Dr. Frank Shallenberger's
SECOND OPINION
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Brain Cancer Patient Beats the Odds With a Therapy I Thought Was a Hoax

If you live long enough, you just might start to become more than a little cynical about this world. I've been working in medicine for over 40 years now and the experience has made me more than just cynical. It's made me a hearty believer in something called Sturgeon's Law.

Theodore Sturgeon is a world famous science fiction author. In his later years, Sturgeon developed Sturgeon's Law. It's really quite simple. It goes like this: "90% of everything is crap." And in my time in medicine, I can tell you that Sturgeon's Law is pretty accurate. But notice that Sturgeon didn't say 100%.

There are a lot of things out there that at first glance appear to be in the 90% category, but then turn out to be the real thing. Something happened to me about three years ago that has led me to a place I would never have guessed I would go. And what I've learned since then just might be the most important message I send out all year (and it's only January). That's why I'm kicking off the New Year with this – and dedicating almost the entire issue of this month's *Second Opinion* to one topic. And all of this started with Barry.

I've known Barry for years. His son grew up with my son. But since the kids grew up, I hadn't seen him for a long time. Then one day about three years ago, Barry called me up and told me he was in trouble. Barry had started to have headaches and was losing his balance. A few scans later, he found out he had brain cancer. It was a solitary tumor, so the first thing his doctors did was to take it out surgically. He was immediately better, but you can guess what happened six months

later. The symptoms returned and the scans showed that the cancer was back. At this point, his doctors told him that the next step was radiation. So that's what he did.

The radiation knocked the tumor back a few notches and his symptoms disappeared again. But he was having such a hard time with the side effects of the radiation that he called me to see if there was something I could do. Now here's the thing. I wish he would have called me right away when he first had the diagnosis. I would have treated him with ozone therapy before and after the surgery and the radiation therapy. His odds for a cure would have been much better. And the side effects from both treatments would have been minimal. In my world, there's no way that a patient should have surgery or radiation therapy without a course of ozone therapy before and after. But that bridge was already crossed and so we had to deal with what was at hand. Barry still had brain cancer and he was now sick from radiation damage.

He immediately started a course of ozone therapy combined with intravenous vitamin C therapy. Within a few days he was already feeling better. Ozone treatment is the only treatment I have ever found that can turn radiation damage around. We continued the treatments along with some immune-stimulating supplements and a special diet. Barry was looking good a month later. And that's when we had the talk. I told him that although this plan was a good one, there was no way that it would be able to stop the cancer. He needed something else. That's when I lost track of him. He told me he was going to do some investigating. I figured that would likely be the last time I saw him this side of heaven. But I was wrong.

Barry's doctors had given him about six months to live. So imagine my surprise when I was driving to work one morning about a year later and the cell phone rang and it was Barry's number. My first thought was that he had died and one of his sons was using his phone to call me up to let me know. But it was Barry's voice. And he sounded great, like the same old Barry I had known for years. He told me that he started taking a special oil and had really tightened up on his diet. The result? He was feeling great. And unbelievably enough, his scans not only showed that his cancer had completely stopped growing, but they also showed that the cancer had actually shrunk! Of course, the first thing out of my mouth was, "What in the world have you been doing?"

"I started taking hemp oil," was the answer. Now I thought that hemp was just another word for the same remedy that Mick Jagger and hippies all over the world

have in their medicine cabinets — marijuana. But don't break out your old Jimi Hendrix records yet. Although hemp oil is very similar to marijuana, it's significantly different. Hemp and marijuana are versions or strains of the same plant — cannabis. The difference has to do with special substances in both hemp and marijuana called cannabinols.

Cannabis has more than 100 different cannabinols. But two of them stand out. One of them is THC (tetrahydrocannabinol). Marijuana has the distinction of having a very high content of THC. THC is the only cannabinol that gets you high. Too much THC and you can't think straight and become disoriented. But there's another cannabinol that's also found in high amounts. It's called CBD (cannabidiol). CBD does not produce a high. But as you will soon see, the effects of CBD on the human body are nothing short of amazing.

Besides THC and CBD, there also are a host of other cannabinols in much smaller amounts in cannabis. But almost all the research on cannabis has looked at the effects of THC and CBD. The difference between hemp and marijuana has to do with THC. Hemp contains very little THC – less than 0.3%. Marijuana can contain anywhere from 5-30%. And there's another big difference. Hemp and hemp extracts, unlike marijuana, are legal in all 50 states. Other than the fact that hemp has almost no THC, the two plants are the same. All of the other cannabinols are present in both plants. So what is the effect of CBD, and why did it work so well in Barry's case?

Here's a remarkable fact that I would never have guessed. Research has shown that our bodies actually make their own cannabinols. The cannabinols that we make are called endocannabinols. And in order for the body to use the endocannabinols it makes, it has its own cannabinol receptors. These receptors are special molecules that occur on the surface of cells that allow the endocannabinols to work. One absolutely amazing fact is that there are more cannabinol receptors in the human body than any other receptor system. That shows you just how important these molecules are for our health.

