



Medical Marijuana for Cancer Patients: A Physician's Perspective

By Victor Sierpina, MD

Editor's note: This is a revised version of an article that was first published in the June 2015 issue of *Medical Journal – Houston*.¹ Reprinted with permission from the author and *Medical Journal – Houston*.

Recently, I was making a house call. The family of a hospice patient with metastatic lung cancer asked me about using marijuana (*Cannabis* spp., Cannabaceae) as part of her plan to manage her pain, anorexia, nausea, weight loss, depression, and sleep problems. I discussed with them some of the work of Donald Abrams, MD, at the University of California – San Francisco. His meticulous research on medical marijuana over the past 10-plus years helps us sort out these kinds of questions. Abrams, an oncologist and HIV specialist, has been funded by the National Institutes of Health (NIH), which provides him with officially-approved, though low-potency, cannabis herbal preparations.

In his research, he uses a "Volcano Vaporizer," which heats and vaporizes the dried herb rather than combusting it, as is the case with the typical marijuana cigarette, joint, pipe, or reefer. This avoids the delivery of carbon monoxide and various potentially toxic chemicals and ash that can irritate the airways. Tetrahydrocannabinol (THC), one of the main active compounds in cannabis, is detected in the blood within about two-and-a-half minutes after using the vaporizer. Abrams prefers this delivery system. It is superior to ingesting marijuana — for example, in muffins, brownies, or cookies — since absorption through ingestion is slower, less predictable, and based on a variety of factors, such as gut motility, other food in the stomach, stomach pH, etc. THC levels don't increase until at least a couple of hours after consumption. This delayed effect may lead to patients' ingesting more than and overdosing, leading to excess sedation for a day or more.

It turns out, in both human and animal models, that the cannabinoids in marijuana (e.g., THC and cannabidiol [CBD]) offer a broad spectrum of benefits, especially for cancer patients. Cannabinoids are the psychoactive or somatically active chemicals that give marijuana its clinical effects. The human body has natural cannabinoid receptors; there are even endogenous cannabinoids in the breast milk of women who are not using marijuana. No wonder nursing infants seem so happy!

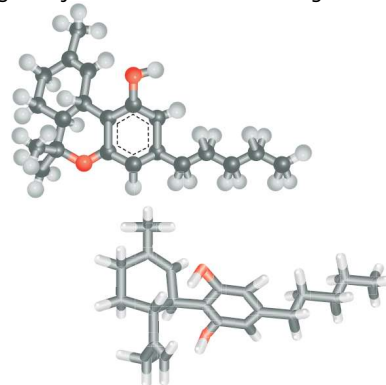
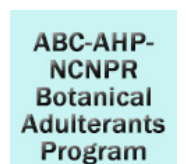
Marijuana has multiple effects on the symptoms commonly experienced by cancer patients: insomnia, lack of appetite, anxiety and depression, pain, neuropathy, and nausea. While there is a genomic variability in response, with some people quickly reacting neuropsychologically (i.e., "getting stoned") and others getting anxious or even paranoid, it turns out that marijuana is pharmacologically very safe with little or no potential for overdose — even with high doses. Deaths from cannabis overdose are extremely rare and are usually due to behavioral choices rather than physiological effects on essential organ function. Remember the famous redneck joke, "Hey, watch this!" You get the picture.

On the other hand, most cancer drugs, painkillers, and many other prescription medicines are lethal at high doses. A recent article reported that hydrocodone products for pain are the number one prescription drug paid for by Medicare.² They are prescribed mostly by primary care doctors, despite the risk of addiction, and there are thousands of deaths annually due to prescription opiate overdose — roughly 50 deaths a day. This lethality is not seen with marijuana. Though there is a large margin of physiological safety, marijuana should not be consumed before driving or doing other potentially hazardous things, since it can affect reaction time, driving skills, and impair judgment and memory.

Medical marijuana has been legal in California for more than 18 years, and the state's patient and physician population have accumulated a significant amount of clinical experience and street smarts with different species, delivery systems, and dosing. Physicians can legally counsel their cancer or chronic pain patients on whether or not marijuana should be part of their treatment plan, and, if so, they can write a prescription. However, medical marijuana is not for everyone. Those with a strong personal or genetic tendency to addiction, or certain mental problems, such as paranoia or excess anxiety, for example, would not be optimal candidates, except perhaps in those who are terminally ill.

There is widely voiced opposition to liberalizing the rules against marijuana cultivation, distribution, and possession. Abrams believes our society suffers from "euphorophobia," a deep suspicion or distrust of any substance that makes us feel happy. However, in a population of cancer patients, a little happiness is not a bad thing.

So, while the legal and moral debates on the wisdom of legalizing medical marijuana rage on,



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some cancer patients are benefitting from Abrams' and others' careful research on medical marijuana's pharmacodynamics, safety, and clinical effects.

Marijuana is now legal in 23 states and the District of Columbia for medical purposes and in four states for recreational purposes. Still, state-approved medical marijuana use is in a legal morass since it is illegal under federal law. Oklahoma and Nebraska have even tried to sue Colorado over residents who are buying legal pot in the "Rocky Mountain High" state and carrying it back across state borders

into the lowlands. The two states filed the lawsuit directly with the Supreme Court, but in late March 2016, the justices declined to hear the case.

If you are a physician in Texas, it is not yet legal to prescribe medical marijuana.* I told my hospice patient this, and I warned that she needed to be careful about her source of marijuana if she and her family decided to use it medicinally. Street sources may be laced with other drugs that can have serious adverse side effects. This is one reason that controlled, licensed medical marijuana dispensaries have arisen in other states. The family told me that it would not be a problem, as they had a reliable source of quality organic weed who could supply all that they needed.

As I left from my house call, walking past the cancer patient's family members who were smoking cigarettes in the driveway, I scratched my head over this legal and ethical paradox. Here she was, dying from the adverse effects of a legal drug, tobacco, which she had used for more than 60 years, but she could not legally get a palliative botanical medicine.

She died less than two weeks later. I am not sure if her hospice care team knew about the marijuana question, or even if she ultimately used it. It made me wonder though, if lawmakers might rethink the question of legalization here in the Lone Star state for medical and compassionate care purposes — particularly in advanced cancer patients.

* In June 2015, Texas Governor Greg Abbott signed into law Senate Bill 229, the Texas Compassionate Use Act, which will allow for the medicinal use of "low-THC cannabis" by patients with intractable epilepsy. The Texas Department of Public Safety is expected to start licensing dispensaries in June 2017.³

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References

1. Sierpina V. Medical marijuana in cancer patients. *Houston Med J.* 2015;12(3):6,14. Available at: www.joomag.com/magazine/medical-journal-houston/0770269001439307740?page=6. Accessed March 1, 2016.
2. Silverman E. The most widely prescribed Medicare Part D drug was... generic Vicodin. *Wall Street Journal.* May 4, 2015. Available at: <http://blogs.wsj.com/pharmalot/2015/05/04/the-most-widely-prescribed-medicare-part-d-drug-was-generic-vicodin/>. Accessed March 9, 2016.
3. Compassionate Use Program. Texas Department of Public Safety website. Available at: www.txdps.state.tx.us/rsd/CUP/index.htm. Accessed March 3, 2016.

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