Program: Common Diseases of the Retina in the Elderly
Speaker: Ramana Moorthy, MD, Opthalmologist, Associated Vitreoretinal & Uveitis Consultants
Introduced by: self-introduction
Attendance: 130
Guests: Jim Bebee, Larry Marcus, Dick Rhodes, Mark Sperka, Barb Applegate, Marianne Wokeck
Scribe: Don Mink
Editor: Bill Elliott

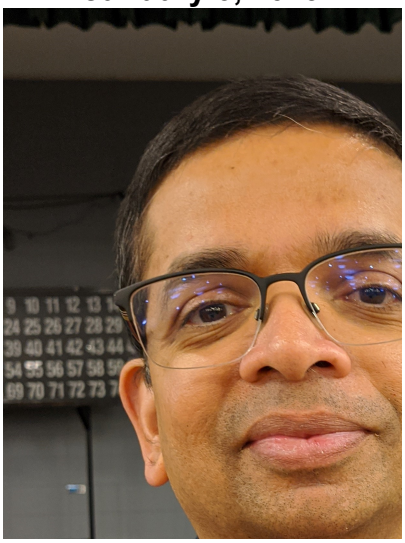
Dr. Moorthy began an explanation of macular degeneration by describing the eyeball as a camera with a lens and a focal point. The retina receives light that the lens has focused, converts the light into neural signals, and sends these signals on to the brain for visual recognition**.** Macular degeneration (MD) is a progressive vision impairment resulting from deterioration of the central part of retina, known as macula, and, is the leading cause of legal blindness in the U.S. in people over the age of 65. Incidence increases after 50, and 1/3 of people are affected in their ninth decade. Caucasians may have more neovascular AMD but African Americans are also affected; and, women are more prevalent than men. Prevalence of AMD ranges from 52-64- 2%, 65-75- 11%, >75- 28%, and, prevalence of visual impairment from AMD is 1.5% (75-79 years of age) which doubles every 5 years. Symptoms include reduced reading speed, subtle metamorphopsia (visual defect), and, scotoma (a partial loss of vision or blind spot).

There are two types of AMD: wet and dry. Clinical signs of AMD include soft drusen (deposits made up of lipids, a fatty protein). Individuals are classified as having early AMD if they manifest either extensive small drusen (<63 μm) or a few (non-extensive) medium-sized drusen. At this stage, patients generally experience no symptoms and have normal vision. These individuals are at low risk; approximately 1% will develop advanced AMD over a 5-year period. Patients with intermediate AMD have many medium size drusen, or, one or more large size drusen. These patients are at an 18% risk of developing advanced AMD over five years. Patients with advanced non-neovascular AMD can have severe visual impairment in the affected eye, and, a 43% expected probability of progression to the fellow eye. Patients with neovascular AMD typically have vision loss.

Risk factors include: atherosclerosis, oxidative damage, photic toxicity, inflammation, diet, genetics, family history, fellow eye condition, and, smoking (risk of vision loss from neovascular AMD is 10-12 times greater for smokers).

Although a myriad of treatment options are in research, at this time, there is no effective treatment for dry AMD. Treatment of wet AMD includes hot laser (developed in the 80's), which Dr. Moorthy describes as not effective, and, cold laser (developed in 1999). In 2002 a paradigm shift caused treatment to focus on injections. Although there are risks associated with injections, the benefits outweigh the risks. However, a treatment burden remains high for patients and families: Expense and monthly visits, separately for each eye. Work continues to reduce the frequency of visits. One development is a Port Delivery System with which medication is stored in the eye for longer term use. Treatment risks include: Endophthalmitis (infection inside the eye), vitreous hemorrhage, and, retinal tears and detachment.

Prevention measures of AMD include: Nutritional supplementation (e.g. AREDS vitamin supplement), dark green, leafy vegetables, UV protection, Amsler Grid monitoring daily, and, smoking cessation.



Ramana Moorthy, MD