

# **Diabetic Retinopathy**



#### What is Diabetic Retinopathy?

Diabetic retinopathy is a condition occurring in persons with diabetes that causes progressive damage to the retina, the light sensitive lining at the back of the eye. It is a serious sight-threatening complication of diabetes. Over time, diabetes affects the circulatory system of the retina. Diabetic retinopathy is the result of damage to the tiny blood vessels that nourish the retina. They leak blood and other fluids that cause swelling of retinal tissue and clouding of vision. If untreated, diabetic retinopathy can cause blindness. At Vista Eye Care in Thornton, Colorado, our eye doctors take a preventative approach to monitoring your retinal health and will work with your primary care physician to maintain healthy eyes and vision.

### What are the symptoms of diabetic retinopathy?

It is important to recognize that sometimes diabetic retinopathy can have no symptoms. However, all of the following are commonly reported:

- Spots or floaters in vision
- Blurred vision
- Dark or empty spot in the visual field
- Difficulty seeing at night

#### What are the classifications of diabetic retinopathy?

There are two classifications of diabetic retinopathy:

- Non-proliferative diabetic retinopathy (NPDR) The early stage of the disease in which symptoms will be mild or non-existent. In NPDR, the blood vessels in the retina are weakened, causing microanuerysms.
- Proliferative diabetic retinopathy (PDR) The more advanced form of the disease. At
  this stage, fragile blood vessels can grow in the retina and into the gel-like fluid at the
  back of the eye. The new blood vessels may leak blood into the gel, clouding vision.

#### Who is at risk for developing diabetic retinopathy?

Patients with both Type 1 and Type 2 diabetes can develop diabetic retinopathy. The longer a person has diabetes, the more likely they are to develop retinopathy. Patients with other medical conditions such as high blood pressure and high cholesterol are at a greater risk.

#### How is diabetic retinopathy diagnosed?

Our eye doctors, Dr. Abert and Dr. Pedroza, can diagnose diabetic retinopathy with a comprehensive eye and vision examination. Careful patient history, visual acuity measurement, refraction, evaluation of ocular structures, and measurement of the eye pressure are all important. In order to better view your retinas, diabetic retinal exams need to have dilated pupils.

#### How is diabetic retinopathy treated?

Treatment for diabetic retinopathy depends on the stage of the disease and is directed at trying to slow or stop the progression of the disease. If the disease advances, leakage of fluid from blood vessels can lead to macular edema. Laser treatment is used to stop the leakage of blood and fluid. A laser can be used to create small burns in areas of the retina with abnormal blood vessels to try to seal the leaks. When blood vessel growth is more widespread throughout the retina, as in PDR, a pattern of scattered laser burns is created across the retina. This causes abnormal blood vessels to shrink and disappear.

Some bleeding into the gel may clear up on its own. However, if significant amounts of blood leak into the gel, it will cloud vision and can prevent laser photocoagulation from being used. A surgical procedure called a vitrectomy may be used to remove the blood-filled gel and replace it with a clear fluid to maintain the normal shape and health of the eye.

Persons with diabetic retinopathy can suffer significant vision loss. Special low vision devices such as telescopic and microscopic lenses, hand and stand magnifiers, and video magnification systems can be prescribed to make the most of remaining vision.

## How can diabetic retinopathy be prevented?

If you are a diabetic, you can help prevent or slow the development of diabetic retinopathy by taking your prescribed medication, sticking to your recommended diet, exercising regularly, controlling high blood pressure, and avoiding alcohol and smoking. Good control of blood sugar levels also slows the onset and progression of diabetic retinopathy. Our optometrists recommend that all diabetic patients be seen at least once per year for a comprehensive vision exam. This exam will include a thorough evaluation of each retina through a dilated pupil. A complete eye health report will be written and forwarded to the your primary care physician.

Please call our office today at (303) 450-2020 to schedule your diabetic eye exam.