Assault as a Cause of Ocular Morbidity in Contemporary Nigeria: A Case Report

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Introduction: Violence in Nigeria in its various forms has escalated to an alarming rate over the last decade. Factors responsible for this include poverty, political/civil strife, as well as domestic violence. The most frequent location of injury for victims of all types of violence is the head and neck with ocular injuries[1] ranging from a small laceration on the eyelid, orbital fracture, or involvement of the globe.[2]

Case Report: A 20-year old man who presented with poorly sutured facial and lid lacerations sustained four days prior, from assault with a machete in a domestic setting. The laceration was sutured at the referring facility to secure haemostasis. Examination revealed a poorly sutured deep laceration extending from the left temporal region across the left upper and lower lids down to the upper lip. Vision in the left eye was counting finger at 1 meter. The puncta and canaliculi were not involved. There was conjunctival chemosis, and subconjunctival haemorrhage. X-rays showed no bony or orbital fracture. He had topical antibiotics and the eyelids lacerations were re-sutured layer by layer using interrupted vicryl 5/0 suture.

Figure: Photograph of the patient before and after re-suturing of lacerations

Discussion: Domestic violence is a serious but preventable problem that may be unrecognized by healthcare providers as a primary cause of ocular trauma.[6] Studies have shown it to be on the rise globally, representing up to 20% of ocular trauma.[3] Traumatic eye injuries have also been found to be a significant problem in developing countries like ours.[8] They are an important cause of utilization of ophthalmic services and resources[9] In Nigeria, ocular trauma is rampant especially from domestic violence and this causes significant loss in wages and health care expenses[7] Ocular trauma from violence occurs more commonly in males[10], between the ages of 20 to 60 years, which constitute the active and economically productive age group[11] A study from south west Nigeria showed that 17.6% of ocular injuries occurred from fight and assault, with eyelid laceration accounting for 5.9%, traumatic mydriasis 9.2%, and subconjunctival haemorrhage 15.3%.[5] This patient had similar findings. Other findings such as corneal abrasions/lacerations, hyphema, foreign body, ruptured lens, retinal detachment were however not present in this case. Diagnosis in such cases are mainly clinical however radiological tests such as x-rays and CT scans are useful[6] Management of such a case would involve excluding associated globe injury, protecting the cornea, maintaining proper lid dynamics, excluding foreign body, managing risk of infections and optimizing cosmesis. Ideally eyelid repair surgery should be performed within 12-24 hours of injury as this reduces subsequent complications.[11] Exact repair of lid margin is critical to avoid notching or margin discontinuity which causes functional and cosmetic problems[12]

Conclusion: This case report highlights domestic violence /assault as a significant cause of ocular morbidity which may impact negatively on both health and economic resources of a population.

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