

Case Report of Bilateral Congenital Upper Eyelid Eversion in a Newborn.

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Case Report

Received: 13/11/2013

Revised: 14/12/2013

Accepted: 16/12/2013

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Keywords: Bilateral, Congenital, Conservative Management, Eversion, Upper Eyelids.

ABSTRACT

Congenital eversion of the upper eyelids is a rare clinical entity, the pathogenesis of which is still obscure. Incidence is higher in black babies, infants with Down's syndrome and in collodion babies. Treatment modalities vary from conservative management to surgical correction. We report a case of bilateral congenital eversion of upper eyelids in a full term neonate born by caesarean section. Immediate conservative management of the condition resulted in complete recovery.

INTRODUCTION

Pico ^[1] has referred to the term congenital eversion of upper eyelids as being suggested by Ostriker and Lasky ^[2]. However this rare entity was first described in 1896 by Adams ^[3] who called it as 'double congenital ectropion'. Though most often a bilateral condition that presents at birth, unilateral cases as well as late presentations have been reported ^[4,5,6]. We report a case of bilateral congenital upper eyelid eversion in a normal full term baby born by caesarean section.

CASE REPORT

A full term neonate was referred immediately after birth for bilateral total eversion of upper eyelids. The normal male child was born by caesarean section after prolonged labour due to cephalopelvic disproportion.

On examination there was total eversion of upper lids of both eyes. Palpebral conjunctiva was congested and associated with mild chemosis (Figure 1). Under topical anesthesia, double eversion of the lids revealed normal anterior segment. On manual repositioning, the lids everted back spontaneously. Systemic examination as performed by the pediatrician was unremarkable.

Child was started on carboxymethylcellulose 1% eye drops every hour and Moxifloxacin eye ointment three times a day to both eyes. Taping the lids was advised. On review after four days chemosis had disappeared and the child was able to open his eyes. However both upper lids everted every time on crying. Topical medications were continued and the mother was counseled to reposition the lids whenever eversion occurred on crying. At subsequent follow up after ten days, marked improvement was noted with only occasional partial eversion of both upper lids on crying. While antibiotic eye ointment was discontinued, lubricant eye drop was continued four times a day to both eyes. Next review at the end of three weeks showed complete resolution of the condition.



Figure 1: Bilateral total upper eyelid eversion, conjunctival congestion and mild chemosis as seen at presentation.

DISCUSSION

Total eversion of upper eyelids presenting at birth is a rare clinical entity, exact incidence of which is not known [7]. Most cases reported have been in normal black babies [4, 6]. However congenital upper eyelid eversion associated with trisomy 21 [5, 6, 8, 9] and collodion babies [4, 10, 11] have been reported.

A number of anatomical and mechanical factors are implicated in the etiopathogenesis. Proposed causes include birth trauma [7], overlapping of lower eyelid margins by upper eyelid [4], orbicularis hypotonia [12], vertical shortening of the anterior lamella or vertical elongation of posterior lamella of eyelid, failure of orbital septum to fuse with levator palpebrae superioris, absence of effective lateral canthal ligament and lateral elongation of eyelid [13]. Once everted, orbicularis spasm may act as a sphincter that leads to a vicious cycle of conjunctival strangulation and oedema secondary to venous stasis [4, 8, 14]. The resultant chemosis usually protects the cornea from exposure [8].

Most often conservative management results in complete resolution of the condition [15,16,17,18]. Primary aim of treatment is to prevent desiccation, infection of the exposed conjunctiva and allow spontaneous inversion of the lid. Various options include lubricant and prophylactic antibiotic either as eye ointments or eye drops, moist chamber, subconjunctival injection of hyaluronidase [4], taping of lids, pressure patch and subconjunctival hyaluronic acid gel injection [17].

Surgical treatment is reserved for cases that do not respond to conservative management. Surgical methods that have been tried are lid sutures [4,19], excision of the redundant conjunctiva [8,9], temporary tarsorrhaphy⁹, fornix sutures and full thickness skin graft to the upper lid [6, 9,12].

