

Glaucoma Suspect

Glaucoma refers to a category of eye diseases often associated with a dangerous buildup of internal eye pressure (IOP) which can damage the eye's optic nerve. The most common form of this disease is known as **open-angle glaucoma**.

With untreated or uncontrolled glaucoma, you might eventually notice decreased ability to see at the edges of your vision (peripheral vision). Further eye damage can lead to tunnel vision or blindness.

Glaucoma suspect describes a person with one or more risk factors that may lead to glaucoma, but this individual does not have definite glaucomatous optic nerve damage or visual field defect. A great overlap can exist between findings in patients with early glaucoma and those who are glaucoma suspect without the disease. Five to 10 million Americans with ocular hypertension have elevated intraocular pressure (IOP) above 21 mm Hg without evidence of damage. Many of these patients are being treated, but the indications for treatment are not clear-cut. Many others are glaucoma suspect based on the suspicious appearance of the optic nerve head or other risk factors.

Diagnosis, Screening and Tests for Glaucoma

When ordered by Dr. Schachter, the following tests are performed to create baseline images and measurements of the optic nerve and internal structure. At specific intervals, additional images and measurements are taken to monitor change or progression over time.

A **tonometer** is used to measure IOP by blowing a puff of air onto your eye's surface.

Visual field testing is a subjective measurement of your peripheral vision.

Optical Coherence Tomography (OCT) is a method of imaging that uses light waves to provide cross-sectional views of the interior structures of the eye. This allows 3-dimensional analysis of the eye at the tissue layer.

Visual Evoked Potential (VEP) objectively measures the strength of the signal going from your eyes to your brain and how quickly it gets there.

Retinal Tomography uses a laser scanner to produce a 3-dimensional topographic image of the retina. Each follow-up visit is compared to the original image to allow analysis of any changes in your eyes.

Corneal Pachymetry measures the thickness of the cornea.

Fundus Photography is a panoramic image of the surface of the back of the eye focusing on the optic nerve. This imaging may be used in place of dilation.