



Shepherd Center

October 16, 2018

To Whom It May Concern:

My name is Ben Thrower, MD. I am a board-certified neurologist and have served as the medical director of the Andrew C. Carlos MS Institute at Shepherd Center in Atlanta, Georgia since 2001. The Andrew C. Carlos MS Institute offers comprehensive and integrated care for over 3000 individuals living with multiple sclerosis. I participate actively in clinical research and serve as the senior medical advisor to the Multiple Sclerosis Foundation. I have no commercial ties to any entities that would represent a conflict of interest in preparing this statement.

As an MS specialist, I have had a long relationship with the National MS Society (NMSS). I have served on the boards of the Inland Northwest Chapter and the Georgia Chapter of the NMSS. I was the board chair of the former. In 2000, I was the recipient of the Norm Cohn Hope Chest Award from the NMSS. In addition, I was the first physician inducted into the Volunteer Hall of Fame for the Georgia Chapter of the NMSS.

Nationally, the MS community has been very interested in research and legislation involving the use of cannabinoids in managing multiple sclerosis. With the passing of the Hayleigh's Hope legislation in 2015, the medical community serving the MS population became more involved in guiding our patients through the use of cannabinoids for managing MS symptoms.

In my experience, CBD/THC oil can be of benefit in managing 2 of the more common symptoms seen with multiple sclerosis. Spasticity/spasms and central neuropathic pain can greatly affect the quality of life for people with multiple sclerosis and effect their ability to carry out activities of daily living. In regard to spasticity/spasms, our treatment options include rehabilitation, range of motion exercises, medications and intrathecal baclofen. Most commonly used medications for spasticity/spasms are baclofen and tizanidine. There is great individual variability in tolerance for these medications with sedation being one of the more common side effects. In addition, baclofen can result in weakness that may further impair activities of daily living. In my experience, CBD/THC oil can be of great benefit in managing spasticity/spasms and for many patients has a much lower side effect risk.

Central neuropathic pain which is best described as burning or hypersensitivity is also commonly seen in multiple sclerosis. Traditional treatment options would include antidepressant medications such as Cymbalta (duloxetine) or anticonvulsant medications such as Neurontin (gabapentin). Other treatment options include Tegretol, Trileptal and Lyrica. CBD/THC oil has been of great benefit from many of my patients suffering from central neuropathic pain and may be better tolerated as well.



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As we have added CBD/THC oil to our treatment regimen, we have been able to wean many patients off of all of the prescription medications mentioned above. An added benefit of CBD/THC oil is the reduction or avoidance of opiate pain medications.

For the patient dealing with symptoms of multiple sclerosis, their goal is to improve their level of functioning and to be able to participate more in life. It has not been my experience that patients are seeking a "high" from CBD/THC oil. It has been my experience that CBD/THC oil has a lower side effect profile than many of our prescription medications. When patients begin CBD/THC oil, we typically recommend that they start with bedtime dosing and then, if needed, slowly introduce daytime doses. As with any treatment, we watch for sedation or other side effects.

Unfortunately, barriers do exist for patients with multiple sclerosis in their attempts to access and use CBD/THC oil. These barriers include a lack of information, lack of availability of products and financial hurdles. Patients and their families are sometimes overwhelmed by the misinformation or lack of information regarding CBD/THC products. The Internet and social media can be confusing for many. Some patients are unaware that hemp-based CBD oil contains little to no THC. I also have concerns about products sold to patients that may not be subject to any quality control. In the past few years, the FDA has sent out warning letters to companies producing CBD oil products that are mislabeled.

Given the current state of legislative affairs in Georgia, patients who are in the CBD/THC registry, may not be able to obtain CBD/THC oil. For our multiple sclerosis patients who are in the registry, we have identified a vendor from California who is willing to ship products to the state of Georgia. We do have other patients who make trips out of state and bring back products or have relatives who shipped them to the patient. It would be of great benefit if patients had a locally manufactured and dispensed product.

CBD/THC oil is not inexpensive. Our typical MS patient who is using these products, spends about \$250 per month. This expense is prohibitive for many of our patients. Currently, there are no patient assistance programs that I am aware of.

In summary, CBD/THC oil has been a valuable tool in the management of central neuropathic pain and spasticity/spasms secondary to multiple sclerosis. As a neurologist treating a large population of people with multiple sclerosis, I would support legislation that improves access to safe, locally produced CBD/THC products for our Georgia MS community.

Respectively submitted,

Ben Thrower, MD
Medical Director
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