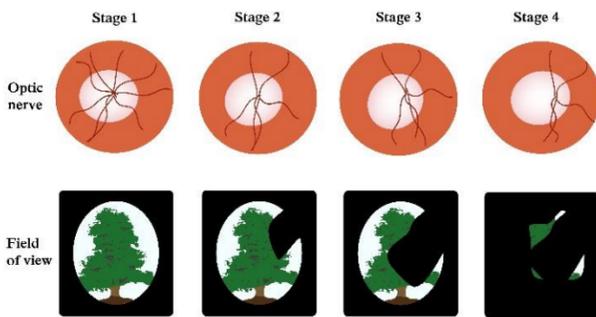


On the occasion of World Glaucoma Week which will take place from March 8 to 14, 2020, Dr. Mark Eltis gives us an update on this disease now redefined as an optic neuropathy. **Watch Dr. Mark Eltis during one of his presentations at one of the following events: Inside Optics (ON), OAC/OOA National Webcast (All Canada), Vision British Columbia and Salon Vision-R (QC).** For more information, visit www.oalive.ca

STAGES OF GLAUCOMA



For years glaucoma was considered to be a disease caused by high eye pressure (greater than 21 mmHg). The disease has been redefined as an optic neuropathy with field loss resulting from pressure unacceptably high for the optic nerve head. Therefore, the simplistic cut-off point of 21 mmHg seems outdated and invalid. Despite the prevalence of glaucoma, a universal definition of the disease is still absent. Glaucoma is a leading cause of blindness worldwide and the leading cause of vision loss in the United States. Approximately 2% of the U.S. population older than 40 have glaucoma and, with the aging of the population, the number of patients with the disease is expected to increase. Glaucomatous nerve damage generally has no symptoms until the advanced stages. There is a large body of evidence to suggest that an estimated 50% of those with glaucoma have not been diagnosed.

Primary open angle glaucoma (POAG), the most common glaucoma represents 90-95% of cases. POAG is defined by optic neuropathy in the absence of an identifiable secondary cause. POAG is a bilateral condition, but disease progression may be asymmetric. The disease can be divided into high tension glaucoma (HTG) and normal tension glaucoma (NTG). Although it is frequently accompanied by increased intra-ocular pressure (IOP), POAG can exist in patients with normal IOP. Up to 50% of patients

with glaucoma never have an IOP above the statistical norm. Therefore, IOP alone is not reliable for glaucoma screening. However, IOP remains the only modifiable risk factor. Early detection is critical to prevent permanent structural damage and irreversible vision loss.

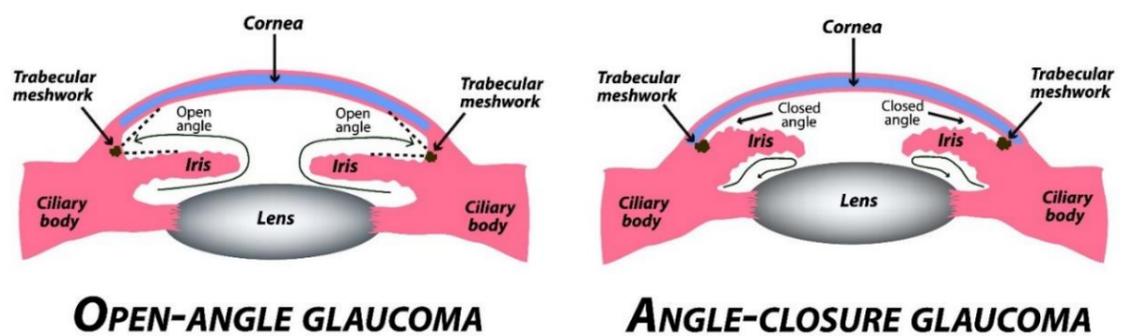
Over the last fifteen years the diagnosis and management of glaucoma have changed dramatically. Numerous advances, such as the diagnostic role of pachymetry (measurement of central corneal thickness), imaging devices (such as OCT) and new therapeutic options, have revolutionized the diagnosis and management of the disease.

The discovery that lower than average central corneal thickness was a risk factor for glaucoma converted pachymetry into a routine procedure in glaucoma assessment. A new generation of quantitative imaging technologies that go beyond photography have been developed to help with glaucoma management. To help the clinician in the evaluation of visual function and structure, computer-based imaging devices such as scanning laser ophthalmoscopy (HRT) and optical coherence tomography (OCT) provide quantitative assessment of structural damage to the optic disk and retinal nerve fibre layer.

Scanning technology should not replace observation of the optic nerve but complement it. Despite advances in glaucoma diagnosis, visual field testing is still important. It is critical to include measurements both of structure and of function in the evaluation of glaucoma although they may not correspond in the early stages of the disease.

Current pressure measurement devices supply merely a snapshot, but emerging models (worn as contact lenses) can provide 24 hours of data. A new front in the fight against glaucomatous damage may be opened by drugs working through an alternative to pressure reduction. In particular, drugs which offer neuroprotection (which shield the optic nerve from damage) would be revolutionary.

TYPES OF GLAUCOMA



About Dr. Mark Eltis, OD, FAAO



With over fifteen years of experience, Dr. Mark Eltis has practiced Optometry in New York, California and Toronto. He is a graduate of the University of Waterloo School of Optometry and has lectured there for over a decade. Dr. Eltis is also a Fellow of the American Academy of Optometry and a Diplomate of the American Board of Optometry. Dr. Eltis has served as an examiner for national licensing assessment in both Canada and the United States (NBEO, CSAO and CACO). He has presented and published internationally and has been sought as an expert on optometric issues for national television and print.

In 2013, Dr. Eltis was honored as a member of the Optometric Glaucoma Society (OGS) having “demonstrated excellence in the care of patients with glaucoma through professional education and scientific investigation.” Dr. Eltis is a reviewer for over a dozen publications including Journal of Glaucoma and Canadian Journal of Optometry. In 2017, Dr. Eltis was recognized for his “outstanding contribution in reviewing” by the editors of Journal of Optometry and Elsevier.

Dr. Eltis has been a consultant for academic institutions overseas, contact lens/pharmaceutical companies, law firms, and a subject matter expert for competency evaluations. In 2018, Dr. Eltis was appointed as a member of the College of Optometrists of Ontario’s Discipline Committee (adjudicating allegations of professional misconduct at formal hearings). He has since been appointed to the Quality Assurance Committee and is also a College approved Coach for optometrists ordered to undertake remediation programs.

Dr. Eltis recently completed the full sequence of courses at University of California at Berkeley to achieve California Glaucoma Certification TLG (the highest level of licensure in the state). His monthly column for Primary Care Optometry News shares his perspective on the latest in Glaucoma research.

Follow Dr. Mark Eltis on

