



Macular Degeneration

Information about Age-Related Macular Degeneration (AMD)

Macular degeneration (AMD) is a condition that occurs primarily in adults over the age of fifty and is currently the leading cause of blindness in adults. The National Eye Institute (NEI) estimates that macular degeneration causes over 16,000 cases of legal blindness every year. Unfortunately, macular degeneration causes irreversible vision loss. Therefore, it is important that adults have regular dilated eye examinations to detect early signs of macular degeneration.

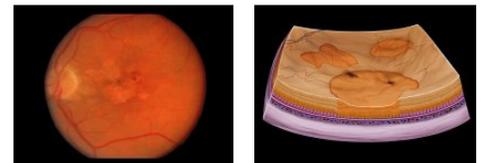
What Is Age-Related Macular Degeneration?

The very central part of the retina, where light focuses, is called the macula (the retina is the inside lining of the eye). The macula is made up of very specialized vision cells that provide our central vision, allow us to read, and to see details and colors. Problems that affect this central part of the retina like abnormal pigmentation, scarring, and/or hemorrhages can cause a severe loss of central vision. These retinal changes that affect vision are known as macular degeneration.

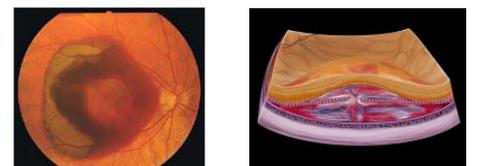
Types of Macular Degeneration (AMD)

Macular degeneration (AMD) is classified into two types, called “Dry” AMD and “Wet” AMD.

“Dry” AMD is a progressive degeneration of the specialized vision cells of the macula. Over time, these cells lose their shape and structural integrity, decrease in number, and slowly lose their ability to process light. This degenerative process leaves behind debris and waste that forms deposits in the retina, known as drusen. As the drusen increase, the retina becomes distorted and scarred. Gradual loss of central vision and the ability to see fine detail occurs. Dry AMD is the most common form of macular degeneration.



“Wet” AMD is a faster, more aggressive form of degeneration that usually leads to more severe vision loss. Some research suggests that it is a more advanced form of the dry degeneration. In wet AMD, the microscopic blood vessels that nourish the macula break down and begin to leak fluid. This can lead to swelling, blistering and scarring of the retina. New blood vessels may begin to form. Unfortunately, these new vessels are extremely fragile and tend to leak even more. Sudden vision loss can occur when these vessels break.



How is Macular Degeneration Diagnosed?

Unfortunately, many people do not realize they have a problem with their macula until they begin to lose vision. Symptoms may include blurred vision, distortion of angles and lines, or dark spots in the vision. Since macular degeneration is not reversible, early detection is important to preserve valuable sight.

A comprehensive dilated eye health examination can detect early macular degeneration. In some cases, a special dye can be injected into a vein (in the arm) which travels to the eye. With the use of a special camera, the dye can help highlight problems with the blood vessels in the macula.

Who is at risk for Macular Degeneration?

Although macular degeneration (AMD) can occur during middle age, scientific studies show that people in their 50s have about a 2 percent chance of getting AMD. The risk increases to nearly 30 percent in those over 75. In general, women are at a slightly greater risk for AMD. People with a family history of AMD and/or those with high cholesterol may also be at a higher risk. Studies have also shown that smoking significantly increases the risk for macular degeneration.

Can Macular Degeneration be treated or prevented?

There are currently no specific treatments available for the dry form of AMD. Fortunately, dry AMD generally develops very slowly. Vision changes usually occur over many years. Recent scientific studies by the National Eye Institute (NEI) have shown that taking high levels of certain antioxidant vitamins and zinc can help to reduce the risk of severe vision loss by about 25 percent.

Some cases of wet AMD can be treated with laser surgery. In the wet form of AMD, retina specialists may inject special medications into the eye or they may use a special type of laser to try and stop leaking blood vessels at the back of the eye. These treatments generally do not improve vision; however, they may help to slow down the progression of the degeneration. Unfortunately, individuals with the wet form of AMD may experience severe vision loss

What should you do if you are diagnosed with Macular Degeneration?

You should have a dilated eye exam once a year or more often, based on your doctor's recommendation. Your doctor may give you an Amsler Grid to view at home to help monitor your vision. The Amsler Grid is a special type of graph paper designed to help detect subtle changes with your retina. To help improve your overall health, you should stop smoking, eat a healthy and balanced diet, and exercise regularly. Your doctor may also recommend that you supplement your diet with high potency anti-oxidant vitamins, lutein, and omega-3 fatty acids (like fish oil).

What can you do if you have already lost vision from AMD?

Normal use of your eyes will not cause any damage to your vision, so you do not need to be afraid that you might "over use" them. If you have lost vision from macular degeneration, traditional eyeglasses may not work very well. There are specialty glasses and magnifiers that are available to help individuals maximize their vision and function more comfortably. In many cases, special lens tints can be used to improve clarity and contrast and reduce glare.

Our doctors are trained to detect, diagnose, and manage patients with macular degeneration. If laser treatment or other specialty care of the retina is needed, we work very closely with the area's leading retina specialists. Our office can provide the most advanced eyeglasses and optical solutions for patients that experience vision loss from macular degeneration. Our doctors also work closely with the area's leading low vision specialists to assist patients with severe vision loss.

For more information about AMD, visit the National Eye Institute @ www.nei.nih.com