

Understanding Diabetic Retinopathy

Diabetic retinopathy occurs in more than half of people who develop diabetes.

1 Introduction

Diabetic retinopathy is a condition that causes vision loss in individuals who have diabetes (both type 1 and type 2). High concentrations of blood sugar due to diabetes can cause blockages and damage to blood vessels — including those which lead to the retina. When this occurs, the body attempts to compensate for the loss of blood supply to the eye by producing new blood vessels. However, the new vessels are unable to develop properly and tend to bleed and leak fluid into the retina. Over time, the fluid buildup will begin to hinder eye function.

2 Signs and Symptoms

Like many diseases, symptoms may not be present until the condition has progressed to a more critical state. When this occurs, patients may experience:

- Blurred and/or fluctuating vision
- Spots or dark strings floating in their vision
- Dark or empty areas in their vision
- Vision loss

3 Risk Factors

Although anyone who has diabetes is at risk for developing diabetic retinopathy, there are some additional factors that can increase the possibility. These include:

- Having diabetes for a long time
- High blood pressure
- Poor control of blood sugar levels
- Pregnancy
- High cholesterol
- Tobacco use

However, there are preventative measures that can be taken to reduce the risk of disease — attending regular eye exams, maintaining a healthy diet and carefully monitoring both blood sugar and blood pressure levels.

5 Treatments

In the early stages of diabetic retinopathy, surgical intervention is not often used. Doctors may recommend implementing healthy lifestyle habits (e.g. exercise and healthy eating) to help manage blood sugar levels as well as schedule regular visits to monitor disease status and eye health. In cases of advanced retinopathy, injections, laser treatment or eye surgery may be administered to prevent further vision loss.

Did you know?

Early detection and treatment of diabetic retinopathy can reduce the risk for blindness by 95%

For more information on diabetic retinopathy and supportive resources, please visit www.asrs.org.

References:

<https://www.mayoclinic.org/diseases-conditions/diabetic-retinopathy/symptoms-causes/syc-20371611>

<https://www.nei.nih.gov/learn-about-eye-health/eye-conditions-and-diseases/diabetic-retinopathy>

<https://www.nei.nih.gov/sites/default/files/2019-06/diabetes-prevent-vision-loss.pdf>