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Case Report
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Bilateral Congenital Upper Eyelid Eversion in a Newborn

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Abstract

Congenital upper eyelid eversion is a rare condition of unknown etiology. It is more common in newborns of black origin and it has been associated with trisomy 21 and colloidal skin. Usually, it resolves spontaneously with conservative treatment apart from rare cases that require more invasive-surgical techniques. Limited number of cases has been published in literature since 1896, the year it was first reported.

Our case report involves an otherwise healthy Afro-Caribbean male newborn who presented with bilateral palpebral eversion at birth and he was treated conservatively with complete resolution.

All health care professionals involved in the treatment of neonates should be aware of this condition in order to calm down the horrified parents and ensure that appropriate treatment is instigated.

Keywords: Congenital eyelid eversion; Congenital ectropion; Chemosis

Introduction

Congenital eyelid eversion is a rare entity in which the upper and/or lower eyelid is wholly turned out, the conjunctiva is prolapsed, and chemosis is observed. This condition was firstly described in 1896 by Adams who termed it as 'double congenital ectropion' [1]. Usually, it is a bilateral condition presenting at birth, although unilateral cases and late presentation have been reported so far [2,3]. A delay in managing this condition could result in keratopathy, corneal scarring, and perforation [4].

Here in we report a case of bilateral eyelid eversion with chemosis in an otherwise healthy newborn of Afro-Caribbean origin. This case was successfully managed conservatively resulting in complete resolution of the eyelid eversion and without any complications. The aim of this report is to raise awareness among pediatricians and all healthcare professionals for prompt recognition of this rare condition, since early intervention is simple for the majority of the cases, but at the same time, of great importance. Moreover, it is vital that healthcare professionals are in a position to firmly reassure the usually anxious parents.

Case Presentation

An Afro-Caribbean male neonate was delivered by caesarean section due to fetal distress, in Larnaca General Hospital in Cyprus, with a birth weight of 3790 g, with Apgar scores of 9 at 1 min and 10 at 5 min. The neonate was born at full term, following an uneventful pregnancy. The mother is a 24-year-old primigravida who had irregular antenatal care and follow-up during pregnancy. The parents are non-consanguineous and reported to be healthy with no family history of note.

At birth, the neonate was noted to have eversion of upper eyelids bilaterally. The eversion was most pronounced on the left eyelid and the palpebral conjunctiva was edematous and hyperemic (Figure 1). The eyeballs could not be visualized because of swelling and chemosis. The remainder of the physical examination was unremarkable. The neonate underwent an urgent ophthalmologist evaluation. Eye swabs were obtained from both eyes for microscopy and culture. The therapeutic regime prescribed was topical application of tobramycin ointment and dexamethasone/polymyxin B sulfate/neomycin sulfate ointment to both eyes twice daily. The prolapsed conjunctiva was covered with gauze dressings (acting as eye patches) and was gently cleansed regularly. On the 3rd day of admission, the chemosis on the right upper eyelid resolved significantly, but there was still poor eyelid opening and eversion was still present on the left eye (Figure 1). On the 6th day of treatment, the chemosis and eversion of both upper eyelids resolved substantially (Figure 1). A follow-up review two weeks later showed complete resolution of the eversion and normal ocular findings bilaterally. In addition, the conjunctiva was non-chemotic and normally positioned, with

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Figure 1: a) The 1 hour old newborn with upper eyelids everted and severe chemosis. b) On 3rd day, resolution of eversion and chemosis on right eye and significant improvement of the left eye. c) Spontaneous opening of the eyes on day 6th.

normal opening and closure of both eyes.

Discussion

Complete eversion of the upper eyelids with conjunctival chemosis and prolapse is a rare clinical entity. In most cases, it is an isolated finding and the neonate has no associated medical problems. However, there are case reports correlating complete eversion of the upper eyelids with trisomy 21 or collodion baby [5-7].

