

RETINOPATHY (DIABETIC EYE DISEASE)

Just as diabetes can affect the large blood vessels that go to the heart, brain, and legs, diabetes can also damage the smaller vessels (capillaries). This damage is caused by lack of blood flow to these vessels. The eyes and the kidneys are most often affected.

WHY DOES THIS HAPPEN TO THE SMALL VESSELS?

High blood sugar levels can damage these blood vessels over a period of time. High blood pressure can also cause damage.

HOW CAN DIABETES AFFECT THE EYES?

Retinopathy is a disease of the retina in the eye. The retina is a thin layer in the back of the eye. The retina sends the pictures of what we see to the brain.

After people have had diabetes for a time, the blood vessels in the retina may become weak. The weak spots in the blood vessels balloon out into small pouches. These pouches are fragile and can break easily, causing blood to leak into the retina. A scar then forms at the broken spot. This is called nonproliferative retinopathy. In this type of retinopathy, the blood vessel changes are found only in the retina. There is usually no change in sight, unless the central part of the retina (called the macula) is affected.

IS THIS THE ONLY TYPE OF RETINOPATHY?

No, there is a second type called proliferative retinopathy. With this type, new blood vessels grow over the retina and out into the clear jelly that fills the eyeball (the vitreous).

These new, smaller, and very fragile blood vessels grow around the scarred place. They try to get the blood to flow through the area, but end up causing

more damage to the retina. You may not notice any changes in your eyesight when this first begins.

The new vessels can break and leak blood into the vitreous. As the broken vessels heal, bands of scar tissue form. You may be able to see signs that this has happened. Your vision may be like looking through blood or a spider web, or you may see black floating spots. Proliferative retinopathy is very serious. Unless it is treated, it can lead to blindness.

Sometimes the bands of scar tissue pull the retina away from where it is attached. This is called retinal detachment, which is also very serious. You may lose sight suddenly in one or both of your eyes, or it may seem as if a curtain has been pulled over part of your eye. It's important to call your health care provider if you experience any of these symptoms.

HOW IS RETINOPATHY TREATED?

If retinopathy is caught early, most blindness can be prevented. One treatment for retinopathy is called laser therapy. This is simple and fairly painless. A focused beam of light is aimed through the eye. This light seals or destroys the weak places in the small blood vessels that might break and leak. Laser treatment is usually done in three or four visits.

A surgical treatment is called vitrectomy. In this surgery, the clear jelly that fills the eyeball (vitreous) and any scar tissue in the eye are taken out and replaced with a clear fluid. This surgery is done only when sight has been lost in the eye. Sometimes sight will return after this operation.

HOW WILL I KNOW IF I HAVE RETINOPATHY?

There usually aren't any early signs of this problem. It is very important that you see an eye doctor every year and have your eyes dilated with drops and examined. Your health care team can tell you the name of an eye doctor in your area.

HOW ELSE DOES DIABETES AFFECT MY EYES?

You may notice that your vision is blurred when your blood sugar is too high. The blurred vision will usually go away when your blood sugar levels come down into the target range. This is not usually a sign of retinopathy.

People with diabetes develop cataracts and glaucoma more often than people who don't have diabetes. A cataract happens when the lens of the eye becomes cloudy. This causes your vision to become cloudy, too. With glaucoma, there is too much fluid inside the eye causing high pressure in the eye. Glaucoma can cause vision loss if it is not treated. Both cataracts and glaucoma can be treated if they are found early enough. Your eye doctor can check for these eye problems and treat them if they occur.

CAN EYE PROBLEMS BE PREVENTED?

Keeping your blood sugar in the target range may prevent or delay eye problems. Keeping your blood pressure near normal will also help. Most blindness in people with diabetes can be prevented if treated early enough. One of the best things you can do for yourself is to see your eye doctor each year. Your eyesight is worth the cost of the exam!

EYE EMERGENCIES

If your eyesight changes suddenly, you may have a very serious problem. Your retina may have come away from the back of your eye. You may see black spots, flashing lights, or cobwebs in your eye. You may lose sight suddenly in one or both eyes. This is an emergency. Call your doctor right away.

ADDITIONAL NOTES:
