American Journal of Ophthalmology Case Reports 5 (2017) 90–91

Contents lists available at ScienceDirect

American Journal of Ophthalmology Case Reports

journal homepage: http://www.ajocasereports.com/

Case report

Nonorganic visual loss in a child due to school bullying

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ARTICLE INFO

Article history:
Received 29 May 2016
Received in revised form
27 October 2016
Accepted 16 November 2016
Available online 17 November 2016

ABSTRACT

Purpose: To describe a case of a child with nonorganic visual loss due to school bullying.
Observations: An eight-year-old boy presented with bilateral painless vision loss for a few days. His best corrected visual acuity (BCVA) was 20/200 in the right eye and 20/140 in the left eye. Color vision was normal. Fundoscopy, visual fields, electroretinography, electrooculography and visual evoked potentials were within normal limits. A nonorganic (psychogenic) cause of visual loss was suspected. A conversation with his parents and school teachers revealed that he was undergoing intense school bullying. Discussion between the boy and his parents and teachers' awareness helped in relieving the boy's stress. After two weeks BCVA was 20/20 bilaterally.
Conclusions and importance: School bullying is a potential cause of nonorganic vision loss in children. Correct diagnosis, and support by the parents and teachers might rapidly alleviate the symptoms.

1. Introduction

Peer victimization in school bullying is a highly distressing event that has been reported to manifest with a variety of physical symptoms, such as pain, skin problems, sleeping problems, bedwetting, or dizziness.[1–3]

Nonorganic visual loss usually manifests as loss of vision and/or visual field defect, diagnosed by excluding organic causes.[4–10] It occurs in both adults and children, but is more common in teenagers than young children.[4] Nonorganic visual loss is usually reversible. In children, social stress is often encountered, usually related to family tribulations, or even school difficulty.[4,5] Herein we present an original case of a young child with nonorganic visual loss as a consequence of school bullying.

2. Case report

An eight-year-old boy was referred to our department due to painless vision loss. According to his parents, he began complaining for having difficulties in reading the board a few days before, at the beginning of the final trimester of his third grade school year. The patient underwent a complete clinical evaluation. His best corrected visual acuity (BCVA) was 20/200 in the right eye and 20/140 in the left eye with a mild myopic correction. Color vision testing by Ishihara plates was normal. He also underwent cycloplegic refraction and retinoscopy revealing no change in the boy's present myopic correction. Fundoscopy was within normal limits, with a few non-specific retinal pigment epithelium abnormalities in the retinal periphery. In order to assist diagnosis, the boy also underwent formal visual field evaluation (Humphrey Field Analyzer II, Carl Zeiss Meditec, Dublin, Calif., USA) with SITA Fast technique with stimulus size III, and this showed no specific findings. A complete electrophysiologic investigation with electroretinography, eletrooculography and visual evoked potential assessment were performed and were within normal limits. This is not indicative of any specific ocular or visual pathway disorder. He was also scheduled to undergo neuroimaging evaluation with magnetic resonance imaging of brain and orbit. In the meantime, a nonorganic (psychogenic) cause of visual loss was suspected and the parents were instructed to investigate for any stressful conditions in the boy's everyday life. His parents and school teachers talked to him and discovered that he was undergoing intense school bullying by one of his classmates during the past few weeks. The boy admitted that the situation was becoming more stressful. He

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http://dx.doi.org/10.1016/j.ajoc.2016.11.009

specified that his peer was increasingly aggressive towards him and was consistently teasing him both verbally and physically. Awareness of the bullying by school teachers and school director allowed them to take proper measures and end it, and discussion between the boy and his parents helped in relieving the boy's stress. The parents provided the boy with support and reassurance about his visual recovery. Two weeks from initial presentation to our institute the boy reported improvement of vision. On repeat clinical evaluation his BCVA was 20/20 in each eye. An MRI was no longer felt to be necessary due to the recovery of his vision.

3. Discussion

School bullying has been strongly associated with multiple psychosomatic problems such as headache, backache, abdominal pain, skin problems, sleeping problems, bedwetting, or dizziness in several studies.[1,2] To our knowledge, this is the first report of nonorganic (psychogenic) vision loss due to school bullying. Children victimized by their peers often experience significant internalizing problems such as depression, anxiety, or loneliness.[1–3] They may not express any complaints regarding their problems, except if carefully questioned. Those internalizing problems can be both strong causes as well as consequences of peer victimization, thus contributing to a vicious cycle which preserves the temporal stability of peer victimization.[1–3] The patients may have devastating psychosomatic consequences. In our case, it manifested as severe visual loss.

Nonorganic visual loss is more common in teenagers, and patients are predominantly female.[4] The reported incidence among younger children in an outpatient department may reach 1.75%.[4] In adults, a concomitant psychological disorder or physical trauma is common. This is in contrast to adolescents which are more commonly triggered by social stress or family problems.[4] Academic difficulty in school has also been reported as cause of nonorganic visual loss in children.[4,5] Diagnosis is made by excluding any possible organic cause. In different studies, 45–93% of patients have been reported to show total remission of symptoms, but the time from presentation to remission varies from a few days to a few years.[5]

In our case the patient was a third grade student, undergoing severe stress due to school bullying. The distressing events of the boy's school environment had not been revealed prior to the diagnosis of the psychogenic visual loss. The diagnosis was based on the normal findings of the other tests performed, such as visual fields and electrophysiologic investigation, that did not correlate with the boy's visual acuity. Correct diagnosis and discussion with the boy, accompanied by the support of his parents and teachers alleviated patients stress and led to rapid resolution of symptoms in this case.

4. Conclusions

School bullying should be considered as a possible cause of visual loss in children with no other evident organic causes. Correct diagnosis may be based on a complete clinical workup as well as a discussion with the child and an investigation of the school environment.

Patient consent

The patient's parents provided written consent for publication of this report.

Funding

No funding or grant support.

Conflict of interest

The following authors have no financial disclosures: DK, GK, DB, MM, AD.

Authorship

All authors attest that they meet the current ICMJE criteria for Authorship.

Acknowledgments

None.

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