

## **EYE-Q**

by R. Thomas Barowsky, MD

### **Many Types of Glaucoma**

National Glaucoma Awareness Month is coming to a close and I have been discussing with you the major types of glaucoma, how they affect vision and what can be done to treat and control this serious blinding disease. What I failed to tell you was that October is also National Dessert Month. But don't be too upset about missing out on this celebration because Thursday, October 28<sup>th</sup>, is National Chocolate Day so all is not lost. Remember to treat your favorite eye doctor staff with glorious chocolate.

With today's technology we are able to do a much better job of preserving vision for most patients with glaucoma, there are still some patients with much less common forms of glaucoma who face a more difficult future in protecting their vision. This week's column will look at some of these difficult cases.

Congenital glaucoma is a serious disease that typically leads to severe vision loss very early in development. This can be because it is often not discovered in its early stages unless it is severe. Because the newborn's eyes and skull are still developing, increased pressure in the eyes can cause serious complications. The eye and the bony structures surrounding it enlarge giving the infant a "bug-eyed appearance." Unfortunately, the treatment for congenital glaucoma is less than optimal and visual development is poor.

Patients who have retinal disease from diabetes or obstruction of one of the blood vessels in the retina may develop rubeotic glaucoma. In this disease the retina is starving for blood to bring it nutrition. As a result, the tissues secrete a chemical designed to stimulate the growth of new blood vessels. This chemical diffuses throughout the eye and attempts to start new vessel growth on whatever tissue it touches. If new vessels start growing on the iris, they will grow into the drainage angle of the eye and cause it to be closed off. With no place for the aqueous humor (AH) to drain out of the eye the pressure can go very high in a very short time causing severe pain and decreased vision. Early on this can be controlled with aggressive laser treatment of the retina. If this is not successful, a surgical procedure may be required.

Chronic iritis or uveitis can cause scarring to occur between the iris and the lens of the eye sealing off the pupil. Because the AH is produced behind the iris, there is no place for it to go and the iris billows forward creating something called Iris Bombe. This can be treated by using a laser to make a hole in the iris and allow another place for the AH to leave the back of the eye. When treated in a timely manner, this can be a simple, nearly pain-free and sight saving procedure.

From changes in the normal anatomy to changes caused by injury or disease, there are a number of ways that glaucoma can present in the eye. Routine annual eye exams for anyone with multiple risk factors including age (over forty), ethnic origin (blacks are at

significantly higher risk), sex (females greater than males), family history and high normal IOP will help to identify those patients who should be treated for their condition versus those who do not need treatment.

You are only issued one set of eyes for your lifetime so protect them and they will serve you well.

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