Dr. Abrams' recruitment problem: patients already know treatment helps

The University of California San Francisco's Donald Abrams, MD, is seeking people with Sickle Cell Disease to take part in a study of cannabis as a treatment for pain, now underway at San Francisco General Hospital (SFGH).

The cannabis, being supplied by the National Institute on Drug Abuse, is 5% THC and 5% CBD. Patients vaporize three times a day during two five-day stints at SFGH's historic Clinical Research Center. During one stint they'll be vaporizing placebo.

KALPNA GUPTA

Fifteen patients will have taken part by the end of December. The goal is to enroll 35.

Sickle Cell Disease is a genetic blood disorder that causes intense pain and is generally treated with opioids. It afflicts African Americans and a smaller percentage of African Latinos. *(See story below at right).*

The study was generated by the findings of Kalpna Gupta, MDPhD, a professor of medicine at the University of Minnesota. Working with a mouse model of sickle cell disease, Gupta showed that synthetic cannabinoids decreased pain, inflammation and "markers of disease progression." She hypothesized that cannabinoid medicine would enable patients to reduce opioid use and achieve better pain control.

Gupta got a large grant from the National Heart, Lung and Blood Institute (part of NIH) to study cannabinoids in the treatment for of Sickle Cell Disease. She asked Abrams to conduct a human "proof of principle" study consisting of two arms, one of which had to be a placebo. He chose to test NIDA's variety with equal amounts of CBD and THC.

Work on the project was stalled for several months in the winter of 2013-14 when federal spending was "sequestered" by Congress. Funding was released in April 2014 and Abrams then began seeking the approvals necessary to conduct the research —from SFGH Clinical Research Center Medical Advisory Committee, UCSF Institutional Review Board, the Research Advisory Panel of California, DEA (local and federal), FDA, NIDA and the NIH funding Institute (NHLBI in this case).

DONALD ABRAMS

"In general the FDA has been very cooperative and supportive of everything that I've done," says Abrams, "but when we submitted the IND to study this CBD-THC cannabis, they said I couldn't proceed until I gave them two animal pulmonary histopathology studies showing the effects of inhaling CBD on the lungs. They said that cannabidiol was an NME – a novel molecular entity that had not yet been given to people. I said '*What?*'"

FDA also gave Abrams the option of enrolling patients previously exposed to CBD "'so you're not putting them at any greater risks than they've put themselves,'" he was told. "And then they made us add that CBD could cause sterility in men!"

What patients know

"Many patients with Sickle Cell have already discovered that cannabis is useful for pain," says Abrams. "We hear from some of them that their friends don't want to come in because they don't want to risk five days vaporizing placebo.

"We recently had a patient admitted who felt that she was getting placebo, and on day three she experienced a painful crisis. She needed to be transferred to the emergency room and did not complete the five day segment of the study." She will come back and do the second five day period, says Abrams, who is still blinded.

UCSF's IRB asked Abrams to change the consent form to say that patients randomized to the placebo may experience an increase in pain, even a crisis.

Abrams originally planned to study the effects of cannabis on Sickle Cell patients who were using opioids, but modified the protocol after learning that "many sickle cell patients don't need opiates... Now we're just looking at the effects of adding CBD-THC or placebo to their baseline pain regimen. They can be on opioids but they don't have to be."

It's ironic that Gupta originally involved Abrams because he is a DEA-approved researcher in a DEA-approved setting —San Francisco General Hospital has a locked and alarmed refrigerator to store the NIDA cannabis and a ward from which no fumes escape— only to encounter a new obstacle: patients who already know the answer to the question.

Clinical Trial of Vaporized Cannabis

For Chronic Pain Caused By Sickle Cell Disease

This UCSF study at San Francisco General Hospital (SFGH) will evaluate whether using vaporized cannabis reduces pain in people who are taking opioid medications for chronic pain associated with sickle cell disease.

To join this study you must

- Have a diagnosis of sickle cell disease
- Be taking a stable regimen of pain medications, including an opioid (such as morphine, oxycodone, hydromorphone, etc.) for chronic sickle cell disease-associated pain.
- Be able and willing to spend two separate periods of 5 days and 4 nights in the Clinical Research Center at SFGH.
- Have smoked cannabis on at least 6 occasions in your lifetime
- NOT use cannabis for one week prior to starting the study.
- Agree to use adequate birth control during this study.
- NOT be pregnant or breast-feeding, if you are a women who can become pregnant. You will be tested for pregnancy at screening.
- Be able to read and speak English.
- NOT have any severe heart, lung, kidney, or liver problems.
- NOT currently be using smoked tobacco products.
- NOT test positive for alcohol or injection drugs, as determined by urine screening.
- Meet certain other criteria.

If you are eligible you will:

- Spend two 5-day periods in a clinical research center at SFGH
- Have blood tests and other measurements done
- Inhale cannabis three times a day, using the Volcano™ vaporizer.
- Keep a pain diary for 5 days prior to both hospitalizations to track your pain and medication use.

You can receive up to $560 for participating.

