Diabetic Retinopathy is a common complication of diabetes and is a leading cause of preventable blindness among American adults. Approximately 45 percent of diabetics will develop some form of diabetic eye disease. The good news is that preventative measures and current treatments can help keep your vision clear and bright.

Diabetic retinopathy is caused by changes in the blood vessels of the retina. As the disease progresses, these blood vessels can become damaged. When these vessels are damaged, they prevent parts of the retinas from receiving blood and nutrients. This damage to the normal blood vessels can in turn lead to the growth of abnormal blood vessels or leakage of fluid into the central retina.

One major way diabetes can cause vision loss is through leakage of fluid into the central retina. Normally, the retina helps transform light into a clear picture seen in the brain. The macula is the highly sensitive area of the retina that is responsible for our sharp, central vision. Fluid leakage in the macula, known as macular edema, can cause gradual and painless vision loss. Maintaining good blood sugar control is critical as it can help delay the onset of fluid buildup. However, at least 30 percent of patients with diabetes for more than 20 years have some macular edema. Fortunately, regular eye exams and early treatment can halt the progression of the disease and help maintain good vision in most patients.

Physician researchers are currently working to improve treatments for complications of diabetic retinopathy. The Diabetic Retinopathy Clinical Research Network (DRCR) is the national leading diabetic research program and coordinates the efforts of over 400 clinical sites in the United States. Southeastern Retina Associates is East Tennessee’s only DRCR center and has been nationally recognized for the DRCR’s excellence in their research efforts. The National Institute of Health and the DRCR work in tandem advancing medical research of diabetic-induced retinal disorders.

For the last two years, South- eastern Retina Knoxville, also serv- ing Maryville, Oak Ridge, Se- vierville, Maryville, Morristown, Kingsport and Crossville, has won the top site award. “This level of clinical excellence for our patients is im- portant for Southeastern Retina and we are honored to receive this award,” said Dr. Stephen Perkins.

Neovascular diabetic retinopathy (NPDR), also known as background retinopathy, is diabetic retinopathy in the early stages, characterized by tiny blood vessels in the retina leaking blood or fluid. The retina can swell due to this leakage and form deposits called neovascular. NPDR is common among people with diabetes and usually does not affect their vision. When vision is af- fected, it is due to macular edema (swelling or thickening of the mac-ula) or macular scars (lossing of small blood vessels, causing vi- sion to blur).

Proliferative diabetic retinopathy (PDR) is growth of new, abnormal blood vessels on the sur- face of the retina or nerve fibers in a healing response to the widespread closure of the normal retinal blood vessels. Unfortunately, the new vessels may never become normal blood vessel and may be accompanied by scars which may cause leaking or detachment of the retina. PDR may cause severe vision loss less than 20/200 because it can affect both central and peripheral vision. Exam may lead to vision loss from vitreous hemorrhage (blood leaking into the eye), glaucoma (arising from increased pressure in the eye), retinal detachment (scar tissue pulling away, causing loss of vision), or neovascular glaucoma (abnormal blood vessel growth in the eye). It is not preventable but may be slowed with injections.

Healthy lifestyle changes can help reduce the risk of DME. The major risk factors for DME are:

- The severity of your diabetes.
- How long a person has had diabetes.
- High blood sugar.
- High blood pressure.
- High lip levels.

How to help reduce the risk of DME:
The best way to reduce the risk of DME is to control the diabetes by doing the following:

- Make sure blood sugar levels are monitored regularly.
- Use diabetes medicine as direc- ted by a healthcare professional.
- Eat nutritious foods in moder- ation.
- Exercise regularly to maintain a healthy weight.
- Keep blood pressure in a normal range.
- Don’t smoke.
- See an eye doctor at least once a year for a dilated eye exam.

Southeastern Retina will continue to participate in research for diabetic-related retinal diseases and will be actively involved in up- coming clinical trials to help offer the best treatments for the Knox- ville area community.

Diabetic Retinopathy: the most common diabetic eye disease

Southeastern Retina Associates

Providing comprehensive Retina Care in East Tennessee for over 35 years. Nationally recognized as the Most Experienced Retina Team in East Tennessee.

Specializing in:

- Macular Degeneration
- Intravitreal Injection for Macular Degeneration and Diabetic Eye Disease
- Diabetic Retinopathy
- Retinal Vein and Artery Occlusion
- Flashes and Floaters

The Only Fellowship-Trained Medical and Surgical Retina Specialists in the Region

Macular Hole • Epiretinal Membrane Retinal Detachment & Retinal Tears • Retinopathy of Prematurity

Our retina specialists utilize the most advanced therapies and surgical approaches to provide the best treatment available.

Southeastern Retina Associates also maintains active clinical trials and research programs to provide cutting-edge treatments to East Tennessee.

865-251-0727
www.SoutheasternRetina.com

Experience
Expertise
Excellence

4 Knoxville Offices to Serve You

As well as offices in: Oak Ridge, Maryville, Harriman, Sevierville, Crossville, Morristown, Cleveland, Chattanooga, Dalton, GA, Rome, GA, Kingsport, Johnson City, Bristol, Abingdon, VA.