

and visual acuity deterioration. High blood pressure damages your blood vessels, raising the chances for eye problems.

- **Duration of diabetes**
The risk of developing diabetic retinopathy or having your disease progress increases over time. After 15 years, 80 percent of Type 1 patients will have diabetic retinopathy. After 19 years, up to 84 percent of patients with Type 2 diabetes will have diabetic retinopathy.
- **Blood lipid levels (cholesterol and triglycerides)**
Elevated blood lipid levels can lead to greater accumulation of exudates, protein deposits that leak into the retina. This condition is associated with a higher risk of moderate visual loss.
- **Pregnancy**
Being pregnant can cause changes to your eyes. If you have diabetes and become pregnant, your risk for diabetic retinopathy increases. If you already have diabetic retinopathy, it may progress. However, some studies have suggested that with treatment these changes are reversed after you give birth and that there is no increase in long-term progression of the disease.

The best treatment for diabetic retinopathy is to prevent it. Strict control of your blood sugar will significantly reduce the long-term risk of vision loss. Treatment usually won't cure diabetic retinopathy nor does it usually restore normal vision, but it may slow the progression of vision loss. Without treatment, diabetic retinopathy progresses steadily from minimal to severe stages. Injections of medication are being used to help treat diabetic retinopathy. Laser surgery and Vitrectomy surgery are a surgical procedure used to help and treat diabetic retinopathy.

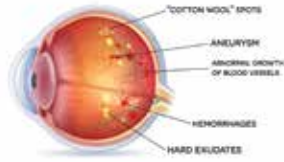
**For any questions or clarifications do not hesitate to contact your ophthalmologist or call Ophthalmology clinic at 01/372888
Extension: 1133**

Contact info:
+961 1 364283
ext: 1133

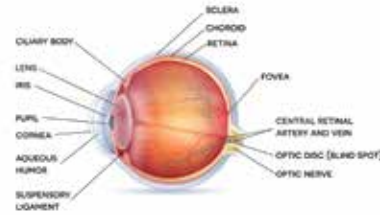


Diabetic Retinopathy

DIABETIC RETINOPATHY



NORMAL EYE



What is Diabetic Retinopathy

Diabetic retinopathy, the most common diabetic eye disease, occurs when blood vessels in the retina are damaged. Sometimes these vessels swell and leak fluid or even close off completely. In other cases, abnormal new blood vessels grow on the surface of the retina.

What are the two types of diabetic retinopathy?

1- Background or nonproliferative diabetic retinopathy (NPDR)

Nonproliferative diabetic retinopathy (NPDR) is the earliest stage of diabetic retinopathy. With this condition, damaged blood vessels in the retina begin to leak extra fluid and small amounts of blood into the eye.

Many people with diabetes have mild NPDR, which usually does not affect their vision. However, if their vision is affected, it is the result of macular edema and macular ischemia.

2- Proliferative diabetic retinopathy (PDR)

Proliferative diabetic retinopathy (PDR) occurs when many of the blood vessels in the retina close, preventing enough blood flow. In an attempt to supply blood to the area where the original vessels closed, the retina responds by growing new blood vessels.

This is called neovascularization. However, these new blood vessels are abnormal and do not supply the retina with proper blood flow. These new blood vessels can leak and bleed into the eye. The new vessels are also often accompanied by scar tissue that may cause the retina to wrinkle or detach.

How Can Proliferative diabetic retinopathy affect your vision?

PDR may cause more severe vision loss than NPDR because it can affect both central and peripheral vision. PDR affects vision in the following ways:

- Vitreous hemorrhage:** delicate new blood vessels bleed into the vitreous — the gel in the center of the eye — preventing light rays from reaching the retina. If the vitreous hemorrhage is small, you may see a few new, dark floaters. A very large hemorrhage might block out all vision, allowing you to perceive only light and dark.
- Traction retinal detachment:** scar tissue from neovascularization shrinks, causing the retina to wrinkle and pull from its normal position. Macular wrinkling can distort your vision. Severe vision loss can occur if the macula or large areas of the retina are detached.
- Neovascular glaucoma:** if a number of retinal vessels are closed, neovascularization can occur in the iris (the colored part of the eye). In this condition, the new blood vessels may block the normal flow of fluid out of the eye. Pressure builds up in the eye, a particularly severe condition that causes damage to the optic nerve.

Maintaining strict control of blood sugar and blood pressure, as well as having regular eye examinations, are the keys to preventing diabetic retinopathy and vision loss.

What are the risk factors of Diabetic Retinopathy

Several factors can influence the development and severity of diabetic retinopathy, including:

- Blood sugar levels**
controlling your blood sugar is the key risk factor that you can affect. Lower blood sugar levels can delay the onset and slow the progression of diabetic retinopathy.
- Blood pressure**
A major clinical trial demonstrated that effectively controlling blood pressure reduces the risk of retinopathy progression