

## **Glaucoma tests are worth it!**

If you are over 40 and you are reading this, you probably have experienced those eye checkups where they make sure you don't have glaucoma. You can add it to those other "fun" annual exams you need to get at this age.

Although your ophthalmologist can probably explain this better, I am going to give you the 10-cent glaucoma education.

Glaucoma is actually a group of eye diseases that gradually steals sight, often without symptoms. Vision loss is caused by damage to the optic nerve. This nerve acts like an electric cable with over a million wires and is responsible for carrying the images we see to the brain.

It was once thought that high intraocular (inner eye) pressure (IOP) was the main cause of this optic nerve damage. Although IOP is clearly a risk factor, we now know that other factors must also be involved because even people with "normal" IOP can experience vision loss from glaucoma.

The two main types of glaucoma are open-angle glaucoma, or primary open-angle glaucoma (POAG), and angle-closure glaucoma. POAG is the most common form of glaucoma, affecting about three million Americans. It happens when the eye's drainage canals become clogged over time. The inner eye pressure rises because the correct amount of fluid can't drain out of the eye. With open-angle glaucoma, the entrances to the drainage canals are clear and should be working correctly. The clogging problem occurs inside the drainage canals, like the clogging that can occur inside the pipe below the drain of a sink.

Most people have no symptoms and no early warning signs. If open-angle glaucoma is not diagnosed and treated, it can cause a gradual loss of vision. This type of glaucoma develops slowly and sometimes without noticeable sight loss for many years. It usually responds well to medication, especially if caught and treated early.

Angle-closure glaucoma is also known as acute glaucoma or narrow angle glaucoma. It is much more rare and is very different from open-angle glaucoma because the eye pressure usually goes up very fast. This happens when the drainage canals get blocked or covered over, such as a clog in a sink when something is covering the drain. With angle-closure glaucoma, the iris and cornea is not wide and open as it should be. The outer edge of the iris bunches up over the drainage canals, when the pupil enlarges too much or too quickly.

Treatment of angle-closure glaucoma usually involves surgery to remove a small portion of the outer edge of the iris. This helps unblock the drainage canals so the extra fluid can drain. Usually the surgery is successful and long lasting. Symptoms of angle-closure glaucoma may include headaches, eye pain, nausea, rainbows around lights at night and very blurred vision.

There is also a type called secondary glaucoma. This type can occur as a result of an eye injury, inflammation, tumor, or in advanced cases of cataract or diabetes. It can also be caused by certain drugs such as steroids. This form of glaucoma may be mild or severe. The type of treatment will depend on whether it is open-angle or angle-closure glaucoma.

Finally there is a type of glaucoma completely different from those noted above. Normal tension glaucoma, also known as low-tension glaucoma, is a type of glaucoma in which the optic nerve is damaged even though the IOP is not very high. Doctors do not know why some people's optic nerves are damaged even though they have what is considered to be normal pressure levels.

You are at risk for glaucoma if you:

- Are 55 or older
- Are black (if so, you are also more likely to get glaucoma at a younger age)
- Are Hispanic
- Are very near sighted (distance objects are blurry)
- Have a family history of glaucoma
- Have a history of high pressure in your eyes
- Have had an eye injury or eye surgery
- Have taken steroids for long periods of time
- Have diabetes or high blood pressure

Both cataracts and glaucoma can be a natural part of the aging process. Many people over 60 may have both. Otherwise, the two are not associated with one another.

Both cataracts and glaucoma are serious conditions that can cause you to lose your vision. However, loss of vision because of cataracts can be reversed with surgery. Loss of vision from glaucoma is, as yet, irreversible.

So, the next time your eye doctor wants to do “the full glaucoma checkup” for you, thank him. He is really doing you a favor.