



## **Look out for age-related eye diseases**

**By age 65, one in three Americans have some form of vision-impairing eye condition. There are four major age-related eye diseases (AREDs) that affect seniors: glaucoma, cataracts, macular degeneration and diabetic retinopathy. Learning about the symptoms of and treatments for each of these conditions can help you protect your vision and that of an ageing loved one. Marlo Sollitto reports on these in *Medical News Today*.**

### **Glaucoma**

Glaucoma occurs when the pressure within the eye is elevated, which can damage the optic nerve and result in vision loss and blindness. There usually are no initial symptoms, so as many as one million people may have glaucoma without realizing it. This condition is one of the main causes of blindness.

At first, glaucoma yields no obvious symptoms. However, as the disease progresses, a person with glaucoma may notice their side or peripheral vision gradually failing. Sufferers may experience worsening tunnel vision if left untreated.

There are many different types of medications (in eye drop and pill form) that are used to treat glaucoma. In some people, however, medications alone do not successfully control increased eye pressure, and surgery needs to be performed. One type of surgery called trabeculoplasty uses a laser to improve the flow of fluids out of the eye thereby reducing pressure. This can be done in your doctor's office. There is also conventional surgery called trabeculectomy in which your doctor creates a new drainage path in the eye, under the eyelid.

**Risk factors for glaucoma** include age, family history of glaucoma, the use of steroid medications and near-sightedness.

Glaucoma can steal 40% of vision before a person notices!

### **Cataracts**

A cataract is a clouding of the eye's usually transparent lens. The lens is composed of water and protein, but if the protein clumps together, it can start to obscure transmission of light through the lens. If the

cataract worsens and begins to severely affect vision, surgery may be necessary to remove the cloudy lens and replace it with a new one.

People with cataracts often complain about glare, cloudy/fuzzy vision, double vision in one eye or halos around lights. Surgery is the only way to correct vision loss caused by cataracts.

Getting older is a **major risk factor** for cataracts, and women are at slightly higher risk than men. People who smoke, do not protect their eyes from the sun and have a family history of cataracts are more likely to develop them as well.

Cataract treatment is performed at a day clinic, and is a common and usually successful procedure.

## Macular Degeneration

Macular Degeneration (MD) diminishes sight in a dramatic way: It affects the central vision. Although people with MD rarely go completely blind because of it, many find it difficult to read, drive and perform other daily functions. This condition affects the macula, an area at the centre of the retina that is responsible for focused, central vision.

In the early stages of MD, there are usually no visual symptoms. A person's central vision will eventually appear wavy or blurry, and in advanced cases it may disappear completely. However, peripheral vision usually remains intact because the rest of the retina is still healthy. Even with some remaining vision, it can still be difficult for those with MD to detect fine details and colours.

MD is considered an incurable eye disease, but there are a few treatments that can help slow its progression. People with macular degeneration can be treated with laser surgery and anti-angiogenic drug injections. Low-vision devices are also helpful for maintaining an active and independent lifestyle despite visual changes.

Age is the **biggest risk factor** for developing MD. It is estimated that 6.5 percent of Americans age 40 and older have some degree of macular degeneration. Family history, race (whites appear to have a higher risk than blacks or Hispanics), high blood pressure and smoking are other risk factors.

## Diabetic Retinopathy

This potentially blinding disorder is a complication of diabetes. Diabetes causes abnormal changes in the retina's blood vessels, causing them to become leaky and grow where they should not. These new vessels tend to break and bleed. As they try to heal, the damaged blood vessels will contract and detach the retina.

Symptoms of diabetic retinopathy include shadows or dark objects that appear to "float" across your field of vision, blurred or distorted vision, partial loss of vision and pain in the eye.

Consistently high blood sugar and high blood pressure are associated with retinopathy. Type 2 diabetics who use the medicine rosiglitazone (brand names Avandia, Avandamet and Avandaryl) to manage their blood sugar may be at higher risk for problems.

There is no cure for diabetic retinopathy. However, laser treatment (photocoagulation) is usually very effective at preventing vision loss if it is done before the retina has been severely damaged. Surgical removal of the vitreous gel (vitrectomy) may also help improve vision if the condition is caught early enough.

## Eye tests every senior should have

Age-related eye diseases are diagnosed through an exam performed by an ophthalmologist.

A comprehensive eye exam should include at least the following three tests:

- 1. Visual acuity test:** The familiar lettered eye chart measures how well you see at various distances.
- 2. Pupil dilation:** Drops are placed in the eye to widen the pupil. This allows the doctor to view more of the retina and look for signs of disease. After the examination, close-up vision may remain blurred for several hours.
- 3. Tonometry:** This test determines the fluid pressure inside the eye, and there are many methods of doing so. An "air puff" test is the most common way to screen for high intraocular pressure. It is a painless process in which a small jet of air is shot against the cornea. Other more involved tests may be required to obtain more accurate readings.

Most age-related eye conditions must be detected and treated early on to prevent lasting damage. A comprehensive eye exam is recommended every one to two years, depending on a person's age and unique risk factors. These exams are vital for catching diseases like glaucoma and MD that have no obvious symptoms in the early stages. If you or a loved one is experiencing noticeable changes in vision, it is crucial to make an appointment for an eye exam as soon as possible.