# Age-Related Macular Degeneration (AMD)

Age-related macular degeneration is a common eye disease that may damage central vision as you age. Central vision is needed for seeing objects clearly and for common daily tasks such as reading and driving. In some people, AMD advances so slowly that it has little effect on their vision. In others, the disease progresses faster and may lead to a loss of vision in one or both eyes. People over sixty are at greater risk than other age groups.

## How does AMD damage vision?

The retina is a paper-thin tissue that lines the back of the eye. Visual signals are sent to the brain. In the middle of the retina is a tiny area called the macula. The macula is made up of millions of light-sensing cells that help to produce central vision. Damage to these cells causes a decrease in central vision.

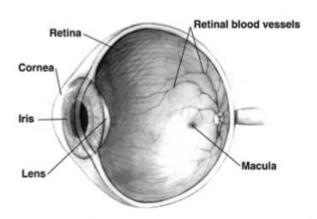
# **AMD Occurs in Two Forms**

# Dry AMD

Ninety percent of all people with AMD have this type. Scientists are still not sure what causes dry AMD. Studies show that the macular area of the retina becomes diseased. This will lead to the slow breakdown of the light-sensing cells in the macula and a slow loss of central vision.

## Wet AMD

Although only 10 percent of all people with AMD have this type, it accounts for most of the severe vision loss from the disease. As dry AMD worsens, new blood vessels may begin to grow and cause "wet" AMD. Because these new blood vessels tend to be very fragile, they will often leak blood and fluid under the macula. This causes rapid damage to the macula that can lead to the loss of central vision in a short amount of time.



# What are the symptoms?

Macular degeneration is painless. With the dry form, vision loss develops slowly. With the wet form, visual symptoms can happen faster. Symptoms for both forms are:

- Blurred or cloudy vision.
- Seeing a dark or blind spot at the center of vision.
- Distorted vision such as straight lines that look wavy.

- Trouble reading or doing other close-up work.
- Trouble doing any activity that requires sharp vision (e.g. driving).
- Complete loss of central vision. Peripheral or side vision is not affected.

The classic early symptom of wet AMD is that straight lines appear crooked. This results when fluid from the leaking blood vessels gathers and lifts the macula, distorting vision. A small blind spot may also appear in wet AMD. This results in loss of one's central vision.

## **Treatment of AMD**

For patients with dry AMD high doses of the antioxidant vitamins C, and E along with zinc with lutein and zeaxanthine can slow the progress of AMD. This supplement lowered the risk of AMD progressing to advanced stages by about 25 percent. The daily supplements also reduced the risk of vision loss. The supplements do not seem to help people with minimal AMD or people without signs of the disease.

There are many brands of AREDS2 vitamins for the eyes. Your eye doctor can tell you about some.

The standard treatment for wet AMD is to inject medicine into the eye. The type of medicine is called antivascular endothelial growth factor, or anti-VEGF, drugs. Blocking VEGF reduces the growth of abnormal blood vessels, slows their leakage, helps to slow vision loss, and in some cases improves vision. Your eye doctor injects the anti-VEGF drug right into your eye in an outpatient procedure.

First, your eye doctor and staff will clean your eye to prevent infection and will use drops to numb your eye. The injection is performed with a very fine needle. You may receive multiple anti-VEGF injections over the course of many months. You often need repeat anti-VEGF treatments to keep seeing benefits. There are different types of anti-VEGF medicines. Your doctor will need to decide which one will work best for you.

In some cases, your eye doctor may want to combine anti-VEGF treatment with other treatment. The treatment that's right for you will depend on the state of your AMD.

Low vision aids are often helpful. Different devices can help with different tasks. Training and practice are important to become good at using any device. The University of Wisconsin Ophthalmology Clinic provides a low vision service that will show you aids and advise you which may be helpful to you.

## **Phone Numbers**

University Station Eye Clinic, 8 a.m. to 4:30 p.m., Monday through Friday (608) 263-7171.

When the clinic is closed, your call will be forwarded to the hospital paging operator. Ask for the "Eye Resident on Call." Give the operator your name and phone number with area code. The doctor will call you back.

If you live out of the area, call: **1-800-323-8942** and ask to be transferred to the above number.

Please call if you have any questions or concerns.

If you are a patient receiving care at UnityPoint – Meriter, Swedish American or a health system outside of UW Health, please use the phone numbers provided in your discharge instructions for any questions or concerns.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 7/2019 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#4523