The underlying cause of congenital complete eversion of the upper eyelids is currently unknown [8]. However, several aetiologies have been proposed, including birth trauma, orbicularis muscle hypotonia, vertical shortening of the anterior lamella or vertical elongation of the posterior lamella of the eyelid, lateral elongation of the eyelid, failure of the orbital septum to fuse with the levator aponeurosis and absence of an effective lateral central ligament [9]. Furthermore, when the baby passes through the birth canal, the head is compressed, thus inducing venous stasis leading to edema and conjunctival prolapse that culminates in eyelid eversion [9]. However, in this report the neonate was born following a caesarean section, which adds some doubt when considering birth injury as the sole cause of eversion of the upper eyelids.

In most cases, management of this clinical condition is conservative [4-9]. The main objective is to prevent secondary bacterial infection and corneal desiccation [9,10]. This noninvasive approach includes the use of lubricant and prophylactic antibiotic ointments or eye drops, subconjuctival local application of hyaluronic acid, taping the eyelids closed, use of pressure patches moistened with and 5% hypertonic saline [4,8,11]. Surgical intervention is usually reserved only for non revolving cases. Surgical methods that have been tried are temporary tarsorrhaphy, fornix sutures, full-thickness skin graft, horizontal eyelid shortening, and excision of the redundant conjunctiva [9]. Appropriate and timely management is essential to avoid keratopathy, although the chemotic conjunctiva usually protects the cornea from exposure and therefore damage to the cornea is rare [4,8].

The case reported here were managed using topical antibiotic agents to prevent conjunctivitis and dryness of the exposed conjunctivae. Improvement was observed within 3 days and complete resolution had occurred 6 days after birth without any short or long-term sequela.

Conclusion

Congenital upper eyelid eversion could alarm both parents and healthcare professionals in obstetric and neonatal specialties, especially if they are not familiar with this condition. Awareness of this congenital condition and early recognition are essential for immediate and effective referral, as delayed and inadequate management could lead to deterioration and potentially serious complications. Hence, pediatricians and all healthcare professionals treating neonates must be aware of this rare entity and the prompt management required which usually responds well and fully resolves with conservative treatment.

References

1. Adams A. A case of double congenital ectropion. Med Fortnightly. 1896(9):137-8.
2. Pereira FJ, Trindade Sde P, Cruz AA. Congenital ectropion: Three case reports and literature review. Arq Bras Oftalmol. 2007;70(1):149-52.
3. Sellar PW, Bryars JH, Archer DB. Late presentation of congenital ectropion of the eyelids in a child with Down syndrome: A case report and review of the literature. J Pediatr Ophthalmol Strabismus. 1992;29(1):64-7.
4. Daniel P, Cogen M. Conservative management of congenital upper eyelid eversion. J AAPOS. 2020;24(1):46-8.
5. A M. Ectropium congenitum der oberliden. Z Augenheilkd. 1920(43):565-7.
6. Stern EN, Campbell CH, Faulkner HW. Conservative management of congenital eversion of the eyelids. Am J Ophthalmol. 1973;75(2):319-20.
7. Shapiro RD, Soentgen ML. Collodion skin disease and everted eyelids. Postgrad Med. 1969;45(4):216-9.
8. Alves CM, de Macedo RS, dos Anjos EB. Abordagem conservadora do ectrópio palpebral congênito. Revista Brasileira de Oftalmologia. 2020;79(2):131-3.
9. Fasina O. Management of bilateral congenital upper eyelid eversion with severe chemosis. J Ophthalmic Vis Res. 2013;8(2):175-8.
10. Ibraheem WA. Bilateral congenital upper eyelid eversion: The clinical course and outcome of conservative management. Pan Afr Med J. 2014;17:215.
11. Adeoti CO, Ashaye AO, Isawumi MA, Raji RA. Non-surgical management of congenital eversion of the eyelids. J Ophthalmic Vis Res. 2010;5(3):188-92.