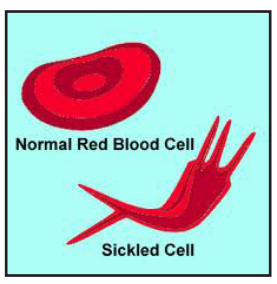
For more information call (415) 476-4082 ext. 146

Sickle Cell Disease and Cannabis

By Jay Cavanaugh, PhD

Some 70,000 Americans suffer from Sickle Cell Disease —a genetic blood disorder that primarily affects African Americans, Latinos, and those of Mediterranean origin. One African American in 650 will be born with the disease.

Normal red blood cells are made of two types of hemoglobin and have a round shape that allows the blood cells to move through capillaries. A mutation of one type of hemoglobin can produce malformed hemoglobin that causes the red blood cells to adopt a sickle shape which causes the red blood cells to clog capillaries.



Sickle cell disease is a recessive genetic trait. Carrying just one sickle gene actually confers a greater ability to fight malarial infections while carrying two sickle cell genes results in defective red blood cells responsible for the symptoms of the disease.

Routinely genetic screening (a blood test and/or DNA) should be done if any relatives have the disease. If one of the parents is a carrier and the other not then there is no chance that offspring will have the disease but they will have a 50% of being a carrier. If both parents are carriers the chances are 1⁄4 that the child will have Sickle Cell and 3⁄4 chance of being a carrier of the mutant gene.

Those with the disease usually have lives shortened by their bodies' reduced ability to fight infection, organ damage from "crises," strokes and heart attacks. Most patients experience an average of one "crisis" each year. These attacks often result in hospitalization. Some patients have several episodes of severe illness each year. Each episode can cause organ and nerve damage that may persist after the attack.

Episodes can be mild or severe. In more severe attacks, life-threatening problems can occur, such as a stroke or breathing problems due to fluid in the lungs. Potential complications include:

Anemia caused by splenic breakdown of sickle cell RBC's.
Blood clots (thrombosis)
Pain in various parts of the body, especially the joints.
Stroke
Eye problems (proliferative retinopathy)
Infections, such as pneumonia
Fluid in the lungs during severe attacks
Enlarged heart or heart murmur
Liver problems, such as jaundice and gallstones
Blockage of the spleen/loss of spleen function
Kidney damage
Painful erections (priapism)
Bone problems (osteomyelitis and avascular necrosis)
Leg ulcers
Delayed growth

The primary treatment of Sickle Cell "crises" is rehydration and pain control. Pain can be of excruciating severity and may require both non-steroidal anti-inflammatory agents and major narcotics of the opiate class.

Cannabis does not cure Sickle Cell but is a highly effective agent in managing pain. Patients utilizing medical cannabis can expect better pain relief with lower doses of major narcotics. Cannabis also acts as a powerful anti-inflammatory without NSAID side effects. Cannabis acts both centrally in the brain and directly in the periphery. Further, cannabis provides neuroprotective effects that may reduce the incidence of retinopathy and neuropathy.

The above information from pharmacist Jay Cavanaugh was posted on the American Alliance for Medical Cannabis website in 2006.

The letter at left from Sister Somayah Moore-Kambui is another example of patients' advanced awareness. In 2006 Tod Mikuriya, MD, published his master list of "Chronic Conditions Treated With Cannabis as reported to California physicians, 1990-2005" in O'Shaughnessy's *—and omitted Sickle Cell Disease, which prompted Sister Somayah's letter.*

Black Lives Matter

From Sister Somayah Kambui to O'Shaughnessy's in 2007

Though the list says it was put together by Dr. Mikuriya, and although Thallasemia is a genetic variant of sickle cell, Sickle Cell Disease was ignored in the article.

Fir niore than 20 years, the Crescent Alliance Self Help for Sickle Cell, founded by Sister Somayah Moore-Kambui, has been on the front line advocating for cannabis to be included in sickle cell research.

People living with Sickle Cell Disease have found Cannabis to be most beneficial in their lives. Using all parts of the plant, for both therapeutic and nutritional support has been the primary work and study of of peer research within the Crescent Alliance.

The people at O'Shaughnessy's should be well familiar with Sister Somayah and her struggle to get the City of Los Angeles to apply the CUA 1996 instead of defying and refusing to apply the CUA 1996 to her as well as to all citizenry of the City of Los Angeles.

Can anyone give me a sound reason why Sickle Cell Disease should be excluded from O'Shaughnessy's published "Chronic Conditions Treated With Cannabis?" Certainly, between 1990 and 2005 it is well known that people living with Sickle Cell Disease get therapeutic and curative benefits from consuming cannabis from its seed oil, plant concentrates and extracts as well as overall optimum health in people living with sickle cell disease.

Cannabis addresses the violent episodes of pain, and overall comfort for sickle cell sufferers, but the primary benefit is in eating healthy foods enhanced with cannabis, so as to allow the body to heal itself, produce healthier bloodcells allowing longevity of life and quality of life enhanced. We should also be linking our sites together, shouldn't we?

CHRIS CONRAD, SISTER SOMAYAH, MIKKI NORRIS. Photo by Brenda Kershenbaum.