

Functional & Binocular Vision

Newsletter of the Vision & Learning Center of Northcentral PA

Research & News

Update: Pediatric Vision Care Under the ACA—This month, millions of Americans began accessing online health exchanges established under the Affordable Care Act. Back in February of this year, the US Dept of Health and Human Resources (HHR) announced its final rule on essential health benefits under Obamacare—including a pediatric vision essential health benefit consisting of an annual comprehensive eye exam with materials. Opponents of this measure—including the American Academy of Ophthalmology and Blue Cross and Blue Shield—pushed for HHR to require that children fail a vision screening before being granted access to an eye health professional. “Instead, all optometrists should prepare for an influx of newly insured patients starting Jan 1, 2014,” the AOA stated. “All health plans (both inside and outside of the new marketplaces) offering small group or individual coverage are required to provide a pediatric optometric care essential health benefit” including an annual eye exam, treatment, and materials from infancy through age 18. Sources: AOA Firstlook Oct 4, 2013; Murphy J, Children’s Vision Health Benefit Approved, Review of Optom, Mar 2013.

Optometric Management of Persistent Diplopia Status Post Scleral Buckle Surgery: Two Case Studies—“When there is a distance horizontal misalignment of greater than 10 to 15 in combination with a vertical deviation that is greater than 8 to 10, vision therapy is strongly recommended, particularly when there is binocular instability when fusional prism is trialed during the evaluation.” Yutaka M, Han E, Optometry & Visual Performance 2013; vol 1, issue 5, 296-303.

A Case of Longstanding Diplopia with Post-Surgical Esotropia

Rachel, 25, was referred for a vision therapy evaluation by optometrist G William Orren III in Northumberland with a complaint of daily diplopia, with and without prism spectacles, for many years. She said she had no difficulty with driving because she knew which image to use. Rachel had strabismus surgery at about age 13 for esotropia that reportedly began in infancy after a fever. At our initial evaluation, Rachel wore new spectacles with appropriate compensating horizontal and vertical prism but showed no ability to fuse. We were unsuccessful in achieving fusion with vectograms and other targets for several therapy sessions. Rachel experienced a “breakthrough” at about session 8 when she excitedly described the Quoit “popping out” and floating. Progress was then steady and rapid until diplopia became rare and Rachel described the “feeling” of using both eyes together. Acquisition of random dot stereopsis occurred at the end of office-based therapy, which lasted 20 sessions. With diplopia now eliminated, Rachel notes instances of “depth” in real-life situations and continues therapy activities at home.

INITIAL

cc prism rx 11 BO, 3 BD OD
 cover D 4 CLET, 2 RH
 N 4 CLET, 4 RH
 RDS none
 DBI unable
 DBO unable
 NBI unable
 NBO unable

(Randot)
 (prism bar)
 (prism bar)
 (prism bar)
 (prism bar)

FINAL

cc prism rx 5 BO, 4 BD OD
 cover D 1 RH (phoria)
 N 3 XP, 1 RH (phoria)
 RDS 250 sec
 DBI -/12/8
 DBO -/16/12
 NBI -/6/0
 NBO -/14/12

Rachel's comments are on the back of this sheet.

Related Reading

Fixing My Gaze: A Scientist's Journey into Seeing in 3 Dimensions by Susan Barry, a must-read for every optometrist, is available in paperback at Amazon. In addition to recounting her remarkable journey from “stereoblindness” to depth perception, Dr Barry discusses the neuro-science of vision therapy in simple terms.

“The book's main contribution...is exposing the wrong-headed dogma that acuity and binocular vision can be restored only during a critical developmental period.”—New England Journal of Medicine