

**James M. Maisel, MD, FAAO**  
**Rodney P. Coe, MD, MS**  
**Sabah A. Shah, MD, MBA, MS**

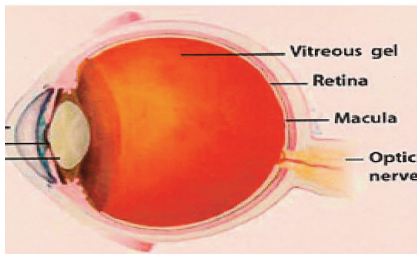


Vitreoretinal and Laser Surgery,  
Medical Retinal Treatment

**NASSAU OFFICE**  
400 SOUTH OYSTER BAY RD.  
SUITE 305  
HICKSVILLE, NY 11801  
(516) 939-6100

**SUFFOLK OFFICE**  
1455 VETERANS MEMORIAL  
HWY.  
HAUPPAUGE, Y 11749  
(631) 273-1818

Website: [www.rgony.com](http://www.rgony.com)  
FAX: (516) 939-2510



**Cornea:** The cornea is the clear outer part of the eye's visual system located at the front of the eye.  
**Iris:** The iris is the colored part of the eye that regulates the amount of light entering the eye. Lens: The lens is a part of the eye behind the iris that helps to focus an image, on the retina.  
**Macula:** The macula is the small, sensitive area of the retina that gives central vision. It is located in the center of the retina.  
**Optic nerve:** The optic nerve is the largest sensory nerve of the eye. It carries impulses for sight from the eye to the brain.  
**Pupil:** The pupil is the opening at the center of the iris. It adjusts the size of the pupil and controls the amount of light that can enter the eye.  
**Retina:** The retina is the light-sensitive tissue at the back of the eye. The retina converts light into electrical impulses that are sent to the brain through the optic nerve.  
**Vitreous gel:** The vitreous gel is a transparent, colorless substance that fills the rear two-thirds of the eyeball, between the lens and the retina.

# Diabetic Eye Disease

**What is it?**  
It refers to eye problems people with diabetes may have. These include



There are often NO early warning signs.

**Cataract**  
Clouding of the lens of the eye.



**Diabetic retinopathy**  
Damage to blood vessels in the retina; most common.



**Glaucoma**  
Damage to the optic nerve.



**Who is at risk?**

→ All people with diabetes.



The longer you have diabetes, the higher your risk of getting diabetic eye disease.

**SYMPTOMS:** In the very early stages of diabetic retinopathy, there often are no symptoms or pain. As capillaries weaken, leak and bleed, vision may start to blur.

## DIABETIC RETINOPATHY TREATMENT



**LASER**

Laser eye surgery can close or shrink new abnormal blood vessels that can leak blood into the eye and cause vision loss. It can also slow or stop the fluid leakage from the retina vessels that can cause vision loss.



**MEDICATIONS**

Injection of anti-VEGF or steroid drugs into the eye reduces leakage from diabetic macular edema and can stabilize or improve vision. Treatments are initially used on a monthly basis and are painless, safe and effective and usually covered by insurance.



**VITRECTOMY SURGERY**

VITRECTOMY surgery is an outpatient procedure usually performed with local anesthesia. An operating microscope and tiny surgical instruments remove blood and scar tissue due to abnormal diabetic vessels in the eye. Laser is often performed to prevent recurrence of the bleeding. A bubble may be placed in the eye to help healing. Removing vitreous hemorrhage and scar tissue often restores vision.

## COMPREHENSIVE DILATED EYE EXAM



All diabetic patients need a comprehensive dilated eye exam yearly. Eye drops dilate, or widen the pupil.

**VISUAL ACUITY TESTING** with an eye chart measures a person's ability to see.



**FUNDUS PHOTOGRAPHS** document retinal findings and allow tracking of changes.

Special lenses are used to examine the retina for damage to blood vessels.



**FLUORECEIN ANGIOGRAPHY** uses a special dye injected in the arm. Retinal images are captured as the dye travels through the blood vessels identifying macular leakage (DIABETIC MACULAR EDEMA or areas of poor blood flow (ISCHEMIA).

**OCT IMAGING** uses a low power laser light to look for subtle changes in retinal layers indicating DIABETIC MACULAR EDEMA or swelling in the central area.

## What are the numbers?

7.7 million people ages 40 and older have diabetic retinopathy. Will reach 11 million people by 2030.



**95%**

of severe vision loss from diabetic retinopathy can be prevented by early detection, timely treatment, and appropriate follow-up.

Stay on **TRACK** to protect vision

**PROTECT YOUR VISION FROM DIABETES**

Have a dilated eye exam every year, and follow these steps to keep your health on TRACK.

**T**

Take your medications as prescribed by your doctor.

**R**

Reach and maintain a healthy weight.

**A**

Add more physical activity to your daily routine.

**C**

Control your A1C, LDL, and blood pressure, and cholesterol levels.

**K**

Kick the smoking habit.