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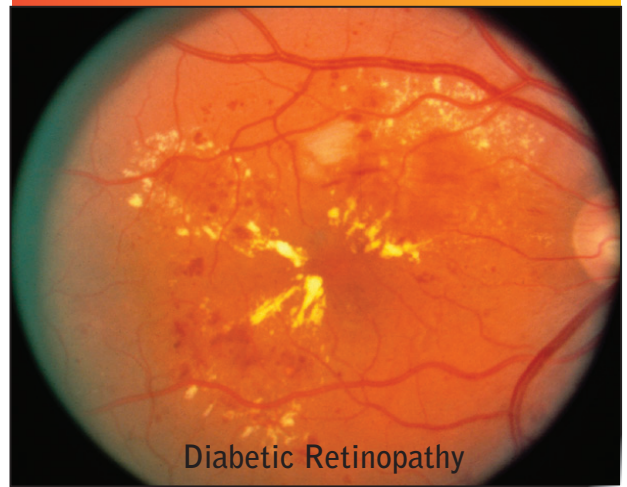
## Diabetic Eye Disease

**Diabetes mellitus is a group of metabolic disorders that affect the way sugars are utilized in the body. People with diabetes can develop a number of complications that are called diabetic eye disease. All of these complications can lead to vision loss and even blindness. Among them are diabetic retinopathy, cataract and glaucoma.**

Diabetic retinopathy is the most common diabetic eye disease and in the US, it is the most common cause of blindness among adults. It is caused by problems in the blood vessels of the retina. For some people with diabetes, the blood vessels in their eyes' retina may leak fluid or blood. For other people, abnormal new blood vessels may develop on the surface of the retina, causing bleeding or even pulling on the delicate retina. The retina is the light-sensitive part of the eye and acts much like the film of an old-fashioned camera. If the blood vessels in the retina are leaking fluid or blood or aren't allowing normal blood flow, vision can be severely affected. Normal, clear vision becomes blurred from swelling in the central part of the retina (the macula) and fragile new blood vessels are prone to bleeding, which can lead to new floaters, decreased visual acuity and parts of the field of vision being blocked by blood.

Cataracts are more likely to develop in people with diabetes and tend to occur earlier. Often, cataract surgery is required at a younger age, particularly in people whose level of blood glucose fluctuates widely.

Glaucoma is common in people with diabetes about twice as common as other adults. Glaucoma is associated with an increase in fluid pressure inside the eye, which can lead to optic nerve damage and vision loss.



All people with diabetes mellitus are at risk for ocular complications whether they have Type 1 or Type 2 diabetes. The longer people have diabetes, the more likely they are to develop complications in the eye. At present, about 45 per cent of Americans with diabetes have diabetic retinopathy. Because it is so common and so serious, we recommend that everyone who has diabetes have a comprehensive dilated eye exam once a year, at minimum. Sometimes, the exam should be more frequent, as for pregnant women with diabetes and those with advanced diabetic eye disease. Fortunately, these complications are treatable, using a variety of laser treatments, medication injections and even surgery. Some of those treatments we can perform in the office setting; if more specialized treatments are necessary, we'll refer you to a retina specialist colleague nearby.

Most important, many of ocular complications of diabetes are preventable (or can be delayed by years) through better control of blood sugar levels. In a number of landmark studies, people with diabetes whose blood sugar levels were maintained close to normal had less retinopathy and slower progression. They also had less kidney damage and fewer problems with nerve pain. They needed fewer laser treatments to protect their eyes from severe vision loss.

Many of our patients with diabetes do a good job controlling their blood glucose levels. We will always inquire about your level of sugar control and ask about your hemoglobin a1c, which can serve as a marker of long-term glycemic control. By using dilated eye exams, we'll monitor your eyes and vision carefully so that any important changes can be identified and treated early, before the changes lead to vision loss or become permanent.