GENERAL OPHTHALMOLOGY

Ocular Injuries from the Horsewhip: A 9 Years Retrospective Study

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Background: Horsewhip is a thong made from animal hide with different local names. In Nigeria, it is locally known as "Koboko" in Yoruba and Igbo languages and "Bulala" in Hausa language. It is commonly used by parents, guardians, and teachers as a form of corporal punishment to correct wrong doings especially at home and schools (formal and Quranic schools). Its use is associated with a myriad of vision-threatening conditions including ruptured globe. This practice is against International law (1989, Convention on the Rights of the child, UN) which sought to protect children from all forms of physical or mental violence, injury or abuse, neglect or negligent treatment, and maltreatment or exploitation.[1]
Aim: To evaluate the prevalence and severity of eye injuries caused by horsewhip and recommend ways to reduce it.
Materials and Methods: A 9 years retrospective study of horsewhip ocular trauma was carried out. The following information was extracted from patients' medical records: Sociodemographic record, circumstance of trauma, extent of eye injury, and visual acuity (VA) at admission and the time of discharge. The data were analyzed with SPSS version 18 statistical software (SPSS Inc., Chicago, IL, USA) to determine simple descriptive statistics.
Results: Horsewhip ocular injuries constituted 20 of a total number of 930 cases of ocular trauma seen during the study period. Age ranged between 6 and 23 years although a majority (80%) were below 16 years. There were 13 males and 7 females. Most patients were students 15 (75%). Left eye was mostly affected 11 (55%). Half of the injuries occurred at schools 10 (50%, 8 in Quranic and 2 in formal), followed by home 7 (35%). Half of the injuries were Grade 1 penetrating eye injury while the remaining half were cases of blunt trauma. The cornea was the most frequently affected part of the eye, with corneal abrasion occurring in 7 eyes (35%). Other ocular injuries included subconjunctival hemorrhage, hyphema, traumatic mydriasis, vitreous hemorrhage, and retinal detachment. At presentation to our hospital, 11 (55%) had visual acuities of 6/18 or worse in the affected eye. Evaluation of the final visual outcome of the patients as at the last hospital visit showed that 50% attained a VA of 6/12 or better while 50% had VA of 6/60 or worse.
Conclusion: Horsewhip ocular trauma is an important cause of ocular morbidity, and the importance of ocular health education as a form of preventive measure is underscored.

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An Eye on the Bigger Picture: Marshall's Syndrome in a Nigerian Teenager Presenting to the Outpatient Clinic with Refractive Error

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Background: Marshall syndrome is a rare, autosomal dominant chondrodysplasia characterized by mid-facial hypoplasia, sensorineural deafness, ocular defects, and other abnormalities.[1] This report is probably the second from the subregion, the first described by Onile *et al*.[2]
Case Report: A 14-year-old girl presented with poor distant vision since childhood. She was observed to have the following dysmorphic features: Mid-facial hypoplasia, upward-turned nose, prominent globes, high arched palate, short stature, and a history of recurrent eyelid infections. Further inquiry revealed poor intellectual performance and bilateral sensorineural hearing impairment. She had short stature for age, large, prominent eyeballs, flattened nasal bridge with upturned nostrils, and high-arched palate [Figure 1]. Ocular examination revealed visual acuities of 6/24 and 6/36 in the right and left eyes, respectively. Refraction showed high myopia with significant myopic astigmatism. Dilated binocular indirect fundoscopy revealed a tessellated fundus with lattice degeneration in the periphery. A review of literature enabled a diagnosis of Marshall's syndrome. She was offered a spectacle prescription for significant myopic astigmatism and is followed up to receive hearing aids following audiological assessment by the otorhinolaryngologist.
Discussion: Marshall syndrome was first described by Marshall[1] in 1958, in a multigenerational family with 7 affected individuals. Reported features of the disorder include ocular abnormalities, mid-face anomalies, skeletal anomalies, sensorineural hearing loss, other central nervous system changes, and anhidrotic ectodermal dysplasia.[1,3,4] Craniofacial features are noticeable as early as the second trimester of gestation and are present at birth.[4] Associated features are noticed as the affected individual advances in age. Besides the associated mild to moderate mental disability, life expectancy is not diminished.[5] Diagnosis can be prenatal (especially where there is a known family history), based on clinical features or using genetic studies. Marshall Syndrome is inherited in an autosomal dominant pattern[6-8] with variable expressivity. It is due to a splicing mutation of 54-bp exons in the c-terminal region of the collagen gene, COL11A1.[6] Mutations in other collagen genes such as COL2A1 have also been reported.[6] Symptoms of MS include poor distant vision often associated with hearing deficit,

