

Traditional Eye Medication: Still a Challenge in the Twenty First Century - Case Report

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Introduction: Traditional eye medications (TEM) are substances, naturally occurring or artificial, which are applied to the eyes to achieve a therapeutic aim.¹ In spite of the well documented toxic effects of TEM,² their use remains common practice.³ Studies across Africa confirmed that many individuals still use TEM before presentation to the hospital.^{4, 5}

Case Report: A twenty-six-year-old male undergraduate presented with a five-day history of poor vision in both eyes associated with severe pains, redness and discharge which were preceded by redness, mild pain, tearing and photophobia of 2 days duration following application of plant extract and powdery concoction based on advice of friends. He had previously enjoyed good vision in both eyes.

He had a visual acuity of light perception and hand movement in the right and left eyes respectively with good light projection, oedematous lids, copious discharge and features of intense conjunctival inflammation. The right cornea was ulcerated centrally with uveal prolapse at 9 to 10 clock hours while the left cornea was hazy peripherally with uveal prolapse at 2 to 3 clock hours. Both anterior chambers were shallow with the right more than the left and pupils were corectopic. In the right eye no further details could be seen while in the left, fundus view was blurred and extra ocular motility in both eyes were normal. An assessment of bilateral ulcerative keratitis with perforation secondary to use of TEM was made. Fasting blood sugar was 4.6mmol/litre, retroviral screening was negative while conjunctival swab microscopy and culture showed no growth after 24 hours. He was referred to a corneal specialist but declined for financial and logistic reasons, so was commenced on Gutt. Moxifloxacin, Mydriacyl, Diclofenac sodium, Sub-conjunctival Gentamicin and oral Ciprofloxacin. He improved steadily and by ten

weeks, the corneal ulcer had healed with adherent leucoma in the right eye but the left cornea was clear centrally with some peripheral scars. He had a best corrected visual acuity of hand movement in the right eye and 6/9⁺² in the left eye.

Discussion: TEM use is associated with blinding complications^{1,2} due to the toxic components of the TEM.⁶ With rising trend in the use of natural medicines and access to traditional healers,^{6,7} there is a need to educate the 'healers' on the toxic effects of some of the components, as well as early identification and referral of patients as required.⁸

Visual prognosis following the use of TEM is determined mostly by time of presentation, degree of damage and management instituted.⁹ Cost of orthodox health care despite early presentation and appropriate management remains a challenge in patient care and visual prognosis. Most patients

with corneal blindness are young, causing very high disability life adjusted years (DALYs)¹⁰, and adding to the burden on the individual, community and country at large.



Figure 1: Patient at presentation



Figure 2: Patient at 10 weeks post presentation

Conclusion: The use of TEM remains a challenge in this part of the world, so there is a dire need for more aggressive strategies to create awareness to avert its consequences.

References

1. Prajna N. V., Pillai M. R., Manimegalai T. K., Srinivasan M. Use of Traditional Eye Medicines by corneal ulcer patients presenting to a hospital in South India. *Indian J Ophthalmol.* 1999; 47(1): 15-18.
2. Ukponmwan CU, Momoh N. Incidence and complications of traditional eye medications in Nigeria in a teaching hospital. *Middle East Afr J Ophthalmol* 2010 Oct - Dec; 17(4): 315-319
3. Courtright P, Lewallen S, Kanjaloti S, Divala DJ. Traditional eye medicine use among patients with corneal disease in rural Malawi. *Br J Ophthalmol.* 1994; 78(11): 810-812
4. Osahon AI. Consequences of traditional eye medication in UBTH Benin-city. *Nigerian Journal of Ophthalmology.* 1995; 3:51-54.
5. Klaus V, Adala HS. Traditional herbal eye medication in Kenya. *World Health Forum* 1994
6. Aghaji AE, Ezeome IV, Ezeome ER. Evaluation of content and cost of traditional eye medication in a resource-poor country - Implications for eye care practice and policy. *Niger. J ClinPract.* 2018 Nov; 21(11):1514-1519
7. Foster A, Johnson GJ. Traditional eye medicines - good or bad news? *Br J Ophthalmol.* 1994; 78: 807.
8. Ntim-Amponsah C T, Amoaku M K, Ofosu-Amaah S. Alternate Eye Care Services in a Ghanaian District. *Ghana Med J.* 2005; 39(1): 19-23.
9. Ajite KO, Fadamiro OC. Prevalence of harmful/ traditional medication use in traumatic eye injury. *Glob Health J Sci.* 2013 Mar 20;5(4): 55-59.
10. Matthew OS, Tim S, Manoj G. Turning the tide of corneal blindness. *Current Ophthalmol* 2012; 60 (5): 423-427.