

Putting the Brakes on *Macular Degeneration*



Within the next 15 years, nearly 3 million Americans risk losing most of their vision to age-related macular degeneration (AMD), a condition that affects the retina of the eye. Put these people shoulder to shoulder and they'd stretch from New York to St. Louis.

Given such a large number, it's easy to see why VSP network doctor Joseph Rappon, O.D., is revved up about strategies to put the brakes on this potentially devastating vision disorder.

"In recent years, I've had several patients who were able to slow down the progression of their AMD with state-of-the-art technology aimed at preventing the destruction of cells in the macula area of the retina," says Dr. Rappon, who practices in Conyers, Ga. "Some promising new drugs are out there, along with new surgical techniques that are quite encouraging."

The key to benefiting from these advances, says Dr. Rappon, is to catch AMD early — by getting into high gear and heading for the doctor's office each time you're due for that annual eye exam — or more frequently, if recommended by your doctor.

What Is AMD?

AMD affects the macula, the part of the retina that provides sharp central vision. The condition occurs in dry and wet forms. Both forms can lead to vision loss in the center of the visual field.

Dry AMD, in which cells in the macula break down, is responsible for 90 percent of AMD cases, but few result in serious vision loss. The wet version, while less common, accounts for 90 percent of serious vision loss from AMD. It is caused by abnormal blood vessels that leak blood and fluid under the retina, causing macular inflammation and distorting vision.

Can It Be Treated?

Dry AMD cannot be treated, although vitamin therapy does slow it down. Several treatments are available for the wet form:



Photodynamic therapy: A laser activates a powerful medication, which has been injected into the bloodstream. When activated, the medication works to shrink and destroy abnormal blood vessels.

Protein-based drug therapy: Medication is injected directly into the eye to attack key proteins needed to form abnormal blood vessels under the retina.

Laser photocoagulation therapy: A laser pinpoints abnormal, leaky blood vessels under the retina and seals them.

Macular surgery: Two new microsurgical procedures are helping patients with wet AMD. One technique slices away tissue where leaky blood vessels are growing. The other lifts the macula from surrounding tissue and moves it to a healthier area of the retina.

Still several years away, but holding huge promise, says Dr. Rappon, are artificial retinas.

"The day is coming soon when we'll be able to implant a tiny microchip in the retina, and this device will help send visual information to the optic nerve and the brain," he says, while describing some recent breakthroughs in the accelerating world of computer-assisted vision. "Breakthroughs like that one are going to have a major impact on patients who suffer from AMD." •