

Diabetic Retinopathy

Diabetes occurs if the body does not secrete enough insulin or is unable to process insulin. While diabetic patients who monitor their blood/sugar levels appropriately tend to experience fewer eye problems, several eye problems, such as cataracts, glaucoma and diabetic retinopathy, are associated with diabetes.

The retina is the back lining of your eye. It changes light into sight by converting light into electrical impulses that are sent to the brain. In diabetic retinopathy, the retinal circulatory system becomes weak and leaky. This can lead to hemorrhaging, oxygen deprivation and abnormal blood vessel growth in the retina. These conditions can create blurry vision, bleeding and may even lead to complete vision loss without proper treatment.

Symptoms

There are many stages of diabetic retinopathy, so symptoms will vary, depending on the stage. Most commonly, symptoms include blurred vision, which is frequently linked to blood sugar levels, floaters (spots) and flashes and/or sudden loss of vision.

If you have diabetes, you should have your vision monitored carefully on a regular basis.

Causes

Diabetes affects the retina through the circulatory system. In the early stages, called background diabetic retinopathy, the arteries in the retina leak, forming small, round hemorrhages, leading to swelling and decreased vision.

In the next stage, proliferative diabetic retinopathy, lack of circulation deprives the retina of oxygen. New blood vessels develop as the circulatory system attempts to maintain adequate oxygen levels within the retina, but these vessels are fragile and hemorrhage easily. Blood may leak into the retina, causing spots, floaters or decreased vision.

In the later stages of the disease, continued abnormal vessel growth and scar tissue can result in more serious problems.



DENNIS J. KHOURY, M.D., F.A.C.S.
M. SHAYEGAN, M.D., F.A.C.S.
BENJAMIN A. KAUFFMAN, M.D.
MICHAEL J. SPONBERG, O.D.

Treatment

In most cases, diabetic retinopathy can be diagnosed during a routine eye exam. The stage of diabetic retinopathy, the specific vision problem and the severity of the problem determine the treatment. We use several tests, including fluorescein angiography, retinal photography and ultrasound, to monitor the progression of the condition and to determine appropriate treatment. The goal of our treatment for diabetics is to arrest progression of vision problems.

We use a variety of treatments, including laser surgery and vitrectomy, but we also urge our patients to maintain appropriate blood sugar levels. Research shows that patients who use diet and exercise to keep their levels in balance have fewer eye problems than those who don't control their levels.

Vision complications can be treated with greater success if we catch them early. We can't emphasize enough the importance of having regular eye exams, especially if you are diabetic.