

# MACULAR DEGENERATION



## THIS SIMPLE HOME TEST COULD SAVE YOUR SIGHT

By Dr Christolyn Raj

On the back of this year's Macular Degeneration Awareness Week (21–27 May), it's important to remind patients of the importance, and ease, of checking for signs of this blinding condition.

Macular degeneration (also known as age-related macular degeneration or AMD) is the leading cause of blindness and severe vision loss in Australia. AMD actually refers to a group of degenerative diseases of the retina (the light-sensitive tissue at the back of the eye) that cause progressive, painless loss of central vision or visual distortion. It affects a person's ability to see fine detail, read, drive and distinguish faces. There are essentially two types of AMD – the wet form and the dry form.

There is no cure for AMD, but recent treatment options have revolutionised the management of this condition and our ability to prevent blindness. For example, patients with wet AMD are often eligible for eye (intravitreal) injections, which trials have shown can maintain and improve vision in the majority of patients. While there is no approved treatment for the dry form of AMD, there are ongoing trials investigating disease progression and potential therapies.

### Macular degeneration is the leading cause of blindness and severe vision loss in Australia

In general, the research shows that patients who do best with treatment are those who present early in the disease process. This is why monitoring your macula is so important.

### Symptoms to watch for

Key symptoms of AMD include dark patches or empty spaces appearing at the centre of your vision or vision distortion, where straight lines appear wavy or bent. You may also notice an increased need for lighting, difficulty distinguishing colours, decreased night vision and sensitivity to glare.

### Easy screening test

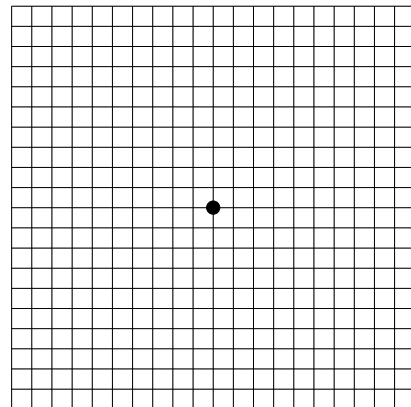
It's important to screen for AMD so that treatment, if appropriate, can be started as early as possible. Fortunately, there is a quick and easy way to test yourself, which you can do from the comfort of your home – the Amsler Grid (see image). This is a simple test to alert you to any vision changes that may indicate the presence of AMD, or worsening of your condition.

I generally recommend that everyone over the age of 50 monitors their vision by spending a moment each day looking at the straight edge of a door or window, one eye at a time, to

### A 10 second test that could save your eyesight

**This Amsler Grid is used for the early detection of macular degeneration.**

1. If you normally wear glasses to read, put them on
2. Look at the grid, holding the page at your normal reading distance
3. Cover one eye and look at the dot in the centre
4. Without moving your eye off the dot, see whether any of the lines in the grid are wavy, missing or blurred. If this happens, please see your usual eyecare provider immediately
5. Repeat with the other eye



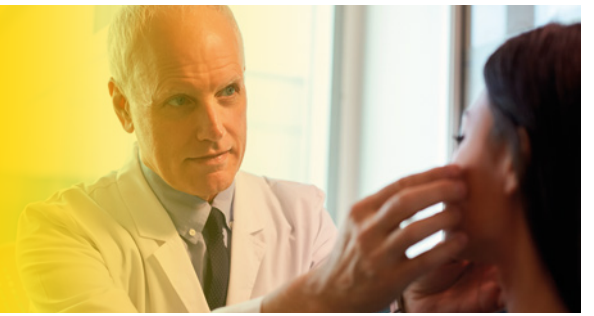
see if there are any 'bumps' or parts missing. Anyone who is at increased risk of AMD (e.g. if you have a family history of macular degeneration and/or are a smoker) would benefit from using the Amsler Grid.

### Seeking professional help

If you notice any signs or symptoms of AMD, or detect changes to your vision using the Amsler Grid, get your eyes checked immediately. In addition to regular use of this grid, you should see an eye care professional every 1–2 years for a general check. Don't dismiss any changes in your vision as part of the ageing process – early detection can save your sight.

Vision Eye Institute has a number of ophthalmologists who specialise in the diagnosis and management of AMD.

# LASER EYE SURGERY



## FOCUS ON LASER EYE SURGERY

### Part 3: The pre-surgical consultation

We continue our series of articles discussing common questions about laser eye surgery. In Part 1, we examined the basic criteria you must meet to qualify for surgery and then we covered how to choose a laser eye surgeon in Part 2.

Now we move onto the pre-surgical consultation. This is necessary to confirm if you are suitable for laser eye surgery and which procedure is most appropriate for you. Remember to let your doctor know of any eye-related health issues, together with more general health concerns or problems. Also specify what medications, if any, you take on a regular basis, as well as medications you may be allergic to.

At your pre-surgical assessment, you will undergo a comprehensive eye examination so that your doctor can evaluate your vision and establish whether you are suitable for laser eye surgery. This includes several easy and painless tests such as vision and prescription testing, an eye pressure test and a dilated eye exam. Your doctor can then assess the health of your eyes and confirm your degree of refractive error – you will know this as your glasses prescription. He/she will also evaluate the shape, contour and thickness of your cornea, as well as any irregularities. This information will be used to determine the laser eye surgery procedure most appropriate for your situation and the precise amount of corneal tissue that needs to be removed to bring your vision back to normal (or as close as possible).