Table 1: Ocular and systemic abnormalities in Marshall syndrome

Ocular features	Systemic features		
Hypertelorism	Skeletal abnormalities	CNS abnormalities	Others
Epiphora	Mid-facial hypoplasia (flattened nasal bridge, with upturned nostrils)	Mild-moderate mental deficiency	High arched palate
High myopia	Shallow orbits (with prominent eyeballs)	Sensorineural hearing loss	Cleft palate
Cataracts (may spontaneously resorb)	Absent frontal sinuses	CNS calcifications	Ectodermal dysplasia (sparse or absent scalp hair, defective sweating, defects in dental structures)
Vitreous veils	Thickened skull	Mild-moderate mental deficiency	Spondyloepiphyseal abnormalities
Lattice degeneration	Short stature		
Retinal detachment	Joint hypermobility leading to early onset arthritis		

CNS: Central nervous system

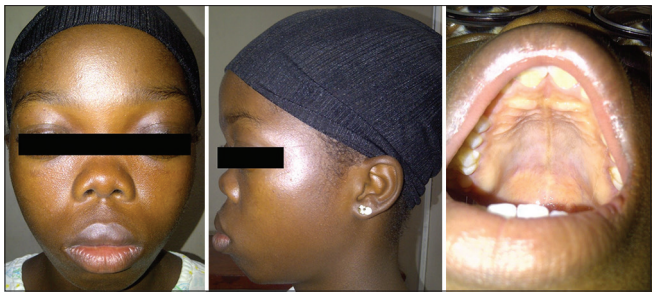

Figure 1: Hypertelorism, anteverted nares, low set ears, and high arched palate in patient with Marshall syndrome

short stature, and poor intellectual ability. Other ocular and systemic abnormalities of Marshall's syndrome are listed in Table 1.

Conclusion: The out-patient clinic is a goldmine of opportunities, for teaching and learning in ophthalmology. Daily repetition of routine clinical activities often becomes monotonous and unchallenging. However, occasionally, someone out of the ordinary walks through the door and a unique opportunity presents itself. A keen eye and an inquisitive mind should keep the focus of the clinician on the bigger picture, thereby improving the educational yield of an otherwise routine patient encounter. Although exceedingly rare, Marshall's syndrome has been reported in Nigeria. Patients need to be identified and offered multidisciplinary management involving long-term follow-up and targeted interventions to ensure a meaningful quality of life.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Psychological Disorder Presenting as Visual Impairment in a Teenage Male

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Introduction: Conversion disorder (CD) is a form of psychological disorder, in which there is a sudden manifestation of neurologic symptoms that is unexplained by any physical examination. Symptoms are unfeigned and often occur after a stressful event, it is postulated to represent the "conversion" of underlying emotional distress into physical symptoms.[1]

Although it is a common presentation in the pediatric clinic, it may be overlooked or misdiagnosed as malingering.[2-8]

Case Report: A 12-year-old male presented to the Paediatric Ophthalmology Clinic, University College Hospital, Ibadan, with a history of poor vision affecting both distant and near, difficulty reading off the board, with letters seen to be upside down and a decline in academic performance. He had been experiencing these visual symptoms for the past 5 years.

