EYE-Q

by R. Thomas Barowsky, MD

Age-Related Macular Degeneration

February has been designated Macular Degeneration Month by the Prevent Blindness Society of the United States. I will spend the next few columns discussing macular degeneration, its causes and treatments. Be sure to also check out this column later in the month when I discuss some of the revolutionary new technology coming down the pike to provide better vision

To better understand macular degeneration it is important to understand how the eye works. If we consider the eye to be like a camera, the retina in the back of the eye is like the film in the camera. Images are focused on the retina by the lens of the eye and those images are changed to electrical impulses and sent to the brain. The macula is in the center of the retina and is responsible for helping you see fine details in the center of your vision. The loss of central vision can make it difficult to read, drive, or recognize faces. Age-related macular degeneration (AMD) is a disease that damages the macula in the eye. So, in effect, it causes damage to the film in our camera.

AMD is a common problem for many people as they get older. It is typically seen in up to 15% of the population over age 65. It usually affects both eyes, but one eye may be affected before the other. The cause is not known but, you may be at greater risk if you smoke, are obese, have high blood pressure, or have family members with AMD. It is also more common in people of Northern European decent and in women.

There are two forms of AMD: wet and dry. In both cases, a blind spot forms in or near the center of vision. The wet form of AMD occurs when new, fragile blood vessels grow under the macula. These vessels leak blood and fluid and cause unwanted scarring. This can cause rapid vision loss. In the dry form, the light-sensitive cells in the macula gradually break down. The dry form is more common and causes a much slower and often less severe loss of vision.

AMD does not cause pain. Most people with AMD in an early to intermediate stage do not have any symptoms and have good vision. Only people with advanced AMD have symptoms. These symptoms may include:

- blurred vision
- wavy appearance to straight lines (for example, a telephone pole may appear to be bent)
- a dark patch in the middle of words as you read
- a worsening of your color vision.

If just one eye is affected, you may not notice the loss of vision immediately because you are using both eyes together. Since this condition only effects the central vision your side (peripheral) vision is not affected is not affected.

Your eye doctor can diagnose this disease with a complete eye exam including dilation of the pupil. Some eye doctors feel that they can diagnose AMD without dilating the eye by using a camera that takes pictures through the undilated pupil. This is a very inaccurate way to evaluate the retina in AMD and should not take the place of a dilated retina exam.

Sometimes a special test called fluorescein angiography is needed. In this test a dye is put into a vein in your arm. The dye travels to blood vessels in your retina while a special camera takes pictures of the retina. These pictures can show where the leaking blood vessels are or where the retinal cells are wearing away.

Next week I'll talk about how to watch for changes in your vision caused by AMD and how we treat the changes to preserve vision. In the mean time, sit back and cheer for your favorite team or Super Bowl commercial this evening.

If you have questions about your eye health e-mail Dr. Barowsky at doctom@tdkj.com and we'll try to answer your questions here at Eye-Q.