Multiple sclerosis and spinal cord injury, neuropathic pain, cancer, atherosclerosis, stroke, diabetes, myocardial infarction, hypertension, glaucoma, obesity, metabolic syndrome, and osteoporosis are just some of the diseases in which alterations in the endocannabinol system play a role. And that's where the magic of CBD works. CBD (and also THC) interacts with our cannabinol receptors.

In that sense, CBD works much more like a nutrient than a drug. And what it does when it interacts with the cannabinol receptors is nothing short of wonderful!

The receptors that CBD interacts with are found in large amounts in the peripheral nervous system, the internal organs, the skin, the muscles, the ligaments, and in the immune system. And when CBD acts on these cells, it decreases inflammation, decreases pain, decreases tension and anxiety, increases energy levels, and stimulates the immune system. So how did that help Barry? First of all it made him feel better, more relaxed, less pain, and more energy. But it also had a very obvious direct anti-cancer effect. How did it do that? In three ways.

First, almost all cancers require inflammation in order to survive. In fact, inflammation is so important to cancer that cancer cells activate a special pathway called the NF-kB (NF-kappa Beta) pathway that causes inflammation. CBD decreases inflammation by deactivating the NF-kB pathway. And in this way, it decreases the ability for cancer cells to grow and spread.

Secondly, CBD stimulates the immune system. When patients get cancer, their immune systems are often in need of help. And when they have surgery, radiation, and chemo, they need even more help. CBD can have a profoundly positive effect on the immune response. But that's not all. Like certain chemotherapy drugs, CBD is an angiogenesis inhibitor.

Angiogenesis is the process that cells use to form new blood vessels and improve blood flow. Since cancer cells don't die and are constantly growing, they have an ever-increasing need for more blood. So to provide the extra blood flow, cancer cells produce pro-angiogenic factors that act to promote angiogenesis. This allows them to grow and spread without restraint. Scientists have discovered that CBD acts as an angiogenesis inhibitor by preventing cancer cells from producing these pro-angiogenic factors and also by directly affecting blood-vessel growth.

And if that's not enough, CBD has a direct anti-cancer effect on tumors. By interacting with the cannabinol receptors on tumor cells, it inhibits tumor growth and leads to apoptosis. As most of my readers know by now, the reason that cancers are so problematic is that they refuse to die. Normal cells go through a process called apoptosis in which they eventually die. But cancer cells have found a way to avoid apoptosis. So they don't die! This leads to uncontrolled growth and all

of the problems associated with that. CBD helps to undo that by stimulating apoptosis in cancer cells.

But CBD does more than only stimulate apoptosis through the cannabinol receptors. It also has a direct anti-cancer action that has nothing to do with the receptors. Because of its uncontrolled growth, cancers often kill their victims by invading into and destroying healthy tissues and organs. But when scientists looked at the effect of CBD on the ability of glioma cancer cells to migrate and invade into surrounding tissues, they discovered something marvelous.

The researchers found out that CBD directly impaired the migration and invasion of these cancer cells in a dose-dependent way. That means that the more CBD they added to the cancer cells, the less they were able to invade other tissues. And when they blocked the CBD receptors, they saw the same effect. That proves that the effect was not through the receptors, but instead was a direct anti-cancer effect. The authors concluded, "These results reinforce the evidence of anti-tumor properties of CBD, demonstrating its ability to limit tumor invasion...." Oh, and by the way, Barry's cancer is a glioma. So it's no wonder it worked so well.

But what about studies on cancers other than glioma? Other studies show that CBD has anti-cancer activity in lung cancer, hormonal cancers, melanoma, leukemia, colon cancers, thyroid cancer, prostate cancer, and both estrogen positive and estrogen-negative breast cancers. In all of these cancers, CBD weakens cancer cells, making them more susceptible to chemo and radiation. And it decreases their ability to grow, invade, and metastasize. Additionally, every one of these studies shows that CBD does no harm to healthy cells.

So if you're battling cancer, no matter what course of therapy you decide to use, I can think of nothing easier and better for you than making CBD therapy a part of your plan. I've been using it routinely in all my cancer patients for the last 18 months. I have to say that my results are even better than they were before. And if you're like me and don't have cancer, I can't think of anything better to take than some CBD just for prevention. You will also sleep better, be calmer, have more energy, and have fewer aches and pains. Fighting cancer is only the tip of the iceberg for this therapy.

I've found that CBD is great for virtually anything that ails you. The list includes Crohn's disease, chronic pain, drug and alcohol addiction, chronic anxiety, insomnia, seizures, Parkinson's and other neurological

diseases, depression, high blood pressure, spasticity, migraines, Tourette's syndrome, glaucoma, and autism.

You can buy CBD products right now on the internet. All kinds of manufacturers are jumping on the bandwagon to provide CBD. But there's a big problem with this. Some of these products are worthless. So in a future issue, I'll explain why you have to buy your CBD from the right distributor.

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