

Proliferative Diabetic Retinopathy

This material will help you understand proliferative diabetic retinopathy, its causes, and how it can be treated.

What is proliferative diabetic retinopathy?

Proliferative diabetic retinopathy (PDR) is the advanced stage of diabetic retinopathy. The retina is the layer in the back of the eye that acts like the "film" of the eye. It captures images and sends them to the brain. Prolonged high blood sugar damages the small blood vessels and nerve cells in the retina. With PDR, new blood vessels form on the surface of the retina. These new vessels are weak and break easily. This can cause your vision to become cloudy.

What are the symptoms of proliferative diabetic retinopathy?

Symptoms of PDR can include:

- Blurred vision
- Seeing dark spots
- Seeing flashes of light
- Problems seeing at night

Having these symptoms does not mean you have PDR. However, if you experience one or more of these, you should see your eye doctor for a complete eye exam.

What are the risk factors for proliferative 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 he/she 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 also make your diabetic retinopathy worse.

Non-proliferative diabetic retinopathy (NPDR), also called background retinopathy, can progress into PDR. If PDR is not treated, more serious eye problems may develop that can affect both your central and side vision.

How is proliferative diabetic retinopathy treated?

Depending on the nature of your condition, there are a few treatment options available.

- Anti-VEGF (anti-vascular endothelial growth factor) Therapy: The eye doctor injects a drug into the eye to stop the growth of new vessels.
- Laser Surgery: A laser can be used to seal leaking blood vessels or to stop new ones from forming. You may need more than one laser treatment over time to seal all the leaking vessels.
- **Vitrectomy:** For advanced PDR cases, the doctor may recommend surgery to remove the blood filled vitreous (the fluid that fills the center of the eye) and replace it with a saltwater solution similar to your eye's natural fluids.

You and your doctor will discuss the treatment option that is best for you.

It is very important that you see your eye doctor regularly to monitor your PDR. Controlling your blood sugar through diet and exercise may also help slow the progress of PDR.

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



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



http://www.geteyesmart.org/eyesmart/diseases/diabetic-retinopathy/index.cfm

Disclaimer: This document contains information and/or instructional materials developed by the University of Michigan Health System (UMHS) for the typical patient with your condition. It may include links to online content that was not created by UMHS and for which UMHS does not assume responsibility. It does not replace medical advice from your health care provider because your experience may differ from that of the typical patient. Talk to your health care provider if you have any questions about this document, your condition or your treatment plan.

Author: Kathleen Koviak, MPH Candidate Reviewers: Devon Ghodasra, MD and Gale Oren, MILS

Unless otherwise noted, Patient Education by <u>University of Michigan Health System</u> is licensed under a <u>Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.</u>
Last Revised 02/2015