

Macular degeneration



Professional Excellence in Eye Health



THE COLLEGE OF
OPTOMETRISTS

Overview

The macula is an area at the back of your eye that you use for seeing fine detail such as reading a book.

Macular degeneration (MD) covers a number of conditions which affect the macula. The conditions affect your ability to do certain tasks such as reading and watching television, but do not affect your ability to walk around as your side vision is not affected.

One of the most common symptoms of MD is noticing that straight lines appear wavy or that there are patches missing from your vision. You may not notice this if it happens in one eye as your other eye will compensate, so it is important to regularly check your vision in each eye separately. You can do this by looking with each eye separately at the straight lines on a door frame or Venetian blind. If you notice the lines are distorted or there are missing patches, you should see your optometrist straight away.



Watch our video about macular degeneration at lookafteryoureyes.org/amd.

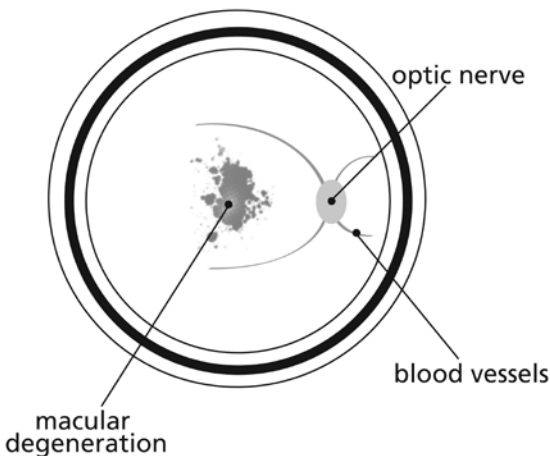
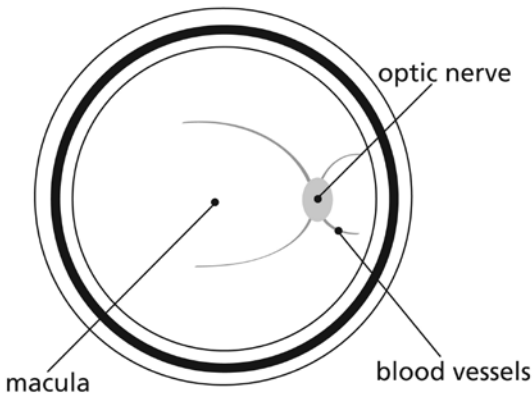


If you have any concerns about the health of your eyes, please visit your local optometrist. Optometrists are the eye health specialists in the community.

What is macular degeneration?

Macular degeneration (MD) happens when the macula at the back of your eye becomes damaged. This can make it harder to see fine detail, such as recognising faces, or to read or watch television. However, this does not normally affect your ability to walk around as the edge of your vision should not be affected.

One of the most common symptoms of MD is noticing that straight lines appear wavy or that there are patches missing from your vision.



Will I go blind if I have MD?

MD is the leading cause of sight loss in the UK. However, most people with MD still have their peripheral (side) vision and so can see well enough to get around. However, they may not be able to see well enough to read without strong magnification.

Does it happen more as you get older?

The most common forms of MD happen more as you get older and are known as age-related macular degeneration (AMD). Around one in 10 people aged 65 or over show some signs of AMD. Some younger people may have MD caused by a genetic condition but this is less common than AMD.

What are the symptoms of AMD?

Some people simply notice that things appear blurry or they have difficulty reading, even with their normal reading glasses. Other people may notice that they have a smudge in their central vision which does not go away, or they may notice that straight lines are distorted or wavy.

The most common forms of MD happen more as you get older and are known as age-related macular degeneration (AMD).

Some people with AMD may notice that they become sensitive to bright light, or that they find it difficult to adapt when going from a dark to a light environment. Some people notice that colours can fade.

These symptoms are more noticeable if you look for them with each eye separately, because, if you have both eyes open, the better eye may compensate for the other one. We recommend you regularly check your vision in each eye separately by looking at some detail, such as a book or magazine, and covering each eye in turn. This will help you notice any changes in your vision early.

