

## Frequently Asked Questions Age-Related Macular Degeneration (AMD)

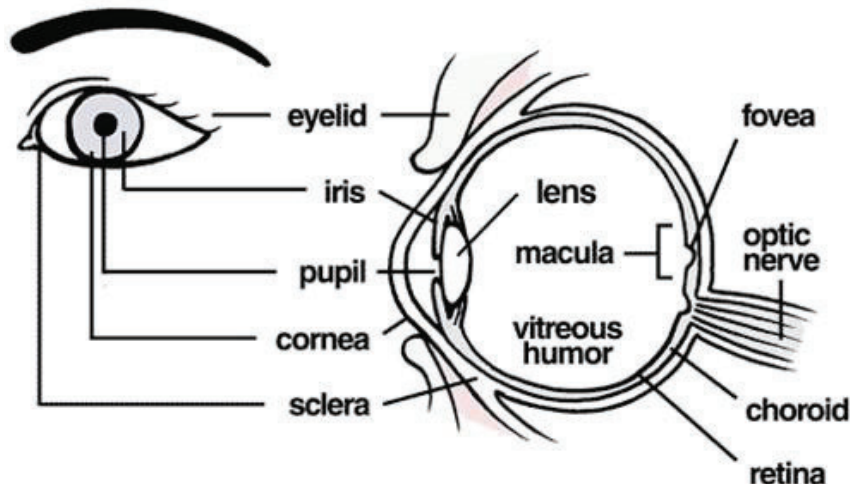
### What is macular degeneration?

Macular degeneration occurs when the macula (part of the retina that lets you see color and fine detail) becomes damaged. This type of central vision loss affects reading, driving, watching TV, sewing, seeing the faces of loved ones, and any other task that requires focusing on small objects. AMD is a chronic eye disease with a high genetic prevalence.

Currently, AMD impacts more than 15 million Americans and without significant advances in intervention and treatment – stands to become an epidemic. AMD is the leading cause of vision impairment and blindness in people over 50. The statistics are astounding. As the baby boom generation ages, it is anticipated that as many as 20 million Americans could suffer from some form of the disease by the year 2020. And incidence is on the rise in other parts of the world.

### Where is the macula?

The macula is located in the center of the retina, the light-sensitive tissue at the back of the eye. The retina instantly converts light or an image into electrical impulses. The retina then sends these impulses, or nerve signals, to the brain.



## **What is dry AMD?**

Dry AMD is the most common type of AMD and vision loss is usually gradual. In its early stages, changes in vision may be hard to notice. Straight lines may appear wavy or it may look like there are blank spots in the center of vision. Colors may look dim.

AMD has three stages, all of which may occur in one or both eyes:

1. **Early AMD**. People with early AMD have either several small drusen or a few medium-sized drusen. At this stage, there are no symptoms and no vision loss.
2. **Intermediate AMD**. People with intermediate AMD have either many medium-sized drusen or one or more large drusen. Some people see a blurred spot in the center of their vision. More light may be needed for reading and other tasks.
3. **Advanced AMD**. In addition to drusen, people with advanced dry AMD experience geographic atrophy, which is a gradual breakdown of the light-sensitive cells and supporting tissue in the central retinal area. This breakdown causes a blurred spot in the center of your vision. Over time, the blurred spot may get bigger and darker, taking more of your central vision.

## **What is drusen?**

Drusen are deposits that lie beneath the retina in a layer called Bruch's membrane. Drusen can be a marker for AMD - 50+ age group - there appears to be an increased risk for macular degeneration as the number of drusen increases. Fat also accumulates in Bruch's membrane with age. This may also contribute to drusen formation. Drusen can be thought of as backed up waste products from various layers of the retina. Most people with drusen have no symptoms. However, the development of drusen may be a precursor to macular degeneration.

## **Can drusen be treated? And, how is it managed?**

There is no clinically effective way to treat drusen. If drusen are present, an ophthalmologist can monitor subtle changes in the retina and manage any complications that may arise.

## **What is wet AMD?**

Wet AMD results when abnormal blood vessels from underneath the retina leak blood or fluid causing that portion of the retina to bulge. This bulging of the retina distorts vision and is characterized by a sudden decrease in central vision. An eye with wet AMD will most likely lose its ability to see fine detail. Prompt treatment by a retina specialist administering Anti VEGF injections may result in slowing down the progression of the disease and some patients experience improvement in visual acuity.

## **Can dry AMD turn into wet AMD?**

Yes. All people who have wet AMD had dry AMD first.

Dry AMD can advance and cause vision loss without turning into wet AMD or dry AMD can suddenly turn into wet AMD, even during early stage AMD. Because of this propensity to change from one day to the next, it is recommended to use an Amsler Grid daily.

## **Which is more prevalent – dry AMD or wet AMD?**

Dry AMD is more prevalent. Approximately 85% to 90% of with AMD have dry AMD. Subsequently, 10-15% have wet AMD. You can have both dry in one and eye and wet in the other.

## **How do I know if I have macular degeneration?**

An exam by an ophthalmologist or retina specialist is recommended in order to determine if the patient has macular degeneration. They are the experts who are focused on the “health of your eyes.”

## **How can macular degeneration be prevented?**

Universally-accepted prevention practices include:

- No smoking
- Wear sunglasses to prevent exposure to ultraviolet light
- Maintain a healthy diet containing antioxidants, lutein and zeaxanthin
- Moderate exercise

Although there are currently conflicting studies with regard to preventing AMD, there is research to support the general health value of not smoking, eating a diet rich in antioxidants - whole fruits, vegetables and fish and exercise is eye healthy. One way to look at it is heart healthy is eye healthy.

### **How can AMD be managed?**

1. Regular eye exams by your ophthalmologist or retina specialist.
2. Self-monitoring of your vision. A simple test, called an Amsler Grid, can reveal signs of AMD such as blurry areas, wavy lines, or blank spots. Any changes like these should immediately be reported to your doctor.
3. People who have been diagnosed with AMD need to monitor their vision daily since sudden vision changes may be a sign of disease progression or new abnormal blood vessel growth or leaking (wet AMD).
4. The use of low vision aids can be a tremendous help with your daily tasks. Make an appointment with a low vision specialist who is a doctor specifically trained in low vision rehabilitation.

### **I have AMD, now what? Should I tell others?**

Vision is a gift we all deserve. When macular degeneration is diagnosed, the impact is devastating! This eye disease effects everyone around you – family, friends, co-workers and caregivers. Learning to live with AMD involves telling others and enlisting their support. People with AMD report a high incidence of depression. Vision allows us to see the face of someone we love, read a letter from a friend, enjoy a new book or navigate through traffic. At the beginning stages, AMD alone does not result in complete sight loss. Most people continue to have some useful vision and are able to take care of themselves. As AMD advances living independently and one's ability to function well in everyday life becomes extremely difficult.

### **Will removing a cataract improve my vision with AMD?**

An ophthalmologist can advise you about your particular and unique condition.

### **Who is at risk for macular degeneration?**

The greatest risk factor is age. Although AMD may occur during middle age, studies show that people over age 50 are at greater risk.

## Other risk factors include:

- Smoking. Smoking may increase the risk of AMD.
- Obesity. Research studies suggest a link between obesity and the progression of early and intermediate stage AMD to advanced AMD.
- Race/Ethnicity. Highest prevalence in Caucasians and Asian Americans.
- Family history. Those with immediate family members (mother or father) who have AMD are at a higher risk of developing the disease.
- Gender. Women appear to be at greater risk than men.

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