

Diabetic Retinopathy

Regular eye exams are an integral part of making sure your eyes are healthy. If diabetic retinopathy is detected, a test known as a fluorescein angiogram can be done in our office by a trained ophthalmic photographer. The pupils are dilated and a small amount of fluorescein dye is injected into the arm vein. As the dye circulates through the blood vessels and reaches the eye, the photographs are taken. The dye itself is unrelated to the dye used for kidney or gallbladder x-rays. These photos help to determine the type of diabetic retinopathy present as well as whether laser treatment is necessary. Additionally if laser treatment is done, the photos from the fluorescein angiogram are used to guide the treatment.

There are two types of diabetic retinopathy: Nonproliferative diabetic retinopathy (NPDR) and Proliferative diabetic retinopathy (PDR) NPDR is the development of small hemorrhages on the surface of the retina as well as microaneurysms, tiny outpouchings of the retinal blood vessels. While some patients will have these changes at the time of the diagnosis of their diabetes, others may not develop it for many years or ever. The presence of NPDR does not signify that visual problems will develop, but certainly is an indication that tight control is advisable, as are more frequent eye exams. Patients with NPDR

can develop macular edema or swelling of the central retina from leakage of serum and/or cholesterol. These patients have been shown to benefit from laser treatment to stabilize their vision.

PDR is the growth of new blood vessels on the surface of the retina and/or optic nerve. This requires prompt treatment with laser to destroy the new blood vessels. If left untreated, these vessels will hemorrhage and cause a retinal detachment.

Although damage caused by diabetic retinopathy cannot be corrected, patients diagnosed with the condition can be treated to slow its progression and prevent further vision loss. Treatment modalities include laser which is usually done as an outpatient procedure. Intraocular surgery may be needed and is also done as an out patient procedure. Recently intraocular injections of steroids have helped macular swelling.