Diabetic Retinopathy Overview

This material will give you a basic understanding of diabetic retinopathy, including its causes, main stages, and treatments.

What is diabetic retinopathy?
Diabetic retinopathy occurs when prolonged diabetes damages the small blood vessels and nerves in the retina. The retina is like the film of the eye - it captures images and sends them to the brain to see. The damaged blood vessels may leak or the retina may grow weak new vessels. If not treated, this may lead to long term vision loss.

What causes diabetic retinopathy?
People with Type 1 or Type 2 diabetes are at risk of developing diabetic retinopathy. The longer a person has diabetes, the higher chance s/he has of getting the disease. Pregnant women, especially those who have gestational diabetes, also face a higher risk. High blood pressure and high cholesterol may worsen diabetic retinopathy, as well.

Most people do not notice symptoms or changes in their vision until later stages of the disease. It is difficult to know if your diabetes has damaged the retina until your eye doctor finds signs during your regular eye exam.
Managing your blood sugar with diet, exercise, and medications, as well as regular visits to your eye doctor, are important steps in preventing or slowing the progress of diabetic retinopathy.

How does diabetic retinopathy progress?
Diabetic retinopathy may progress over time. There are two main stages of the disease that can both lead to vision loss.

**Non-proliferative diabetic retinopathy (NPDR)**
This is also known as **background retinopathy**. It is the early stage in which leaking fluid from damaged blood vessels in the retina cause the retina to swell. Swelling of the macula, the central area of the retina, can lead to vision loss.

**Proliferative diabetic retinopathy (PDR)**
This is the more advanced form of the disease. PDR occurs when new blood vessels form on the surface of the retina. These blood vessels are very fragile and break easily. When they break and bleed inside the eye, it causes your vision to become cloudy. PDR can lead to other serious eye problems, which may cause long term vision loss if not treated. Untreated PDR can lead to retinal tears or detachment. This occurs when new blood vessels pull the retina from its place on the back of the eye.

For more information, scan these codes with your smartphone or visit the websites listed.

http://www.kellogg.umich.edu/patientcare/conditions/diabetic.retinopathy.html
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