He had been in good state of health without any chronic medical conditions or surgeries, on anti-allergic medications and he was prescribed spectacles 3 years ago which did not improve visual symptoms. He is the first of two male children, history of blindness of unknown cause in maternal and paternal grandmothers. His father is an engineer and mother is a teacher. Ocular examination showed that visual acuity at first visit was 6/9 in either eye, fluctuated with subsequent visits. Anterior and posterior segments were normal, and no refractive errors were detected on refraction. Intraocular pressures were 10 mmHg and 11 mmHg in the right and left eye. General and systemic examinations were normal. A diagnosis of dyslexia was made, and a differential diagnosis of functional vision loss was considered. He was referred for evaluation by a child psychiatrist where a history of enuresis and significant parental discord was elicited, and a diagnosis of CD was made on account of identified psychosocial stressors and absence of an organic cause. Psychotherapy was commenced, and he is currently being followed up with a subjective report of improvement.

Discussion: CDs have an overall prevalence of 11–300/100,000, occurring in both children and adults.[2] It is relatively common occurring in 1–5% of pediatric patients, in general, ophthalmology practice, with a female preponderance.[2-8] A stressful or traumatic event precedes the manifestation of symptoms, which are not produced intentionally or feigned as in factitious disorder or malingering.[3,5,7,8-11] The stressful event in the index patient was the father's sudden abandonment of the family. CD may also manifest as other symptoms which may include limb weakness or hearing difficulties. A detailed history and examination are vital in arriving at a diagnosis, especially history of stressful events in patients' life, family history of psychiatric illnesses, history of drug use, and history of physical/sexual abuse. It has a good prognosis and, most times, persuasion and reassurance of patient are sufficient.[11-17] Babinski in 1900 stated that "functional manifestations were caused by suggestion and could be cured by persuasion."[4] Where there is a high burden of psychological stressor, supportive counseling is helpful.[3]

Conclusion: Not all cases of poor vision presenting to the eye clinic have an underlying organic disease or is due to malingering. A good clinical acumen and individualizing care are critical in the appropriate management of ophthalmic patients.

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Securing Research Grants

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Winning a Grant: Getting external funds is not a quick and easy process, but it is essential to get a project started. Time and energy are needed for planning, establishing research credentials and rapport with funding sources. Persistence often pays. To win a grant, you need to understand the requirements. Are you eligible to apply? What are the selection criteria? Is this the right scheme for you? How much will it cost? How long will it take? Where am I in my career? Who might give me a grant? About your project, you should ask; can it be done? Is there a need? Has the research question been answered? Will the research deliver an outcome? What research expertise is required? What do others think? Read all guidelines, terms, and conditions. Check application form requirements, such as referee reports, length of proposal, deadlines, and method of submission. You need also to choose referees carefully.

To help secure a grant, you need to present yourself as an expert in the field while avoiding superlatives or self-aggrandizing phrases. Your CV should demonstrate experience in being able to complete projects on time and within budget, recent publications, awards citations, invited key note addresses, reviews, media coverage, or any other recognition of your past research activity. Who to approach for funding is often a problem, but there are numerous funding sources around. These include local community funds, special purpose foundations, family sponsored foundations, national grants, tenders, and corporate foundations.

The Review - What do Funders Look for in a Proposal? Proposals are usually peer reviewed and each project evaluated for its merit. They check the scientific quality of a project, its impact, and original contribution to knowledge in that field, your academic record for evidence of research potential, qualification, and the means to accomplish the work and whether your institution will support you, allow you enough time accomplish the research and has the necessary equipment or infrastructure.

Collaboration: Collaboration is often important in getting research grants. Research funding agencies are more likely to consider projects, which blend the expertise of different scholars, disciplines, or institutions. To collaborate, you need other scholars interested in your field. You should aim to collaborate with experts that bring to the project something you do not have. They should be researchers, have written papers in the field, and are easy to work with. Contacts can be made at in person at conferences or workshops, or via email, social networking websites, e.g., research gate or academia.edu. or through mentors but be careful not to give too many of your ideas away until a collaboration is secure.

Budget: Budget is central to any grant application. It should be realistic, requesting only what you need and you can defend but not less than you need. Justify every item in the budget thoroughly. It includes salary for research staff and costs for travel, consultant, data collection, equipment, and admin support depending upon the project's scope and size.