijuana warrants further research. As with other medications, this is done by conducting formal peer-reviewed research that investigates the chemical composition and therapeutic effects of medical marijuana in a controlled pre-clinical and clinical laboratory setting. It is also important that research be conducted on the unique strains of marijuana that have been developed in Hawaii.

The purpose of this act is to establish a three-year pilot medical marijuana research program in the state to provide a means by which a team of qualified researchers could undertake medical marijuana research involving local qualifying medical marijuana patients under the protection of state law.

READ THE BILLS IN THEIR ENTIRETY:

Bill 113: http://1.usa.gov/gr8NtB
Bill 1624: http://1.usa.gov/eTZ27V