What is age-related macular degeneration (AMD)?

This is an aging related condition where the cells at the centre of the retina stops working leading to visual loss. This is commonly seen in patients age 65 years old and above. There are two types of AMD:

"Dry" AMD – this is the most common form of the condition. It develops very slowly causing gradual loss of central vision with distortion. Reasonable vision is usually maintained and no medical treatment is needed. Reading aids such as magnifiers can be helpful with small detailed tasks.

"Wet" AMD – this is the more serious form of the condition where new blood vessels grow behind the retina leading to bleeding and scarring and subsequently significant sight loss. This can develop quickly and sometimes responds to treatment in the early stages. It is in 10% of people with AMD and 90% are associated with severe visual loss.

What are the symptoms of AMD?

A blurring of central vision with distortion. Straight lines will look wavy and objects will be of abnormal size or shape. If bleeding occurs on the surface of the retina, there will be a sudden black spot obscuring the vision. This will require immediate medical attention if it occurs.

Will I go blind?

There is very rarely complete blindness as most patients will be left with some peripheral or side vision to get around. However, the central vision will be left permanently damage if the condition is severe.

What should I do if I think that I may have AMD?

If the symptoms has been gradual, do see your local optician or optometrist for an opinion. If it is sudden, please see them or to the local ophthalmology (hospital) services immediately.

What to expect at your eye examination?

A full measurement of vision, examination of the front part of the eye and then examination of the back of the eye after dilation of the pupils with eye drops. Further investigation such as fluorescein angiography and optical coherence tomography to confirm the diagnosis will be performed to confirm the diagnosis.

Can "wet" AMD be treated?

Yes. This treatment involves a tiny injection (intravitreal) of a medicine called anti vascular endothelial growth factor (anti-VEGF) into the vitreous jelly inside the eye . Anti-VEGF treatments stop new abnormal blood vessels of AMD from growing. If given soon enough anti-VEGF treatments can stop vision getting worse. In some cases sight can improve. The key is to have early treatment before significant visual loss has occurred. Anti-VEGF injections are given into the eye over a period of months, usually starting with 1 injection every month for the first 3 months. The following are the available anti-VEGF in the market:

Lucentis & Eylea: specifically developed and licensed for use in AMD.

AGE-RELATED MACULAR DEGENERATION (AMD)

Avastin: first used in the treatment of colon cancer. Found to be effective in treatment of AMD when given by intravitreal injection. Appears to be as effective as the above medications, but unlike the drugs above is not a licensed product.

Do intravitreal injections hurt?

The eye is anaesthetised (numbed) using eyedrops so that do you not feel the injection, or at most just a tiny pinprick sensation.

What are the risks of intravitreal injection?

Generally, it is very safe. However, there is always the small risk of a major infection in the eye, retinal detachment or bleeding which will affect the vision.