A Lie for an Eye, A Sleuth for the Truth: A case of non-organic vision loss in a child and strategies to determine their true acuity

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Abstract: Most optometrists become concerned when children report alarming symptoms; This case report outlines techniques used to determine if doctors are purposely being misled by a child with non-organic vision loss presenting as “acute vision loss.” Optometrists are often faced with a child who reports with alarming symptoms. This case report outlines techniques used to determine if doctors were purposely being misled by a child with non-organic vision loss that presented as “acute vision loss.”

I. Case History

- 9-year-old African American female presents to emergency clinic after being poked in the eye one day prior
  - She reported to a local emergency room a few hours after the incident and was prescribed erythromycin ung QID OS
- Chief complaint: Pain and decreased vision OS
- Patient medical history: Unremarkable
- Medications: None
- Patient ocular history: Unremarkable
  - Patient has never had an eye exam
  - Patient and Father state that patient has never failed a school screening
- Family history: Unremarkable

II. Pertinent findings

Day One

- VA (unaided): OD: 20/20, OS: 20/150 (Pinhole: No Improvement), OU: 20/150
- Confrontation visual field: Full to finger count OD, Constriction 360 OS
- EOMS: Full and smooth
- Pupils: PERRLA (-) APD OU
- Color Vision (Ishihara): 14/14 OD, 1/14 OS (It appeared that patient would add one number to plate shown)
- **VA with** +20 D/-20 D lenses over OS: 20/200
- Worth 4 Dot:
  - At 6 ft: “8 dots; 6 green, 2 red”
  - At 3 ft: “6 dots; equal red and green”
  - At 1 ft: “2 dots; 1 red, 1 green”
- Retinoscopy: -0.25 -1.00 x 180 OD VA: 20/15-, plano -0.75 x 180 OS VA: 20/80
- Slit lamp examination: Unremarkable OD, focal area of trace staining nasally near limbus OS
- IOP: 12mmHg, 11mmHg by NCT
- Dilated fundus examination: Normal. (+) Foveal reflex. Optic nerves were normal with .3/.3 cupping OD and .35/.35 cupping OS with distinct margins, well perfused, and healthy rim tissue OU.
- Macular OCT: No pathology noted.

Day Two

- VA (unaided): OD: 20/15-, OS: 20/500 (Pinhole: No Improvement), OU: 20/500
• VA with 2.75x telescope: 20/10 OS, VA with reverse 2.75x telescope 20/60 (equaling 20/22 OS)
• Patient’s right eye was patched to follow technician to visual fields: Patient was easily able to follow technician without hesitation or stumbling
• Esterman Binocular Visual Field: Complete loss of left field
• All other findings were consistent with Day One findings

III. Differential Diagnosis
• Malingering Patient/Functional Vision Loss/Non-Organic Vision Loss
• Monocular Accommodative Spasm
• Amblyopia
• Visual Conversion Disorder (VCD)

IV. Diagnosis and Discussion
• Diagnosis of non-organic vision loss confirmed after comprehensive eye exam and support from testing that proved that patient has better vision than stated (that patient could see 20/20)
  • Dr. Aubrey Gilbert defines non-organic vision loss as ”a disturbance in any aspect of vision with exam findings that do not support an underlying organic etiology.”
• Patient’s father believed his daughter and that she could not see
• This is an excellent representation of a malingering patient who will not “break”
• It is necessary to validate that there is no reason for decreased vision and that an improved visual acuity is achievable

V. Treatment and Management
• “Special Drops” (artificial tears) employed to decrease pain and clear vision on Day One; RTC 24 hours
• Continue previously prescribed erythromycin ung as prophylaxis for corneal disruption
• Unable to assess corneal defect at follow up visit because father refused stain in the eye
• Patient given “special foam” (OCuSOFT) in office to help clear vision
• Parental education and demonstration of normal vision findings
• Additional follow up in pediatric department in one month for comprehensive eye exam with possible binocular vision work up and electrodiagnostic testing.
• Possible referral for psychological evaluation if unable to “break” patient
• Spontaneous recovery of vision loss has been reported in most cases of non-organic vision loss
• Literature reviews

VI. Conclusion:
• In conclusion, it is pertinent to rule out any possible organic etiology and prove normal visual acuity in children with non-organic vision loss. An astute clinician may have to be creative in selecting tests that help reveal ‘normal’ vision. Also, it is critical to
properly educate the child’s parents and demonstrate inconsistencies in presenting symptoms and test results. Many times, a psychological evaluation may be indicated.