Age-Related Macular Degeneration

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Your friends' faces are just a little bit blurry. Straight lines are beginning to appear wavy.

These symptoms can be the early tell-tale signs of the leading cause of serious vision loss and blindness in the United States – Age-Related Macular Degeneration (AMD). Particularly affecting the 65 and older age group, it is a disease that is progressing exponentially. Today, about 1.75 million Americans have been diagnosed with this disease and the numbers are expected to grow to about 3 million in 2020./1



What is Age-Related Macular Degeneration?

Age-Related Macular Degeneration, or AMD, is a degenerative eye disease that robs a person of their central vision while typically leaving their peripheral vision unaffected. AMD breaks down the macula, the part of the retina responsible for the vision needed for daily tasks such as writing, reading and driving. This disease can affect either one or both eyes. There are two types of AMD:

- **Dry AMD:** When the light-sensitive cells in the macula start to break down, a person will begin to notice a blurred spot in the center of their vision. This is known as dry AMD. An indicator of dry AMD is drusen. Drusen are yellow particles or deposits that form under the retina. Common in people over 60 years old, drusen can be detected in a comprehensive dilated eye examination. Approximately 90% of people diagnosed with AMD have dry AMD.
- Wet AMD: In this late-stage type, abnormal blood vessels grow behind the retina. When fluid leaks from these fragile vessels, massive damage is inflicted upon the retina. A person with AMD would see straight lines as wavy. Wet AMD progresses more rapidly than dry AMD, and a person with dry AMD may later develop into wet AMD.

AMD is the leading cause for serious vision loss and blindness in America for people ages 65 years and older²



How is AMD diagnosed?

AMD is painless and incurable, so early detection is key to catching the disease before extensive damage is done to a person's central vision. Since AMD targets the senior population, eye examinations are especially important to people over the age of 60 so that the disease can be diagnosed in its earliest stages.

During a comprehensive eye examination, eye drops would be administered to dilate the eye so that the doctor would be able to examine the retina and look for any signs of AMD such as drusen or leaking blood vessels.

How is AMD treated?

Once AMD has reached its most advanced stages, there is no treatment that will stem the loss of vision. However, early treatment can help and possibly even prevent AMD from progressing. The National Eye Institute's Age-Related Eye Disease Study has found that a high-dose combination of specific anti-oxidants and zinc can reduce the serious vision loss that occurs in the advanced stages of dry AMD.

Wet AMD, while not curable or reversible, can be treated with a variety of methods. Laser surgery can be used to destroy the leaking blood vessels. In photodynamic therapy, a drug is injected into a person's arm and then travels throughout the body and to the eye where it adheres to the blood vessels. By shining a light into the eye, the doctor activates the drug which then starts destroying the vessels and slowing the loss of vision. Another treatment includes drugs that are injected directly into the eye which block the growth of the abnormal blood vessels.

Additionally, there is constant ongoing research and advances in the investigation and treatment of AMD. Currently, there is a promising new treatment involving a mini telescope surgically implanted into a patient's eye. The telescope magnifies images that fall on the retina, projecting them so that they fall on healthy areas outside the damaged macula.

AMD is the leading cause for serious vision loss and blindness in America for people ages 65 years and older/2, and as people live longer, more will fall victim to AMD. Early detection is the only way to slow down this devastating disease and save the gift of sight, so take care of your eyes and remember to get regular eye examinations.

¹The epidemiology of age-related macular degeneration. Archives of Ophthalmology, April 2004.

²/Age-Related Macular Degeneration by Marily Haddrill; allaboutvision.com.