Diabetes & The Eye

- Diabetics are more likely to develop **Cataracts** at a younger age.
- Diabetics are twice as likely to develop **Glaucoma** when compared to non-diabetics.
- The primary vision problem caused by this disease is **Diabetic Retinopathy**, the leading cause of new cases of blindness and
What is Diabetes?

• The Centers for Disease Control defines Diabetes as a condition in which the body does not properly process foods for use as energy. When you have Diabetes, your body either doesn’t make enough insulin or can’t use its own insulin as well as it should. This causes sugars to build up in your blood.

• Serious Health issues can occur, one of which is Blindness.
Diabetic Retinopathy

• This disease occurs when there is **damage to small blood vessels** that nourish tissue and nerve cells **in the retina**.

• According to the National Eye Institute, there are Four Stages of Diabetic Retinopathy
The Four Stages of Diabetic Retinopathy:

- **Mild Non-Proliferative Retinopathy** - Swelling occurs in the retina’s small blood vessels

- **Moderate Non-Proliferative Retinopathy**

- **Severe Non-Proliferative Retinopathy** - Blood vessels become blocked

- **Proliferative Retinopathy** - Hemorrhages in the retina or vitreous, possible retinal
Symptoms of Diabetic Retinopathy

- Blurred or Double Vision
- Flashing Lights
- A veil, cloud or streaks of red in the field of vision, or dark, floating spots
- Blind or blank spots
Ocular and Functional Effects of Diabetic Retinopathy

- **Fluctuating vision** in response to changing blood glucose levels

- **Blurred central vision** from macular edema can interfere with reading

- **Decreased visual acuity** can interfere with seeing markings on insulin syringe or display on blood glucose monitor

- **Blind spots** can make it difficult to judge the size of food portions

- **Decrease in depth perception**, in combination with decreased visual acuity can make it difficult to see curbs and steps.
Recommended Follow-up

- If you are at high risk for Diabetes you should have regular, dilated eye exams.

- If you have been diagnosed with Diabetes you need to have dilated eye exams every year.
Important to Note:
Three of the Leading Causes of Blindness in U.S are associated with Diabetes

- Cataract
- Macular Degeneration
- Glaucoma
- Diabetic Retinopathy
Cataracts

- Very Common After Age 60
- Leading Cause Of Blindness Worldwide
- 20.5 Million Americans Have Visually Significant Cataracts
Cataract Symptoms

- Blurred Vision
- Glare
- Change In Color Vision
- Halos
- Double Vision
What Is A Cataract?

• Clouding Of Natural Lens

• Number One Cause = Aging

• Other Causes - Medication, Trauma, Diabetes, Congenital
View Through A Cataract

View Through Clear Lens

Clouded View Through Cataract
Cataract Treatment Options

- Continued Observation
- Prescribe Stronger Glasses
- Cataract Removal With Intraocular Implant (IOL)
Glaucoma Risk Factors - Possible Risk Factors

- High Myopia (near-sightedness)
- Diabetes
- Hypertension (high blood pressure)
- History of steroid use, migraine, headache, sleep-related breathing disorders
Glaucoma

- Second Leading Cause of Irreversible Blindness in the U.S.

- 3 Defining Characteristics:
  - High Intraocular Pressure
  - Optic Nerve Atrophy
  - Visual Field Loss

- Every Individual after the age of 64 should be examined yearly to screen for
Glaucoma Damages the Optic Nerve
Myths About Glaucoma

“Glaucoma is a disease of old age”

“I have 20/20 vision so I don't have Glaucoma”

“My eyes would hurt or feel different if I had Glaucoma”
Glaucoma

Strong Risk Factors

- High Intraocular Pressure
- Aging
- Positive Family History
- Suspicious Optic Nerve Appearance
- Thin Central Cornea
Normal Optic Nerve
Abnormal Nerve - Glaucoma
Glaucoma - Visual Field Loss
Glaucoma - Treatment

- Medications - Drops
- Laser
- Surgery
Narrow Angle Glaucoma

Diagram showing the eye with labels:
- Cornea
- Pupil
- Lens
- Conjunctiva
- Meshwork
- Sclera

Text:
Fluid exits through new opening
Don’t Let Diabetes Steal Your Sight

- Be Proactive!
- Develop Healthy Eating Habits
- Monitor Your Glucose Levels
- Exercise
- Schedule Regular Eye Exams
Questions?
Visit us at DSeye.com to learn more about your Ocular Health