

EYE MATTERS

A MONTHLY NEWSLETTER FROM CONLEY EYE CARE



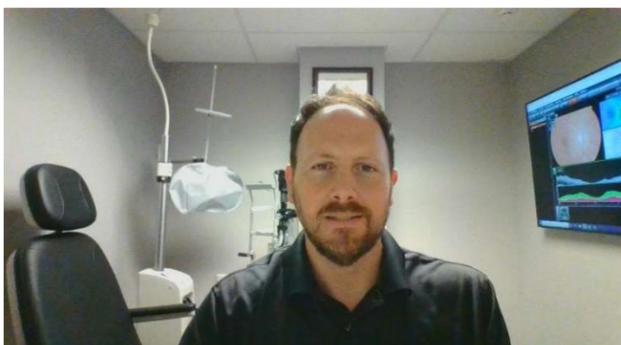
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About the Editor

ERIC J CONLEY OD MJ FAAO

Dr. Eric J. Conley is the founding doctor of Conley Eye Care of Huntington and editor-in-chief of the *Eye Matters* monthly newsletter. With over 15 years of experience in medical eye care and leadership roles in several eye institutes and universities, Dr. Conley provides salient explorations into today's latest eyecare topics. All articles are supported by evidence-based medicine provided through the latest research published in peer-reviewed journals. Opinion articles are provided by clinicians with decades of experience and expertise in their relevant content areas.

Questions and suggestions are welcomed and can be forwarded to: dr.conley@drconleyeyecare.com



CONLEY EYE CARE of HUNTINGTON: Dr. Conley shown presenting his most recent webinar for ODS on Facebook on the science behind *Glaucoctin*®



EYE WELLNESS IMAGING TECHNOLOGY: Topcon Maestro2 3D-OCT Imaging technology available at Conley Eye Care of Huntington (NY)

3D Eye Imaging Capable of Alzheimer's Detection

ERIC J CONLEY OD MJ FAAO

A novel technology called Optical Coherence Tomography (OCT) descended upon the eyecare scene more than a decade ago, and, as with most technologies, advancements in device capabilities have improved dramatically over the years. While serving as a clinical professor at the Illinois Eye Institute (Chicago, IL) opportunities presented to utilize these technologies for our many patients with a wide variety of ocular and systemic diseases. During that time, we discovered significant findings previously unknown related to neurodegenerative disorders. For the first time, we witnessed how conditions, such as Multiple Sclerosis (MS), originate within the brain but then migrate toward the optic nerve structure

and retina within the eyes. It was not long after, that researchers began investigating whether or not other neurological conditions like Alzheimer's and Dementia might be identified from structures within the eyes. Today, with the latest 3D-OCT technologies available at Conley Eye Care, we can image the ganglion cell complex within the human eye. Here, we can detect signs of neurological conditions in patients that may not yet be exhibiting outward symptoms, but nevertheless are actively suffering from neurological disease. With this knowledge we can now also initiate novel treatments that target the intracellular mitochondria (the "power plant" in human cells) of these brain neurons and potentially reverse the *apoptosis* (cell death) process that eventually leads to neurological disease and dysfunction. *Continued page 2*

ALSO IN THIS ISSUE

**CBD OIL CONCERNS
IN GLAUCOMA**

NEXT ISSUE

**COVID-19 AND
THE EYES**

HEALTH WARNING

CBD Oil Ingestion Can Worsen Glaucoma

A Warning for Sublingual Ingestion

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For those seeking natural or homeopathic remedies for common maladies, one does not need to look far to stumble across advertisements for cannabidiol (CBD) oils. Cannabidiol is a chemical that is derived from the Cannabis sativa plant (marijuana). The better known chemical compound, delta-9-tetrahydrocannabinol (THC), is the major active component, however, cannabidiol is also obtained from hemp and contains only minimal amounts of THC. Proponents have touted the many health benefits of CBD and its popularity and usage continues to increase.

Cannabidiol is most often advertised to assist in the management of symptoms associated with seizure disorders like epilepsy as well as for muscle pains and anxiety symptom reduction even though limited scientific evidence exists. Regardless, many patients *have* reported relief of symptoms with CBD. Several studies have been done on the effects of CBD, including in the area of glaucoma and eye pressure. For many years, patients have utilized marijuana for its intraocular pressure (IOP) lowering benefits, a key goal of therapy in glaucoma management. Notably though, most providers do not prescribe medical marijuana for their patients as the American Academy of Ophthalmology and American Academy of Optometry both recommend against its use until more detailed research can be completed. Clinical studies *have been* performed on the effects of sublingual CBD oil use and the eye with surprising results:



