

## Concussion: Parents Speak Out about the Visual Link to Recovery

Will Smith's new movie *Concussion* is likely to make parents think twice about having their children involved in contact sports like football and soccer. But what about kids who have already suffered a concussion and are struggling to get back to learning? Parents of these children are stepping forward to share their experiences with the hope of helping others.

"Research has shown that approximately 70% of young athletes who suffer a concussion have eye coordination, focusing, and eye movement problems<sup>1</sup>. Yet most parents are left on their own choose a health care professional who can help their child correct these problems," shares Dr. Kara Heying, OD, FCOVD, President of [College of Optometrists in Vision Development](#).

Evyn of Tulsa, Oklahoma had struggled for two years after suffering a concussion at the age of 13, sustained while playing soccer. She saw twelve physicians and specialists, including her pediatrician, two ophthalmologists, a neuro-ophthalmologist, a neurologist, and a sports medicine doctor before an optometrist finally referred her to a developmental optometrist.



*Evyn before her concussion*

According to her mother, Ronda Fitzgerald, "Before the concussion, school was easy for Evyn and she had excellent grades. After the concussion, Evyn continued to receive good grades in school, but it was very difficult. She spent forever on homework, reading and re-reading. She was now one of the last students to complete tests at school, and she had headaches all the time. It was extremely difficult for Evyn to take notes from the board."

It turns out her concussion had caused an eye coordination disorder known as [convergence insufficiency](#) which can cause double vision, among a variety of other visual disturbances that interfere with reading. Her mother further explains, "I did not know the depth of Evyn's problems. I knew she saw spots in her vision constantly, but I did not know she had double vision and I did not know her eyes did not work well together."

After completing an office-based optometric [vision therapy](#) program, Mrs. Fitzgerald shares, “I am happy to say that Evyn no longer has double vision or tracking and focusing problems – her eyes are working together. I wish we would have been told about the testing and treatment right after Evyn was injured. Unfortunately, she had to struggle through more than 2 years with double vision, headaches and more.”



*Evyn doing vision therapy*

In 2009, Zackery Lystedt suffered a much more severe head injury playing junior high school football. He returned to play shortly after the concussion, received a second blow to the head, and ended up with a severe [traumatic brain injury](#). After collapsing on the field, he was airlifted to the hospital where he underwent emergency skull surgery to relieve the building pressure caused by his swelling brain. Multiple strokes, a week on a ventilator and three months in a coma were only the start of the athlete’s recovery<sup>2</sup>.

Some of the many persisting difficulties that Zack endured were visual in nature, and initial treatments were only partially successful. It took over a year of recovery before he was directed to a developmental optometrist with the expertise to treat the unique forms of vision problems often caused by concussion and traumatic brain injury.

Zack's optometric services included the use of prism lenses, as well as vision therapy, which played a vital role in helping him walk across the stage to receive his high school diploma. His father Victor shares, "The use of the glasses has given Zack the confidence that he needs to overcome the fear of walking in open spaces. Vision therapy taught Zack to self-correct his double vision without the help of others. It has also helped him find his balance and strengthen his equilibrium."



*Zackery Lystedt*

In 2014, with the help of NFL Commissioner Roger Goodell, the Lystedts were able to have the Zackery Lystedt Law put into effect in every state in the U.S. Also known as the "Shake-it-Off Law," it ensures that child athletes will no longer be pressured to "shake off" the head injuries receive and prematurely return to the game. Now the family wants to help ensure that others who have suffered a concussion and are struggling with vision problems know that there is help available.

According to Dr. Heying, "The traditional vision approach still relies on the spontaneous recovery of double vision, patching, and using therapies to learn functional approaches around vision deficits, as opposed to treating the vision deficits. However, many optometrists across our nation are providing optometric vision therapy in addition to therapeutic lenses and prisms to help resolve visual deficits."

To help educate healthcare and allied professionals about visual rehabilitation, COVD publishes a quarterly, peer-reviewed scientific journal, [Vision Development & Rehabilitation](#). To access the journal articles and other information visit [www.covd.org](http://www.covd.org).

1] Master, C.L., Scheiman, M., Gallaway, M., Goodman, A., Robinson, R.L., Master, S.R., Grady, M.F. Vision diagnoses are common after concussion in adolescents. *Clinical Pediatrics*, July 2015.

2] <http://www.cdc.gov/media/subtopic/matte/pdf/031210-Zack-story.pdf>