

# Correction of Severe Traditional Medication-induced Lower Lid Ectropion: A case report

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## SUMMARY

**Introduction:** The medical and surgical management of lower lid ectropion induced by the instillation of traditional eye medication in a middle-aged Nigerian woman is described. The patient was blind in both eyes as a result of severe pan-ophthalmritis and phthisis bulbi; a floppy ectropion in the left eye required autograft correction. The medical and surgical management is described.

**Type of study:** Case report.

**Setting:** The correction of the lower lid tarsal ectropion was carried out at the Rachel Eye Center in Abuja, Nigeria.

**Result:** After conservative intervention failed, a free pre-auricular skin graft of the floppy ectropion, led to a stable correction.

**Conclusions:** Harmful traditional eye medication continues to be a problem in the Nigerian society. More public health education is needed to avoid complications such as the one described in this communication.

**Keywords:** public health education, harmful traditional eye medication, ectropion surgery

## INTRODUCTION

Traditional medicine is the sum total of knowledge, skills and practices based on the theories, beliefs and experiences indigenous to different cultures that are used to maintain health, as well as to prevent, diagnose, improve or treat physical and mental illnesses.

Traditional medicine that has been adopted by other populations (outside the indigenous culture) is often termed alternative or complementary medicine.

Herbal medicines include herbs, herbal materials, herbal preparations, and finished herbal products that contain parts of plants or other plant materials as active ingredients.

Harmful traditional eye medication continues to be a problem in Nigeria.<sup>1,2,3,4</sup>

Traditional eye medicines (TEMs) are biologically-based concoctions instilled into the eye to achieve a desired ocular therapeutic effect. They tend to be crude or partially processed organic (plant and animal products) or inorganic (chemical) agents. TEM is often used as a result of peer pressure, advice from family, friends and acquaintances and the easy accessibility of traditional healers in less urbanized areas of the country.

Ectropion caused by traditional eye medicine has rarely been reported specifically in the literature. However, ectropion from 'burns' is often reported.<sup>5</sup> Other causes of ectropion often listed are ageing, Bell's palsy, Down's syndrome, stroke, scarring from diverse sources, and some other esoteric causes such as T-cell lymphoma of the eyelids, Siemens syndrome (a rare inherited skin disorder where the skin around hair follicles becomes stiff and the resulting scarring causes hair loss) and perinatal-lethal Gaucher disease in neonates (a disorder caused by the deficiency of an enzyme called glucocerebrosidase. The foetal form is one of several forms of Gaucher disease and is the rarest. The foetal form causes death before birth or soon after).

The challenges of surgical correction of ectropion have been recognized by various authors.<sup>6-14</sup> Where there is no medial canthal tendon laxity, Eliasop<sup>12</sup> recommends wedge resection, lateral tarsal strip, double wedge resection and temporal muscle transfer for progressive levels of ectropion. For medial ectropion of the lower lid, he recommends retrocanalicular resection, lazy 'T', MCT application plus lazy 'T' and temporalis muscle transfer for increasing degrees of severity. These procedures are generally applicable to involitional type ectropion. For cicatricial ectropion, graft techniques are indicated due to the vertical shortening of the lid inherent in such cases.<sup>6,14</sup>

A case of tarsal ectropion following exposure to harmful traditional eye medication in a young Nigerian woman is presented. The objectives of this presentation are to highlight the present and continuing risk of harmful traditional eye medication in Nigeria, and to describe the management of a case of ectropion induced by such use.

## CASE REPORT

A twenty-five-year-old woman from Keffi area in Northern Nigeria was brought to the Rachel Eye Center in Abuja, Nigeria. Her relatives were reluctant to give a comprehensive history but it was obvious that following some redness of the eyes, some topical traditional medication had been instilled into both eyes as prescribed by a local 'mallam' (herbalist). On presentation, the visual acuity in both eyes was no light perception (NPL). There was severe swelling of the eyelids with copious muco-purulent discharge and chemosis. It was difficult to evaluate the globe itself, but following management with topical, parenteral and oral antibiotics, frequent toileting and chymotrypsin, it became possible to determine that the corneas in both eyes had melted, with subsequent phthisis of the globes.

While the right eyeball improved with management after three weeks, there remained a fleshy prominence in the left eye. Careful examination indicated that this was due to an ectropion of the lower lid. A temporary tarsorrhaphy was performed using 4/0 silk non-absorbable suture in the hope that the ectropion would be reversed following regression of the associated chemosis. However, the patient re-presented a few days later with broken down tarsorrhaphy. A re-examination revealed that the breakdown was occasioned by a contractural force on the anterior lamellar of the lower lid.

A decision was taken to vertically extend the anterior lamellar using an ellipsoid free skin graft from behind the left ear. The lower lid defect was 'created' with a horizontal skin incision following which the lower lid was placed on the stretch with 4/0 silk non-absorbable sutures tied from the lower lid margin to the upper eyelid around the eyebrows. The free skin graft was secured in place using interrupted 4/0 black silk sutures. The defect created behind the ear was also closed using interrupted sutures.

The graft was covered with copious amounts of chloramphenicol ointment and gauze, and bandaged into place. It was not disturbed for 48 hours, when it was carefully inspected and left in place for another 72 hours.

The sutures were finally removed on the seventh day. This resulted in a correction of the ectropion as shown in figures 1, 2 and 3 (these pictures are published with consent).



Figure 1. Tarsal ectropion on the left eye.



Figure 2. Immediate post operative period. Note the traction sutures placed on the lower lid and the free graft held in place by interrupted sutures.



Figure 3. Seventh day post operation, with all sutures out. The graft has taken but still needs to be handled with utmost care.

## DISCUSSION

Traditional harmful eye medication is a common cause of blindness in sub-Saharan Africa.<sup>1,2</sup> In this instance, it eventuated in corneal melting, phthisis and associated tarsal ectropion in the left eye. For the management of tarsal ectropion, a decision has to be taken as to whether the pathogenesis of the ectropion is horizontal laxity (usually involutional) or vertical anterior lamellar shortage (usually cicatricial, associated with burns).<sup>5, 6</sup> In this instance, the opinion, following assessment, was that the mechanism of the ectropion was vertical anterior lamellar shortage. It was surmised that the shortage must have been created by the traditional medication applied. However, when the defect was created on the table, it was observed that it was not appear as conspicuous as it first appeared, until the lid was put on stretch.

Certain steps were taken to ensure that the graft took:

- much fat as possible was removed from the graft.
- After grafting, the stretch on the lower lid was maintained for seven days by sutures attached to the upper lid and eyebrow (fig 2).
- the graft was disturbed as infrequently as possible.
- dressings were carried out by the operating surgeon rather than the nursing staff. Less than careful change of dressings could have led to loss of the graft.

The patient did not reveal what led to the application of noxious substances to her eyes, but this case serves to illustrate the fact that several people in Nigeria still have either no access to or no faith in Western medicine, and resort to other means of treatment. Although the eyelid was repositioned, it was little comfort to the young lady who is irreversibly blind.

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