

Clinical Trial Data for Cognitive Decline Suggests Promising Results with High Intensity, Frequency-Specific Photobiomodulation



Conducted by Suzan Syed, MD, and Martin Bales, L.Ac. DAOM, ©2019

Introduction

Dementia currently affects an estimated 5.7 million Americans and over 50 million people globally. In the United States alone, the prevalence is expected to grow rapidly as the proportion of the population age 65 and older continues to increase.⁽¹⁾ Cognitive decline (CD) diagnoses in general are increasing at an unprecedented rate. While the exact Mechanisms of Action (MOA) are not clearly understood, new research into Photobiomodulation (PBM) as a treatment for various types of cognitive decline (CD) suggests efficacy and feasibility of large scale administration.

Methods

At the initial visit the patient and caretaker were interviewed to determine if the patient would be able to complete the study protocol and had a definitive diagnosis of Dementia from their neurologist. The patient was then evaluated with the F-Scan device (TB Electronics, GmbH, Widnau, Switzerland) to determine frequencies in the patient's body that were sensitive. The frequency found most sensitive was then programmed into a function generator (GW Instek Electronics, Montclair, CA). The function generator was then set to input frequency information (sinusoidal waveform, 5V peak-peak) into the Bales Photonics Firefly Clinic Pro using 37,700 mW intensity (Bales Photonics, San Diego, CA).

Frequency specific PBM therapy was then applied for 10 minutes over the patient's cranium. Subjects received 10 treatments over the course of 4 weeks with a minimum of 2 treatments per week. The patient's unique frequency was used for each of the 10 treatments. The Mini-Cog exam (scores range from 0-5) was administered before the first treatment, 1 week after the 10th (final) treatment, and after a further 1 month washout period. Nine subjects completed the pilot study.

Results

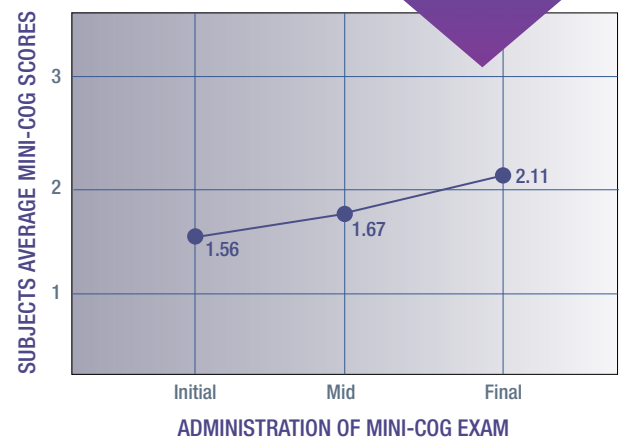
The average Mini-Cog score improved by 7% from the pre-trial to the post-trial exams. The scores improved another 26% from the post trial exam to the post washout period exam. The overall average Mini-Cog score improved by 35%.

Conclusions

The results of this pilot study strongly suggest that PBM therapy with the Bales Photonics Firefly Clinic Pro programmed to an individual's unique frequency has the potential to reverse symptoms of CD. Of particular interest is the fact that the average Mini-Cog scores improved even more over the 1 month washout period. This alone suggests that the therapy invoked physiological healing processes which continued to occur even when no therapy was administered.



The Overall Average Mini-Cog Score Improved by 35%.



(1) 2018 Alzheimer's Disease Facts and Figures, published by Alzheimer's Association. <https://www.alz.org/media/documents/facts-and-figures-2018-r.pdf>

A larger clinical study is clearly warranted.



Powerful, Effective Light Therapy is Now Within Reach



Martin Bales, L.Ac. DAOM

Doctor of Acupuncture and Oriental Medicine, Firefly Therapy Co-Developer

Dr. Martin Bales has spent over 30 years studying and witnessing the effects of light therapy alongside his father Maurice Bales of Bales Scientific, Inc., who developed the first digital Infrared camera and the first Photonic Stimulator to be approved by the FDA.

After graduating from the University of Virginia with a degree in Electrical Engineering, Dr. Bales decided helping people heal was his passion and achieved a Doctorate of Acupuncture and Oriental Medicine. Fusing both backgrounds, Martin formed Bales Photonics, Inc. in 2015, co-developing the previous BioPhoton 100 and the current Firefly models which use different wavelengths of light and frequencies to promote healing. The latest custom designed LED chip increased power from 8,900 mW to 37,700 mW (resulting in 4x the power!).

Dr. Bales's vision is to bring light therapy to the masses via the availability of a powerful, effective, and affordable product line. At a time when neurocognitive disorders are at epidemic levels and conventional medicine falls short with chronic health conditions, Firefly Light Therapy can safely provide needed help with a multitude of health problems, from pain and dysfunction to possibly reversing cognitive decline. **Firefly Light Therapy is truly part of the future of healthcare.**

Patients Say It Best

Here are just two testimonials from our pilot study and one from a Parkinson's patient caregiver about Firefly treatment at a clinic.

"We are very thankful for the Firefly Light Therapy. Mom seemed to be more clear about her thoughts with less delay. We did a lot of traveling after her therapy and she seemed happier and less distracted. Her results for the tests got better and she felt her hair was growing faster too!

Thank you again for the opportunity to be a part of this incredible program!!"

~Maggie S.

"We've noticed many encouraging things during the treatments like more positive responses. My wife's memory improved, and old memories returned. She signed her name in cursive for the first time in 5 years! This was a worthwhile trial!"

~Harvey K.

"I find the Firefly infrared light device invaluable for my husband's Parkinson's. Recently when I returned from a 7-day trip, I found him weak and in a frozen state. No one had used our light therapy device on him while I was gone. I was so concerned I immediately booked a Firefly Clinic Pro treatment with our doctor. I was amazed at how much better he was afterward. We arrived home, he walked in, made us a smoothie, cycled for 20 minutes, walked back into the house, had a clearer mind, and got himself ready for bed with no help. This is dramatic improvement!"

~Marsha H.

Learn more at Balesphotonics.com. For more information contact Martin Bales at martin@balesphotonics.com or call 619.886.5580