

EYE-Q

by R. Thomas Barowsky, MD

Glaucoma Awareness Month and Narrow Angle Glaucoma

In recognition of National Glaucoma Awareness Month I will continue our discussion on glaucoma by talking about narrow angle glaucoma (NAG). As I discussed previously, glaucoma is a disease of increased intraocular pressure (IOP) that destroys the nerve layer of the retina and leads to blindness if not treated properly.

The second most common form of glaucoma is NAG. This results from the normal drainage angle being much narrower than normal (hence the name, obviously) which can restrict flow of the aqueous humor (AH) from the inside of the eye back into the bloodstream.

Under normal conditions, a narrow angle does not necessarily mean that the IOP will be elevated. Narrow angles are seen much more commonly in people who are far-sighted (I guess that leaves out most, if not all, of our political representatives). This is because far-sighted (or hyperopic) people have shorter eyes and therefore naturally narrow angles.

Usually some additional event must occur in patients with narrow angles to cause the pressure to rise. The most common cause of a rise in IOP is caused by the iris crowding the angle when the pupil is dilated and further restricting AH flow from the eye. As we have more and more birthdays, the thickness and diameter of the lens of the eye increases. This will cause the iris to be pushed further forward and also narrow the angle. Additionally, patients who take certain allergy medications may also experience a rise in IOP due to the effect of the medication on the internal structures of the eye.

The most serious form of NAG is called acute angle closure glaucoma. This occurs when iris tissue completely blocks the angle. Because the aqueous continues to be produced, the IOP goes up very high and very quickly. It is not unusual to see pressures in the 70s and 80s. Since the normal IOP is less than 20, a pressure this high can cause a lot of damage if not controlled quickly. The eye in acute angle closure will be very painful, with severe blurring or even loss of vision and severe redness. The patient is very sensitive to light and may even have nausea or vomiting from the severe pain. Obviously, this is a medical emergency and requires immediate attention to protect the vision.

Angle closure glaucoma usually requires the use of IV medications and emergency laser treatment to bring the IOP back under control. There are some who feel that the laser treatment is ineffective at controlling this form of glaucoma. Nonetheless, if these things are not done quickly and the pressure stays up for a prolonged period of time, severe and permanent visual loss can occur.

Narrow angle glaucoma is just one of the many types of glaucoma that can steal our sight. If you have risk factors for glaucoma be sure to see your eye doctor for routine care and follow up with their recommendations to protect your sight.

If you have questions about your eye health e-mail Dr. Barowsky at doctom@tdkj.com and we'll try to answer your questions here at Eye-Q.