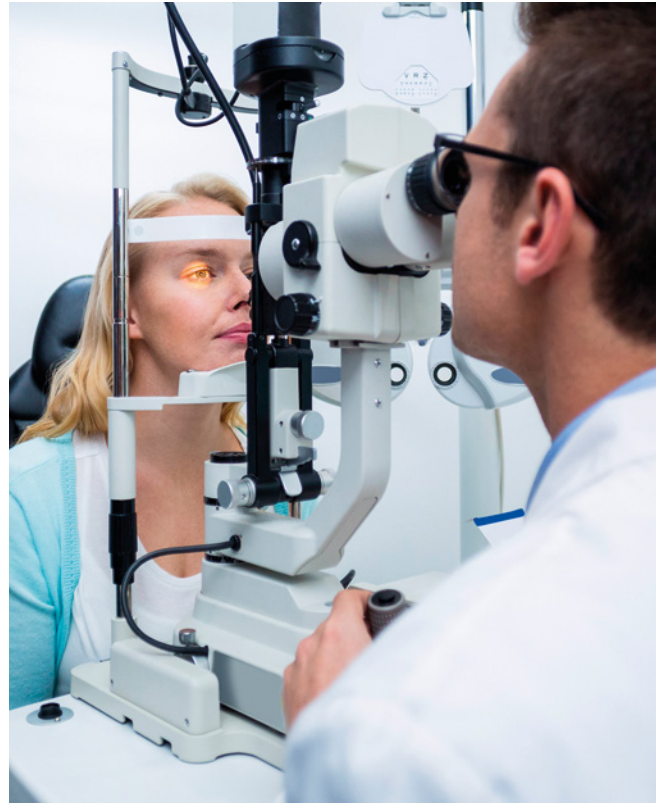
**LASIK** is the most common type of laser eye surgery, and is suitable for patients with regular-shaped corneas and adequate corneal thickness. It can be used to treat short-sightedness, long-sightedness and astigmatism.

**SMILE** is an alternative procedure for patients with regular-shaped corneas. It is particularly suited to patients with a high degree of short-sightedness (myopia), and is also suitable for patients with astigmatism.

**ASLA (also known as PRK)** may be the recommended treatment if your corneas are irregular or too thin.

The risks and benefits of laser eye surgery, as well as details of the specific procedure you will undergo, will be discussed at this consultation. This is also an opportunity for you to ask your doctor any questions about the surgery, and clarify your expectations.

In the next article, we'll look at the surgery itself and what is involved.



All medical and surgical procedures have potential complications – check with your ophthalmologist before proceeding.



## SUBSPECIALTIES OF OPHTHALMOLOGY

### What the different types of ophthalmologists do

Our doctors at Vision Eye Institute have completed specialist training in the diagnosis and management of disorders of the eye to become general ophthalmologists. In addition, many have undertaken further training, which may include extra qualifications, to gain expertise in specific diseases or parts of the eye – this is called subspecialisation. As a result, Vision Eye Institute can offer patients the full spectrum of ophthalmic care.

All of the doctors who work at Vision Eye Institute are registered with the medical college responsible for ophthalmologists – the Royal Australian and New Zealand College of Ophthalmologists – as required by law.

Below is a short description of each of the specialty areas in ophthalmology. Some of our doctors have specialised in more than one area.

**General (or comprehensive) ophthalmologists** treat a wide variety of eye conditions and perform cataract surgery, as well as prescribe glasses and contact lenses. A general ophthalmologist may refer you to another ophthalmologist in certain situations where more specialised care is required.

**Refractive surgeons** perform vision correction procedures to correct refractive errors using techniques such as laser eye surgery (LASIK, SMILE, ASLA) and lens surgery. Refractive errors include short-sightedness (myopia), long-sightedness (hyperopia), age-related long-sightedness (presbyopia) and astigmatism.

**Corneal specialists** diagnose and treat diseases of the cornea, which is the clear 'windscreen' at the front of the eye. These conditions include dry eye disease, corneal trauma, keratoconus, Surfer's Eye (pterygium) and Fuch's dystrophy. Corneal cross-linking and corneal transplantation (keratoplasty) are some of the procedures that these specialists may perform.

**Glaucoma specialists** are experts in treating the various conditions that affect the optic nerve, of which glaucoma is the most common. Managing eye pressure is the only method known to effectively treat glaucoma, and can be achieved by medical, laser and surgical means.

**Retinal specialists** diagnose and manage diseases affecting the back region of the eye. This includes the retina (the light-sensitive tissue at the back of the eye), the macula (the part of the retina that is responsible for central vision) and the vitreous (the clear jelly-like fluid that fills the bulk of the eye). Diagnostic tests may include ultrasound, dye techniques (fluorescein angiography) and electrophysiology, while they may perform treatments such as laser therapy, vitrectomy (removal of the vitreous), cryotherapy (a freezing treatment) and surgery to repair torn/detached retinas.

**Oculoplastic surgeons** perform plastic surgery of the structures around the eye – e.g. the eye socket (orbital surgery), around the eyeball (periocular surgery), the tear drainage system (lacrimal surgery) and the eyelid (blepharoplasty).

**Paediatric specialists** have expertise in the diagnosis and treatment of eye conditions that affect infants and children. Common conditions include eyes that do not align with each other (strabismus), lazy eye (amblyopia), genetic and developmental abnormalities and trauma.

**Ocular inflammation specialists** are interested in the various inflammatory conditions that affect the eye and are the result of an abnormally functioning immune system (e.g. uveitis and scleritis). These doctors have specific knowledge about therapies that modify the immune system, and often work in conjunction with other medical immunology specialists (e.g. immunologists and rheumatologists).

**Neuro-ophthalmologists** treat visual problems related to the brain and nervous system. Examples of this include abnormal eye movements, unequal pupil size (anisocoria), double vision and various types of vision loss. Underlying causes may include strokes, brain tumours and thyroid conditions.

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