



# Valley Eye

*Diseases, Laser & Surgery of the Eye*

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## **What Are the Different Types of Macular Degeneration?**

There are two types of the disease: dry macular degeneration and wet macular degeneration.

### **Dry macular degeneration**

Ninety percent of people who have macular degeneration have the dry form of the condition. In dry macular degeneration, waste products may accumulate in the tissues underneath the macula forming yellowish deposits called drusen.

The continued presence of drusen interferes with the blood flow to the retina and, in particular, to the macula. Less blood flow reduces the nourishment to the macula causing its light sensitive cells to stop working efficiently, or atrophy. You will sometimes hear dry macular degeneration referred to as atrophic macular degeneration.

Occasionally, a large area of cells will stop working. This is called geographic atrophy, which produces a distorted or blind spot, also known as a scotoma, in the central area of vision.

People who have dry macular degeneration may experience a gradual loss of detail vision.

### **Wet macular degeneration**

Though the wet form of macular degeneration affects only 10 percent of people diagnosed with the disease, it accounts for almost 90 percent of the severe vision loss associated with the condition. Dry form patients who have large drusen without clear borders or who have many drusen that run together are at greater risk for developing the wet form of the disease.

With wet macular degeneration, new weak blood vessels may grow in or under the retina causing fluid and blood to leak into the space under the macula. As a result, wet macular degeneration is sometimes called exudative macular degeneration. (An "exudate" is material, such as fluid, which has escaped from blood vessels and has been deposited in tissues.)

You may also hear wet macular degeneration described as choroidal neovascularization. The choroid is the area of blood vessels beneath the retina, and neovascularization refers to growth of new blood vessels in tissue. In choroidal neovascularization, blood vessels from the choroid grow into the macula.

## **Symptoms**

Both the dry and wet form of AMD cause no pain. The most common early sign of dry macular degeneration is blurred vision. As fewer cells in the macula are able to function, people will see details less clearly in front of them, such as faces or words in a book. If the loss of these light-sensing cells becomes great, people may see a small – but growing – blind spot in the middle of their vision.

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

## **Diagnosis**

Regular eye exams are the key to early detection of macular degeneration since symptoms may or may not be present in people who have the disease. Early drusen can be seen in an eye exam before symptoms develop, so you should visit your eye care professional regularly.

## **Eye Exam**

During the eye exam, your eye doctor will inquire about any eye problems you may be having as well as your general medical and family history. Several tests are performed to assess your vision combined with examination of the internal structures of the eye after dilation of the pupil.

## **Risk Factors**

While there are no known causes of macular degeneration, many studies have been performed which illustrate factors that may put you at risk for the disease. There are risk factors you can't control, such as age and genetics, and risk factors that you can control, such as smoking and poor nutrition.

### **Risk Factors You Can't Control**

- Age
- Race (Caucasians are at greater risk)
- Genetics
- Light eye color

## **Risk Factors You Can Control**

- Smoking
- High blood pressure
- High cholesterol
- Poor nutrition
- Unprotected exposure to sunlight
- Excessive sugar and trans fats intake
- Obesity
- Sedentary lifestyle

## **What You Can Do to Reduce Risk**

- Quit smoking
- Control high blood pressure
- Control cholesterol level
- Control cardiovascular disease
- Improve nutrition
- Wear 100% UV protective sunglasses
- Curb sugar intake
- Maintain ideal body weight
- Exercise regularly

## **Early Detection**

People under 50 should have an eye exam every three to five years. People with a family history of eye conditions or those with a medical condition associated with eye disease, such as diabetes, should have their eyes tested every year, particularly if they are over 65. If you notice changes in vision – vision becomes blurry, for example – visit your eye doctor immediately.