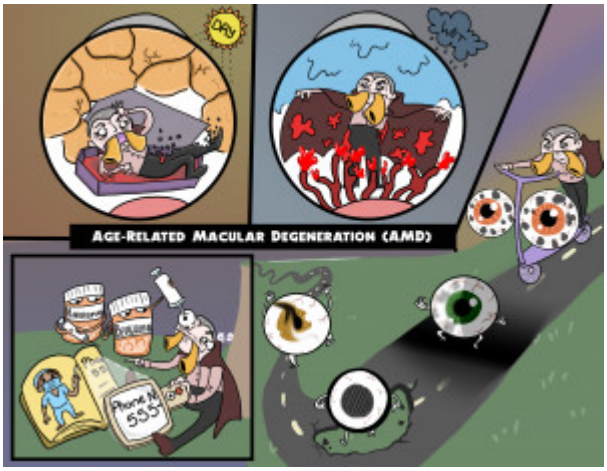
Age-Related Macular Degeneration (AMD)

AMD is the most common cause of irreversible central vision loss. It affects patients over 60 years of age and is related to retinal aging. There are two types: dry (nonexudative) and wet (exudative). Dry AMD accounts for the majority of the diagnoses of the condition, while wet AMD is the more severe form. Prolonged exposure to UV light, smoking, lighter colored eyes, and hyperopia are risk factors.



PLAY PICMONIC

Mechanism

Dry (nonexudative)

Dry-sun

Dry (nonexudative) is the most common type and less severe form of AMD (90% of cases). It begins with the accumulation of yellow pigment in the retinal epithelium that leads to atrophy and degeneration of macular cells due to gradual blockage of the retinal capillaries. Dry AMD, even though it is less severe, still accounts for 10-15% of AMD-related blindness.

Wet (exudative)

Wet-cloud

Wet (exudative) is the more severe form of AMD, and while it is only responsible for about 10-15% of the overall number of cases, it is responsible for 80-90% of AMD-related blindness. Those with wet AMD had dry AMD first, and wet AMD had a more rapid onset. It occurs as a result of the development of abnormal vessels in or near the macula. These new vessels begin to leak and form scar tissue.

Signs and Symptoms

Scotomas

Scotomas-scooter

Scotomas are defined as blind spots in the visual field and are a classic sign of AMD.

Blurred, Darkened Vision

Blurry and Darkened Eye

Patients often complain of blurred and darkened vision.

Loss of Central Vision

Darkened Center Eye

Loss of central vision is permanent, and once it is lost, treatment does not help. This permanent loss can have significant psychosocial implications for the patient. One can assure the patient that, while therapy will not recover lost vision, there are options to augment the vision that remain.

Distortion of Vision

Distorted Eye

Distortion of vision, also referred to as metamorphopsia, is another manifestation of AMD.

Considerations

Drug Therapy

Med-bottle

Several medications injected into the vitreous part of the eye can aid in slowing vision loss. Bevacizumab (Avastin) or ranibizumab (Lucentis) are examples.

Surgery

Surgeon

Another possible intervention for those with wet AMD is a surgical procedure known as photodynamic therapy (PDT). This procedure uses the drug verteporfin (Visudyne) and a laser. The light from the laser activates the verteporfin dye, thereby destroying the abnormal blood vessels without causing permanent damage to the retinal epithelium and photoreceptor cells.

Low-vision Assistive Devices

Low Vision Magnifier

Several low-vision assistive devices can be used to augment the remaining vision. These include devices such as magnifiers, large print books, and talking watches/clocks.