



Diabetic RETINOPATHY

Overview

Diabetes and eye health concerns go hand-in-hand. DeHaven has been treating diabetes eye disorders in East Texas for many years, offering laser surgery for diabetic retinopathy and diabetes vision care education.

Diabetes and Your Vision Health

If you have diabetes, you know your body's inability to properly use and store sugar affects your health. You may also know that having diabetes can damage the blood vessels in your eyes. This damage can lead to diabetic retinopathy—the leakage of fluids or bleeding into the back of the eye. The macula is near the center of the retina and determines the quality of the images you see. When fluid leaks into the macula it causes the retina to swell and form deposits called “exudates”. This is known as macular edema, or non-proliferative diabetic retinopathy, or NPDR. Weak blood supply can allow abnormal blood vessels to grow, causing bleeding or scarring that can greatly reduce vision. This is called proliferative diabetic retinopathy, or PDR

Risk Factors

All people with diabetes—both type 1 and type 2—are at risk for developing diabetic retinopathy. And, the longer someone has had diabetes, the higher the risk. Other risk factors include:

- Poor control of blood sugar levels
- High blood pressure
- High cholesterol
- Pregnancy
- Tobacco use
- African American, Hispanic or Native American heritage

What To Expect?

There are medications, as well as non-invasive and surgical laser treatments for diabetes-related vision problems. Most laser and non-laser treatments for diabetic eye disease depend on the severity of the eye changes.

Procedure Options

There are non-invasive and non-surgical options for preventing or treating diabetic eye disorders. Controlling your blood sugar and high blood pressure are two of the best things you can do to protect your eye health.

Medical Injection Therapy

A treatment is medication injection therapy. It is used to treat macular edema—an eye disorder caused by diabetic retinopathy. Anti-vascular Endothelial Growth Factor (Anti-VEGF) is known to work well in slowing the growth of blood vessels and reducing macular edema.

Anti-VEGF drugs target a chemical in the eye called vascular endothelial growth factor (VEGF) that plays a key role in blood vessel abnormalities in the retina. An anti-VEGF drug can help treat macular edema by blocking the VEGF chemical, which slows their leakage in the eye. Anti-VEGF can also help reduce the growth of abnormal blood vessels.

DeHaven performs medication injection therapy in the office. An anesthetic is applied to numb the eye and a tiny needle is inserted into the eye to deliver the medication near the retina.

Laser Treatments

Laser treatments for diabetic eye disorders generally target areas of diabetic damage. Some treat leaking blood vessels directly by spot sealing the area of leakage. Lasers also may be used to treat areas of weak blood supply in the periphery of the retina. The two types of laser treatments most commonly used to treat diabetic eye disorders are:

Focal or Grid Laser Photocoagulation

In this type of surgery, the laser is focused directly on the leaky blood vessels and area of swelling in the retina. This procedure is usually completed in one session, but if both eyes need treatment, two separate sessions will be scheduled. Prior to Laser, a fluorescein angiogram is performed. This is a dye test that outlines the areas of leaky blood vessels and guides the Laser treatment.

Scatter (panretinal) Laser Photocoagulation

This method applies laser spots to the periphery of the retina in the area of weak blood supply. The Laser helps reduce the growth of abnormal blood vessels and stabilize the diabetic changes.

Laser treatment for diabetic retinopathy does not improve vision, but is designed to prevent further vision loss. Even people with 20/20 vision who meet treatment guidelines should consider laser therapy as a means of protecting themselves from future diabetes-related vision loss.

Surgical Treatment

There are times surgical treatment is required for diabetic retinopathy. The doctors at DeHaven can assist in evaluating the treatment options should surgery become necessary.