

## Eye Facts

# Your Eyes and Diabetes

Diabetes mellitus can lead to retinal problems. In type I diabetes mellitus, retinal damage usually doesn't develop unless the disease has been present seven or more years. In a patient with type II diabetes mellitus, however, retinal problems can be present at the time of diagnosis because there was often a long period of previously undetected elevated blood sugars (glucose). Diabetic damage to the retina is called diabetic retinopathy. Diabetic retinopathy is a major health problem and is the leading cause of visual loss in working age Americans. Fortunately, vision loss from diabetic retinopathy can largely be prevented through some fairly simple (although not necessarily easy) steps:

- Keep your blood glucose in the normal range as best as possible.
- Monitor blood pressure, and medically manage elevated blood pressure.
- Work closely with your primary care provider, with regular follow up.
- Have regular eye examinations.
- Utilize proven ophthalmic interventions (such as laser) when indicated.
- Exercise if possible, eat a healthy diet, and keep your weight down.

**Additional information about diabetic retinopathy:** Diabetic retinopathy is classified into two different stages: nonproliferative and proliferative. Vision loss can occur in either stage, but for different reasons. Nonproliferative diabetic retinopathy leads to swelling in the macula (the part of the eye that

controls the center of vision) and is worsened by high blood pressure. There can also be damage to some of the fine blood vessels that support the retina in the nonproliferative stage. There are several medications being studied for the treatment of diabetic swelling in the macula (macular edema) but there are no FDA approved therapies. Laser is a proven treatment for diabetic macular edema, and the careful use of laser can slow visual loss due to macular edema.

Vision loss in proliferative diabetic retinopathy can take place faster, and is often more serious than nonproliferative causes of vision loss. In proliferative diabetic retinopathy, new abnormal blood vessels grow inside the eye. These blood vessels can bleed inside the eye obstructing vision. Surgery may be required in some cases. The new blood vessels can block the drainage channels inside the eye leading to a very serious eye pressure problem. Rapid and aggressive treatment is required in such situations. Retinal detachments can occur when new blood vessels pull on the retina.

These very serious ocular complications of diabetic retinopathy can largely be prevented with close ophthalmic follow up and the timely use of laser. Laser is generally well tolerated, has minimal side effects, and can be performed quickly.

Vision loss from diabetic retinopathy, when managed appropriately and diagnosed early, can largely be prevented. Please contact your eye care provider or the Retina service at the University of Rochester Eye Institute for any questions, or to schedule an exam.

To schedule an appointment call 585 275-0626 (m-f 8:00 a.m. - 4:30 p.m.)  
or 585 273-3937 (after hours & emergencies)

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