

# SEEING Beyond Abuse

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Many may think that visiting an eye doctor would be the last place for an abuse victim to go. After reading this article, you may disagree. One day, a 49-year-old woman came to see me for a routine eye examination. Her vision was getting a little worse, and she thought she might need new glasses. During the examination, I noticed a tear in the iris of her right eye. I checked her eye pressure and found it to be elevated in her right eye. I asked if she had ever sustained any injuries to her eyes. She confirmed that she had, in fact, been hit many times in her eyes and face many years prior by a former boyfriend. I explained how the trauma had damaged her eye, and that the increased eye pressure could lead to optic nerve damage and vision loss if left untreated. We decided to begin medicated eye drops to lower the eye pressure. So far the drops are successfully keeping the pressure down, reducing her chances of vision loss. This woman very well may have lost her eyesight had she not happened to come for a regular eye exam.

Physical assault resulting in trauma to the eye can have both immediate and lasting effects. If trauma to the eye occurs, urgent medical attention should be sought to treat any immediate damage. Visiting an eye doctor is prudent for anyone who has ever sustained trauma to the eye because a condition called traumatic or angle recession glaucoma can occur months, or even years, after an eye injury.

Glaucoma is the second-leading cause of blindness in the United States. The eye contains fluid that is constantly being produced and drained. This fluid creates pressure inside the eye (intraocular pressure), which helps the eye keep its shape. In glaucoma, this pressure becomes too high, which can damage the optic nerve inside the eye and lead to permanent vision loss.

Damage to the eye from traumatic injury can lead to angle recession or traumatic glaucoma. The fluid in the eye is drained at the *angle*, which is where the cornea (the front clear window of the eye) meets the iris (the colored part of the eye). This drainage angle can be damaged during a traumatic event such as a strike to the eye. When the angle is damaged, the fluid may not drain properly, which can cause the eye pressure to increase and lead to glaucoma.

In the United States, over 1 million Americans experience eye injuries each year. Blunt eye injuries account for over 60% of these injuries, and over 10% of all eye traumas are due to assault.<sup>1</sup> Damage to the eye angle is one of the most common complications after a strike to the eye.<sup>2</sup> Though infrequent, damage to the eye

angle can lead to angle recession glaucoma weeks, months, or even many years after the trauma to the eye has occurred. As with most other forms of glaucoma, symptoms of vision loss are not noticed until the glaucoma is advanced and the damage is extensive. In fact, glaucoma is often called the “sneak thief of sight.” Since traumatic glaucoma can occur long after the eye has been injured, it is important not only to have an initial eye examination at the time of an injury but also regular visits to an eye doctor thereafter.

At the first visit to an eye doctor, it is necessary to mention any previous eye or head trauma so the eye can be properly evaluated for angle recession and glaucoma. The doctor will check the eye angle with a special lens, measure the eye pressure, and evaluate the optic nerves for any signs of damage. If angle recession is found, regular follow-up visits will be needed to monitor the eye for angle recession glaucoma. If glaucoma is detected, the doctor will likely start prescription eye drops to lower the eye pressure and try to prevent further damage to the optic nerve.

In 2007, the U.S. Department of Health and Human Services found that 794,000 children were victims of maltreatment.<sup>3</sup> Nearly 11% of these children were physically abused. Child abuse is a serious concern that has extensive short- and long-term health consequences. Monitoring eye injuries must be an important part of intervention.

I urge anyone who has ever sustained an eye injury, especially victims of domestic violence or child abuse, to schedule an examination with an eye doctor. Professionals who work with abuse victims should include eye examinations as a regular part of ongoing medical care. Victims should mention their history of eye trauma so the eyes can be properly evaluated.

## About the Author

Dr. Jessica Young is a 2007 graduate of the Pennsylvania College of Optometry. She currently practices at Ophthalmic Associates in Johnstown, Pennsylvania. The Pennsylvania Optometric Association named Dr. Young the 2010 Young Optometrist of the Year. She hopes that this article will help to promote awareness of the importance of screening for traumatic glaucoma in victims of abuse. Contact: JLY017@yahoo.com

<sup>1</sup> American Academy of Ophthalmology. (2011). *2009 Eye Injury Snapshot Project results*. Retrieved from:

[http://www.aao.org/practice\\_mgmt/eyesmart/snapshot\\_2009\\_results.cfm](http://www.aao.org/practice_mgmt/eyesmart/snapshot_2009_results.cfm).

<sup>2</sup> Sullivan, Brian R. (2004, March 11). *Angle recession glaucoma*. Retrieved from: [http://www.emedicinehealth.com/angle\\_recession\\_glaucoma/article\\_em.htm](http://www.emedicinehealth.com/angle_recession_glaucoma/article_em.htm).

<sup>3</sup> U.S. Department of Health and Human Services. (2007). *Child Maltreatment 2007*. Retrieved from: <http://www.acf.hhs.gov/programs/cb/pubs/cm07/chapter3.htm>.