CDB OILS: A Cause for Pause in Glaucoma & Pre-Glaucoma Patients

The evidence demonstrated that *40mg* or more of sublingual CBD *increased*, rather than decreased, eye pressure. Patients with glaucoma risk recognize that the goal of therapy is to reduce intraocular pressure (IOP), not the opposite. As such, patients with pre-glaucoma or actively treated glaucoma should avoid sublingual CBD oil to avoid complicating or worsening their glaucoma prognosis and increasing their risk of vision loss. As it relates to the use of topical CBD products (applied to the skin), data suggests that it does not result in increased eye pressure, making it safe for use. Individuals without glaucoma concerns can decide with their doctor if CBD is safe to use. –

FEATURED ARTICLE

3D Eye Imaging Capable of Alzheimer's Detection

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Today, we are learning more about the origins of both systemic and ocular disease, and this includes neurodegenerative disorders. Having tools which can identify individuals earlier in the course of disease allows for the potential to slow progression and even delay the onset of more serious symptoms. The latest research highlights some of the neurological conditions that can present with evidence of retinal ganglion cell loss and includes the following: Multiple Sclerosis (MS), Alzheimer's Disease, Parkinson Disease, Dementia, Huntington's Disease, Amyotrophic Lateral Sclerosis and Glaucoma. Every patient with a family history of neurodegenerative disease should schedule an eye health evaluation that can identify early signs and encourage preventative strategies, including the ingestion of FDA regulated *Medical Foods* earlier in the course of disease.

COLLABORATIVE EFFORTS

Genser Cona Law

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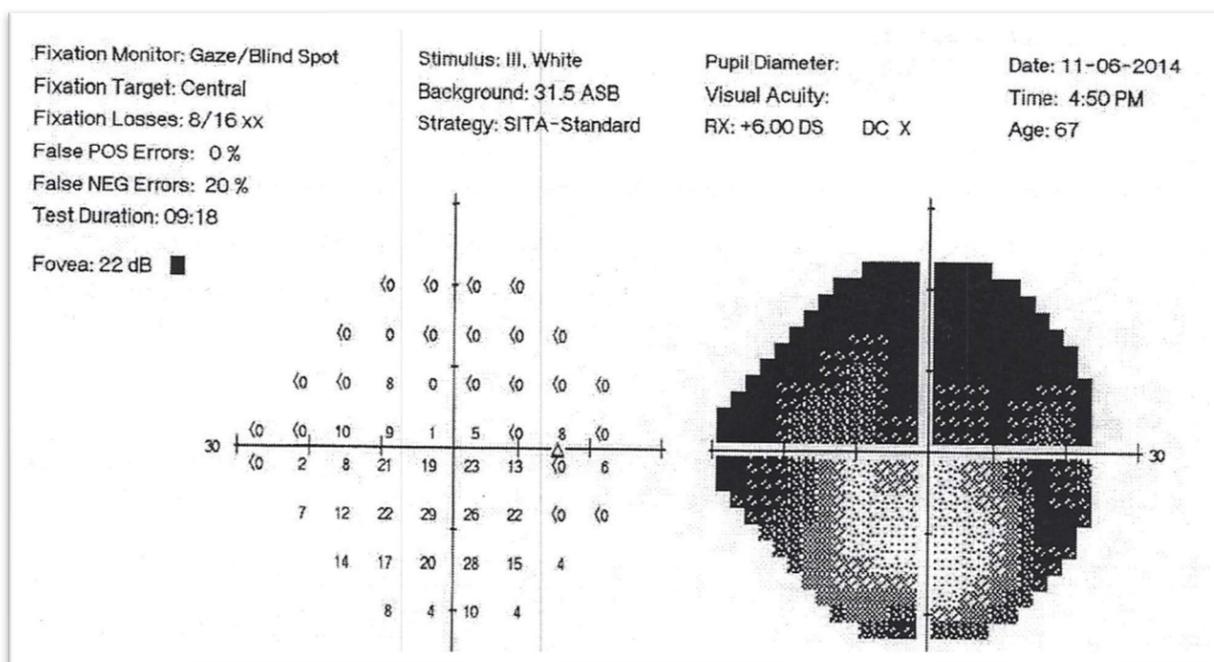
I would like to take this opportunity to personally thank the partners and staff at *Genser Cona Law Firm* for facilitating this collaborative effort to the benefit of its clients.

The firm concentrates in the areas of elder law, estate planning, estate administration and litigation, special needs planning and health care law. Conley Eye Care of Huntington featuring the Lavage Dry Eye Spa® provides eye health evaluations to its patients with emphasis on ocular disease, dry eye solutions, technologically advanced eye imaging systems and one-on-one doctor/patient consultations. Both practices strive to provide the utmost in professionalism and personalized care for the patients and clients they serve.

Please look forward to our next issue of *Eye Matters*© to learn more on the latest research and treatments in eye care including *Covid-19 and The Eyes* and *Screen Time & Dry Eyes: The Connection*.

For more information, comments or questions, email us at: dr.conley@drconleyeyecare.com

For additional insights about our teams and the many valuable services each organization provides, check out: <http://www.drconleyeyecare.com> and <https://www.genserlaw.com/>



VISUAL FIELD RESULTS: Patient with *Severe Glaucoma* demonstrating significant vision loss (dark areas)