

Myopic Degeneration

Myopic degeneration is a condition characterized by progressive stretching of the eye that damages the retina, the layer of light-sensitive cells that lines the back of the eye. People with severe nearsightedness (high myopia) are at greater risk for myopic degeneration.

Myopic degeneration commonly occurs during young adulthood and can lead to a gradual decrease in central vision. Vision can decrease more abruptly in a small percentage of patients. Although central vision may be lost, side (peripheral) vision usually remains unaffected. Remaining sight can still be very useful, and with the help of low vision optical devices, people with this condition can continue many of their normal activities.

The causes of myopic degeneration are not clearly understood, but they may include biomechanical abnormalities or hereditary factors. The biomechanical theory assumes that the retina, in a myopic eye, is stretched over a larger than normal area because the eye is longer in shape than is normal. Over time, the outer coat of the eye, known as the sclera, also stretches in response to forces like internal eye pressure. This stretching of the sclera is thought to lead to retinal degeneration. In the hereditary theory, the retinal changes are thought to be an unavoidable, inherited process.

Loss of central vision can occur if abnormal vessels grow directly under the center of the retina in an area known as the macula. This is called **choroidal neovascularization**. Early diagnosis and treatment can minimize the amount of vision loss. People with myopic degeneration should have their vision monitored by an ophthalmologist (Eye M.D.) on a regular basis. Using an **Amsler grid** to monitor vision at home is also helpful in detecting early growth of these abnormal vessels.

Patients with myopic degeneration have an increased risk of developing peripheral retinal tears and retinal detachment. If a patient experiences new flashes of light, "floaters," "curtains" or "veils," or loss of vision, he or she should see an ophthalmologist immediately.