

# Macular Degeneration: *Now You See, Now You Don't*

By Jonna Jefferis

Prevent Blindness America has designated February National Age-Related Macular Degeneration Awareness Month to increase public education about this potentially devastating disease. Age-related macular degeneration (AMD) is a leading cause of visual impairment and blindness for older Americans.

AMD affects more than 1.75 million people in the U.S., according to the National Eye Institute (NEI). As the population ages, an explosion of new cases is expected. The NEI predicts that AMD cases among Americans will increase to 2.95 million in 2020.

## What Is Macular Degeneration?

AMD causes light-sensitive cells at the back of the eye to stop working. The macula, the most sensitive area of the retina, is responsible for sharp eyesight in the center of the visual field. Reading, driving and looking at people's faces would not be possible without a working macula.

Light-sensitive cells (photoreceptors) are most tightly packed in the macula. When the macula begins to degenerate, visual images can no longer be transmitted by the photoreceptors through the optic nerve to the brain. Degeneration results from a gradual breakdown in the eye's natural waste-disposal system. The exact cause of this breakdown is not known.

The early stage of the disease is called dry AMD, and it is the most common type, accounting for 85 percent to 90 percent of all cases. Dry AMD can lead to wet AMD, which is less common but more serious. In wet AMD, abnormal blood vessels beneath the macula start to grow and leak fluid, causing the retina to become scarred and distorting vision. Wet AMD can damage the macula rapidly and result in a very quick loss of central vision.

## Symptoms & Sight Loss

The dry form of AMD develops so gradually it might not be noticeable; however, an eye care professional can diagnose it through a comprehensive examination, and help stop the disease's progression. If dry AMD is allowed to develop into the wet form, vision may already have been lost.

Symptoms of AMD include blurred vision, difficulty recognizing faces, visual distortions, a need for increasingly bright light for reading or other close work, colors appearing less bright, and having a blind spot in the center of your vision.

Wet AMD can be effectively treated by destroying leaking blood vessels through laser therapy or by inhibiting their growth with medication that is injected into the eye. These treatments help reduce further vision loss in many cases, although they cannot reverse damage that has already occurred.

There is no FDA-approved treatment for dry AMD. Taking steps to prevent AMD from developing is the key to maintaining your eye health.

## Who Is at Risk?

Certain people are more vulnerable to AMD than others. According to the NEI, your risk is higher if you are Caucasian, female, or have family members with the condition. Some studies have suggested that people with lighter-colored eyes may also be more susceptible.

Although the disease can strike during middle age, the risk increases dramatically among the elderly. A large study found that middle-aged people have about a 2 percent chance of getting AMD, but for those over age 75, the risk rises to nearly 30 percent. More than 15 percent of Caucasian women older than 80 have AMD in the U.S.

## Keeping Eyes Healthy

You cannot change your age, race, eye color, gender or family heritage. Scientists have identified other risk factors, however, that you can control. Here are some guidelines to help keep your eyes healthy:

- Quit smoking. Smokers are three to four times more likely to develop AMD than non-smokers. People who live with a smoker are twice as likely to develop it.
- Have your blood pressure checked regularly. If it is high, follow your doctor's recommended treatment. High blood pressure may be associated with AMD.
- Keep alcohol consumption to moderate levels. Scientists have speculated that high alcohol levels place stress on the retina.
- Lose your belly fat. Research suggests that people who lose weight around their middle significantly decrease their odds of developing AMD.
- Shield your eyes from the sun by wearing a broad-brimmed hat and sunglasses. Exposure to the sun's ultraviolet rays may intensify the risk of developing AMD in people with low levels of antioxidants.
- Eat five servings per day of fruits and vegetables. The NEI's seven-year Age-Related Eye Disease Study (AREDS) looked at how high-dose antioxidants (vitamins A, C and E, lutein, zeaxanthin) and zinc affected the progression of AMD. The AREDS formulation did not benefit those with very early-stage AMD, but it reduced by 25 percent the odds of intermediate-stage AMD progressing to the wet stage.

- Take a multivitamin pill that includes zinc and copper. Scientists recently discovered that eyes with AMD had reduced levels of zinc and copper.
- Eat two servings per week of oily fish, such as tuna, salmon or mackerel. This will reduce your wet AMD risk by 50 percent.
- Visit your eye care professional at least once a year for a comprehensive examination. If you are diagnosed with early-stage AMD, no specific treatment is required. Regular eye check-ups are important, however, to determine if the disease is progressing. If it advances to the intermediate stage, discuss taking the AREDS formulation (which many pharmacies stock) with your provider.
- If your eye care professional prescribes supplements, be sure to take them correctly.



As the above list demonstrates, many lifestyle choices that protect your eyes—keeping blood pressure down, eating right, not smoking, watching your weight—also boost overall health, and you probably are already following many of these suggestions.

Your eye health, however, is not always as easy to track as, for example, your weight or blood pressure. So don't wait for symptoms to appear before taking preventive steps on your own and having regular comprehensive eye examinations. Once sight is lost through AMD, it cannot be restored.

Comprehensive eye examinations in Davis Vision plans include a dilated fundus evaluation, which aids diagnosis of AMD and many other eye and systemic diseases.