You can find more information, including a video showing how AMD may affect your vision, on our website, at lookafteryoureyes.org/amd

I have heard that AMD can be 'wet' or 'dry' – is this right?

AMD can be classified as early or late. Early AMD is always dry AMD. This is when yellow deposits, known as drusen, build up behind the macula. Most people with early AMD have near normal vision. There is no treatment for early AMD.

A minority of people with early AMD can progress to late AMD. Late AMD may be 'wet' or 'dry'.

We recommend you regularly check your vision in each eye separately by looking at some detail, such as a book or magazine, and covering each eye in turn.

The most common form of late AMD is the wet form. This happens when abnormal blood vessels begin to grow behind the macula and leak fluid. This pushes the macula away from its blood supply at the back of your eye and causes a rapid loss of vision. It is usually associated with you noticing distorted vision (straight lines become wavy, or you have a blank spot or smudge in the centre of your vision).

You can check this yourself by looking at straight lines such as door and window frames or Venetian blinds. Or, you can look at a grid of squares printed on paper, called an Amsler chart (see later). Your optometrist will be able to advise you on this. It is important to do this with each eye separately and while wearing your glasses (if you have glasses). Wet AMD can be treated, so if you notice these symptoms, you need to see your optometrist straight away.

Late dry AMD is called geographic atrophy and is rarer than late wet AMD. This is where you lose vision because the retina at your macula thins but there are no leaking blood vessels. There is no treatment for geographic atrophy.

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Can I do anything to protect myself from getting AMD?

- The main modifiable risk factor for developing late AMD is smoking, so if you smoke, try to stop.
- Eating colourful fruit and vegetables (for example, kale, spinach, peppers, carrots and broccoli) may reduce your risk of developing AMD.
- Other major modifiable risk factors that have been associated with late AMD include being overweight or obese, having high blood pressure, or having a diet high in fat. You should therefore try to maintain a healthy weight and keep your blood pressure under control.
- Prolonged exposure to ultraviolet light (UV) may be linked to AMD so we recommend that you wear sunglasses that absorb UV when you are going to be outside for long periods. You can tell if sunglasses absorb UV by looking for the British Standard kitemark, or the CE mark, which is the manufacturer's assurance that the sunglasses comply with the relevant safety standards.

Should I take dietary supplements to protect myself from AMD?

There are lots of dietary supplements on the market which claim to be beneficial for eye health. One large trial in the USA showed that people with AMD may experience some delay in progression of the condition if they take certain nutritional supplements, but there is no good evidence that the general population should be taking these supplements. In the UK, the National Institute of Health and Care Excellence (NICE) feels there is not enough clinical evidence to make any strong recommendations on changing your diet or taking nutritional supplements for AMD.

If you wish to take nutritional supplements for AMD discuss with your optometrist whether or not they may be helpful for you. It is important to check that the ingredients are suitable for you.

Are there any other risk factors?

You are more at risk of developing AMD if you have a family history of the condition or already have it in one eye.

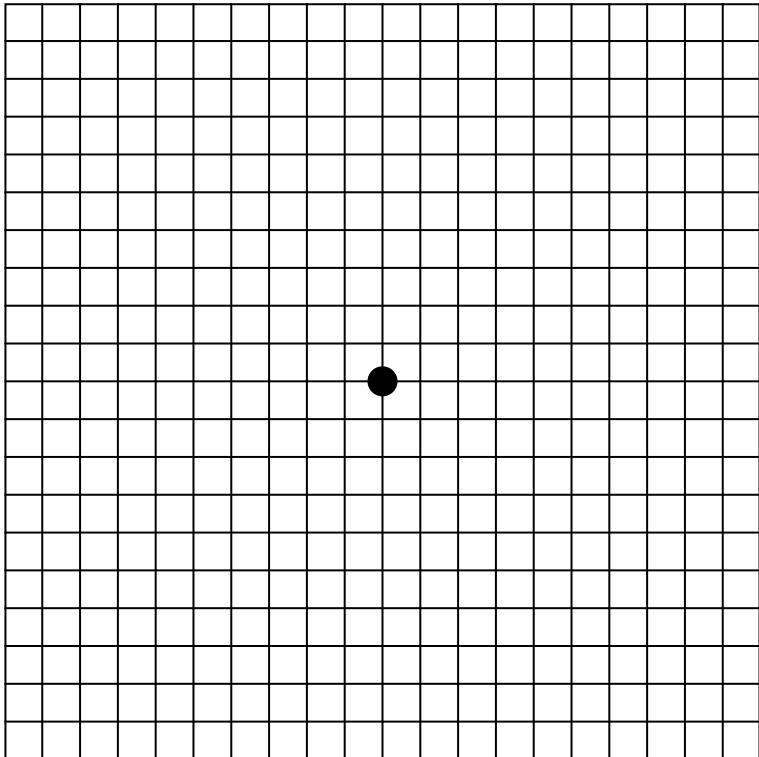
The exact cause of AMD is not yet known, so you may develop it even if you don't have any of these risk factors.

