## Advanced Age-related Macular Degeneration: What to expect

Age-related macular degeneration (AMD) can affect your eyes in a variety of ways.

- The early stages of the disease are visible during retinal examination but do not cause significant vision loss.
- The intermediate stage is visible on examination and may cause very mild blurring or distortion of vision. The use of a vitamin supplement may significantly reduce the chance of progressing from this stage to the advanced wet stage, based on the results of a large national scientific study called AREDS. It is also important to monitor the vision with a grid (the Amsler grid) to detect progression of disease early on.
- In the advanced dry form, tissue in the center of the retina becomes thin and stops functioning, causing gradual, irreversible central vision loss. There is currently no approved treatment for the advanced dry form, but several promising treatments are under development and may be available through clinical trials in the next few years.
- In the advanced wet form, abnormal blood vessels grow under the center of the retina and leak fluid or blood, causing central vision loss. The advanced wet form is currently treated with injections of medicine into the eye. These treatments can almost always prevent further loss of vision and in many cases can improve vision significantly.

## Depression and loss of independence

Older patients with vision loss from AMD are more likely to experience depression than older individuals without AMD. Depression is often related to loss of independence and loss of the ability to perform daily activities such as driving and reading. Patients with vision loss from AMD may not be able to participate in activities they enjoy without help, but they may also resist asking for help because they do not want to burden their family and friends. Talking openly about these issues can be helpful for everybody involved and reduce the emotional toll on both patients and caregivers.



## **The Charles Bonnet Syndrome**

Many patients with central vision loss, particularly when both eyes are affected, will see hallucinations such as familiar faces, repeating patterns (like wallpaper), or objects that are not there. These images tend to be clear, rather than fuzzy like "floaters" in the eye. Other senses such as smell and hearing are not affected, and these hallucinations are not related to dizziness or other symptoms outside of the eye.

Patients with advanced AMD have lost central vision, which means that the brain receives an incomplete picture from the eye. Another name for the Charles Bonnet Syndrome is release phenomena because the brain essentially "releases" images into this missing central space in the picture. This is not a sign of "going crazy" and patients have insight into the fact that the objects or patterns they are seeing are not actually present.

Many patients with the Charles Bonnet Syndrome do not mention their hallucinations to their family, friends or doctors because they are afraid of being diagnosed with mental illness. Family and friends can help by asking about the symptoms described above and providing reassurance that these experiences are "part of the package" of the advanced AMD.

## Low vision services

When central vision decreases due to AMD, a number of aids may increase a patient's ability to make the most of the remaining vision. In particular, magnification and good lighting can greatly improve the ability to read and perform daily tasks. A number of devices, both simple and complex, exist to help maximize vision. Seeing a low vision specialist may be helpful in identifying the most appropriate vision aids for your particular needs, ranging from specialized reading glasses to closed circuit magnified television systems. Your eye care provider can provide you with a referral to a low vision specialist.

Bay Area Retina Associates is a group practice of retinal surgeons. All members of the group are board certified by the American Academy of Ophthalmology and have completed fellowship training in vitreoretinal surgery. BARA surgeons have expertise in the treatment of retinal detachment, diabetic retinopathy, age-related macular degeneration, macular hole, epiretinal membrane, and retinal vascular disease. BARA physicians see patients in eight offices and perform surgery at several hospitals and surgery centers around the East Bay.

