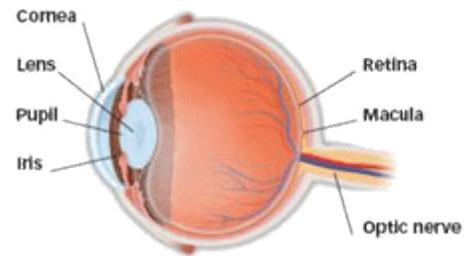


What Is Ocular Hypertension?

Ocular hypertension is when the pressure inside the eye (intraocular pressure or IOP) is higher than normal.

Eye pressure is expressed in millimeters of mercury (mm Hg), the same unit of measurement used in weather barometers. While normal eye pressure has historically been considered a measurement of less than 21 mm Hg, this normal "normal" upper limit may vary in different populations.

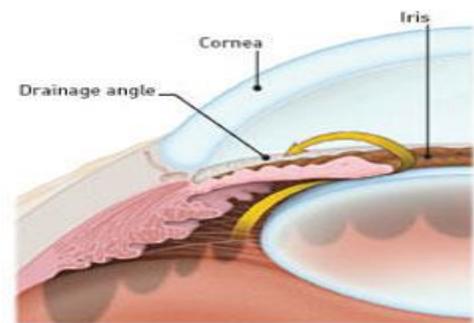


Ocular hypertension is not the same as glaucoma, which is a disease of the eye often caused by high intraocular pressure. In people with ocular hypertension, the optic nerve appears normal and no signs of glaucoma are found during visual field testing, which tests side (peripheral) vision. However, people with ocular hypertension are considered "glaucoma suspects," meaning they should be monitored closely by an ophthalmologist (Eye M.D.) to make sure that they do not develop glaucoma.

Intraocular pressure rises slowly with increasing age, just as glaucoma becomes more common as you get older.

Ocular Hypertension Causes

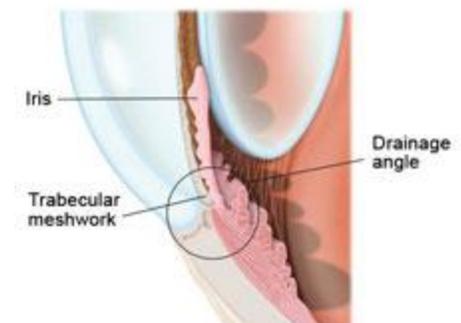
In the healthy eye, a clear fluid called aqueous (pronounced AY-kwee-us) humor circulates inside the front portion of your eye. To maintain a constant healthy eye pressure, your eye continually produces a small amount of aqueous humor while an equal amount of this fluid flows out of your eye.



The fluid flows out through a very tiny drain called the trabecular meshwork, a complex network of cells and tissue in an area called the drainage angle. If the aqueous humor does not flow through the trabecular meshwork properly, fluid pressure in the eye builds up, causing ocular hypertension. Ocular hypertension may also result if the eye produces too much aqueous humor.

Injury to the eye can cause ocular hypertension, as can certain eye diseases. Certain medications (such as steroids) are also a potential cause for ocular hypertension.

While anyone can develop ocular hypertension, the following people are at greatest risk for this condition:



- People with a family history of ocular hypertension or glaucoma
- People with diabetes
- People over age 40
- People of African-American descent
- People who are very myopic (nearsighted)

Ocular Hypertension Symptoms

Ocular hypertension usually does not have any signs or symptoms. Because you can have ocular hypertension and not be aware of it, it is important that you have regular eye examinations with your ophthalmologist.

Ocular Hypertension Diagnosis

As part of a comprehensive eye examination, your ophthalmologist will perform tests to measure your intraocular pressure and to make sure that you do not have glaucoma.

Among the tests your Eye M.D. may perform are:

- **Tonometry exam.** This procedure measures the pressure in your eye. During this test, your eye is numbed with eyedrops. Your doctor uses an instrument called a tonometer (see photo above) to measure eye pressure. The instrument measures how your cornea resists pressure.
- **Gonioscopy exam.** Gonioscopy allows your ophthalmologist to get a clear look at the drainage angle of your eye. Your ophthalmologist is not able to see your eye's drainage angle by looking at the front of your eye. However, by using a mirrored lens, your ophthalmologist can examine the drainage angle, which is important in determining whether or not you have glaucoma, as well as what type of glaucoma you may have.
- **Ophthalmoscopy exam.** Your ophthalmologist inspects your optic nerve for signs of damage using an ophthalmoscope, an instrument that magnifies the interior of the eye. Your pupils will be dilated (widened) with eye drops to allow your doctor a better view of your optic nerve to see if it has been damaged.
- **Visual field test.** The visual field test will check for blank spots in your vision, another sign of glaucoma. The test is performed using a bowl-shaped instrument called a perimeter. When taking the test, a patch is temporarily placed on one of your eyes so that only one eye is tested at a time. You will be seated and asked to look straight ahead at a target. The computer makes a noise and random points of light will flash around the bowl-shaped perimeter, and you will be asked to press a button whenever you see a light. Not every noise is followed by a flash of light.
- **Pachymetry.** Because the thickness of the cornea can affect eye pressure readings, pachymetry is used to measure corneal thickness. A probe called a pachymeter is gently placed on the cornea to measure its thickness.

Ocular Hypertension Treatment

It is important to monitor ocular hypertension closely and to reduce it before it causes vision loss or damage to the optic nerve. Depending upon your individual case and how high your intraocular pressure is found to be, your Eye M.D. may decide not to initiate treatment immediately but instead monitor your intraocular pressure through regularly scheduled testing.

In other cases, your Eye M.D. may decide that medication is needed to reduce your intraocular pressure. Pressure-lowering eyedrops can improve your ocular hypertension, but it is important for you to adhere to your prescribed regimen for them to work effectively.

In some cases, your Eye M.D. may prescribe more than one medication. When prescribing medication, he or she will schedule a visit within several weeks to test your eye pressure again in order to determine how effective the medication is in treating your ocular hypertension.

Many patients with ocular hypertension may go on to develop primary open-angle glaucoma, which almost always requires therapy to lower intraocular pressure. If that is the case, your Eye M.D. will discuss treatment options.