You can check your vision for distortion using the Amsler chart on the next page.

The Amsler test

- Wear the glasses you usually wear to read (if you use glasses to read).
- Hold the chart about 30cm (12 inches) away from your face.
- Cover each eye in turn. With the other eye look at the black dot in the middle of the chart. Are all the lines straight? Do you see any distortion, or any broken or wavy lines? Do you see any missing patches?
- If you see anything unusual, you should contact your local optometrist straight away.

The Amsler chart



Is there any treatment for AMD?

Wet AMD can often be treated if it is caught early enough and this is normally done by injecting a drug into the gel inside your eye. This shrinks the new blood vessels that are pushing the macula away from the back of your eye. You may need to have this repeated every few weeks for a few months. This will be provided by the NHS. It is important to spot any changes early by checking your vision in each eye separately and contacting your optometrist immediately if your vision suddenly becomes distorted or you have a blank spot in your vision.

If your optometrist suspects you have wet AMD, they will refer you to a specialist eye doctor, known as an ophthalmologist. The ophthalmologist will decide if you need treatment by taking some scans of the back of your eye to show if your macula is damaged. They may also inject you in your arm with some special dye to see how this travels through the back of your eye, while taking a series of flash photographs of the inside of your eye.

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There is currently no treatment for dry AMD (early or late). Lighting is very important and you may find it easier to read if you have good light at home, or sit near a window to read. If the AMD is interfering with your ability to see fine details, your optometrist can advise you about special magnifiers which can help you. Organisations like the RNIB or local social services can provide you with equipment that can help you manage your day-to-day tasks. Your optometrist or GP will give you advice on contacting local services.

After treatment

If you find you are struggling to see things because of poor vision, ask your doctor or optometrist for details of your local low-vision service. RNIB can also give you advice on the help that is available. Visit rnib.org.uk, email helpline@rnib.org.uk or phone the RNIB helpline on **0303 123 9999**.

The ophthalmologist will decide if you need treatment by taking some scans of the back of your eye to see if your macula is damaged.

Charles Bonnet syndrome

Some people with poor vision may experience visual hallucinations. These may be quite vivid. They are caused by the brain trying to 'fill in' detail in the blind areas. They are not a sign of mental illness. You can find help and more information at **charlesbonnetsyndrome.uk**.

For support in your local area, and more information about AMD, visit the Macular Society website at **macularsociety.org** or phone **0300 3030 111**.

For more information, please talk to your local optometrist.

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The College of Optometrists is the professional body for optometry. We provide qualifications, guidance and development opportunities for the profession to make sure optometrists provide the best possible care. Our members use MCOptom or FCOptom after their name. Membership of the College shows their commitment to the very highest clinical, ethical and professional standards. Look for the letters MCOptom or FCOptom to see if your optometrist is a member.

Letters after your optometrist's name mean they have done further training, and gained additional qualifications. The qualifications are available in different areas such as low vision, glaucoma and medical retina. They are available at three levels, starting at Professional Certificate (Prof Cert) followed by the Higher Professional Certificate (Higher Cert) and then the highest level, the Diploma (Dip).

Please visit **lookafteryoureyes.org**
for more information.

This information should not replace advice that your optometrist
or other relevant health professional gives you.

Your local optometrist

If you would like this leaflet
in large print, please email
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