In our case the child was born by caesarean section after prolonged labour attributed to cephalopelvic disproportion. Immediate referral promoted the conservative management with lubricant eye drops, antibiotic eye ointment and taping of the lids. Complete recovery was observed at the end of three weeks.

CONCLUSION

Congenital upper eyelid eversion is a very rare condition that responds well to conservative management when initiated without delay. Hence, the need for appropriate recognition of the condition and prompt referral for treatment is emphasized.

ACKNOWLEDGEMENTS

The authors would like to acknowledge Dr. Rajani Kadri, Dr. Asha Achar and Dr. Ajay Kudva, faculty from the Department of Ophthalmology, AJ Institute of Medical Sciences, Kuntikana, Mangalore, Karnataka, India for their editorial assistance, constant support and encouragement.

REFERENCES

1. Pico G. Congenital ectropion and distichiasis etiologic and hereditary factors: a report of cases and review of the literature. *Trans Am Ophthalmol Soc.* 1957; 55: 663-700.
2. Ostriker PJ, Lasky MA. Congenital eversion of the upper eyelids. *Am J Ophthalmol.* 1954; 37: 779-81.
3. Adams AL. A case of double congenital ectropion. *Med Fortnightly.* 1896; 9: 137-8.
4. Bentsi-Enchill KO. Congenital total eversion of upper eyelids. *Br J Ophthalmol.* 1981; 65: 209-213.
5. 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: 64-7.
6. Pereira FJ; Trinity SP; Cruz AA. Congenital ectropion: report of three cases and literature review. *Arq Bras Oftalmol.* 2007; 70: 149-52.
7. Duke-Elder S. Congenital anomalies of the ocular adnexa: anomalies of the eyelids. In: Duke-Elder S. *System of Ophthalmology. Normal and abnormal development.* London: Henry Kimpton; 1964 v. 3 p. 841.
8. Young RJ. Congenital ectropion of the upper lids. *Arch Dis Child.* 1954; 29: 97-100.
9. Al-Hussain HA, Al-Rajhi AA, Al-Qahtani S, Meyer D. Congenital upper eyelid eversion complicated by corneal perforation. *Br J Ophthalmol.* 2005; 89: 771.
10. Boparai MS, Dash RG, Sohi BK. Lamellar ichthyosis (collodian baby) with severe bilateral ectropion. *Indian J Ophthalmol.* 1988; 36: 140-1.
11. Chakraborti C, Tripathi P, Bandopadhyay G, Mazumder DB. Congenital bilateral ectropion in lamellar ichthyosis. *Oman J Ophthalmol.* 2011; 4: 35-6.
12. Loeffler M, Hornblass A. Surgical management of congenital upper-eyelid eversion. *Ophthalmic Surg.* 1990; 21: 736.
13. Blechman B, Isenberg S. An anatomical etiology of congenital eyelid eversion. *Ophthalmic Surg.* 1984; 15:111-3.
14. Rabb EL, Saphir RL. Congenital eyelid eversion with orbicularis spasm. *J Pediatr Ophthalmol Strabismus.* 1985; 22: 125-8.
15. Shinder R, Langer PD. Unilateral congenital eyelid eversion causing marked chemosis in a newborn. *J Pediatr Ophthalmol Strabismus.* 2010; 1: 1-2.
16. Maheshwari R, Maheshwari S. Congenital eversion of upper eyelids: Case report and management. *Indian J Ophthalmol.* 2006; 54: 203-4.
17. Taban M, Mancini R, Nakra T, Velez FG, Ela-Dalman N, Tsirbas A, et al. Nonsurgical management of congenital eyelid malpositions using hyaluronic acid gel. *Ophthal Plast Reconstr Surg.* 2009; 25: 259-263.
18. Adeoti CO, Ashaye AO, Isawumi MA, Raji RA. Non-surgical management of congenital eversion of the eyelids. *J Ophthalmic Vis Res.* 2010; 5: 188-92.
19. Fasina O. Management of bilateral congenital upper eyelid eversion with severe chemosis. *J Ophthalmic Vis Res.* 2013; 8: 175-8.