



Bilateral Congenital Upper Eyelid Eversion in a Newborn: A case Report

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Abstract

Introduction: Congenital upper eyelid eversion is a rare ocular disorder that often presents at birth with everted and swollen eyelids. It is slightly more common among blacks, usually benign and responds remarkably to conservative management.

Case report: 9-hour old male infant presented with fleshy swelling and eversion of both upper lids. No significant antenatal or postnatal history. Further ocular and systemic examination were not remarkable. He was managed with hypertonic saline guaze pack, Gutt salacyn (5% Sodium Chloride ophthalmic solution), Gutt gentamicin and Occ. chloramphenicol. Significant reduction in swelling and return of lids to normal anatomical position were noticed within 3 days of treatment. Full recovery occurred in about 2 weeks.

Discussion: The patient presented with bilateral congenital upper eyelid eversion which is the common presentation, although a few unilateral cases have been reported. Exact aetiology is usually unknown just as we have noted in the index case. However, thorough ocular and systemic examination is important to rule out probable causes. Treatment with hypertonic saline eye pack, salacyn eye drops and antibiotics resulted in excellent resolution of symptoms.

Conclusion: Congenital upper lid eversion is uncommon ocular presentation that may cause. However, it responds remarkably to conservative treatment which should be initiated early to prevent infection and desiccation of exposed conjunctiva.

Introduction

Congenital upper eyelid eversion may be described as a condition in which the eyelid is completely turned out and is usually associated with swelling, conjunctival prolapse and chemosis. It was first reported by Adams¹ in 1896, who used the term double congenital ectropion. It is a rare disorder.² It is usually benign, however, it causes undue anxiety in both parents and primary care physicians who have not had exposure to this disease entity.² Most cases are bilateral, although, there have been some reports of unilateral congenital upper lid eversion.⁴⁻⁸

The exact aetiology is unknown but prolonged and difficult labor has been incriminated in some cases⁹ while no known cause has been found in others.¹⁰ Structural abnormalities such as vertical shortening of anterior lamellar of the eyelid, vertical elongation of posterior lamellar of the eyelid, defective lateral canthal ligament, overlapping of the lower eyelid by the upper eyelid and failure of fusion of orbital septum with levator aponeurosis have been projected as possible causes.¹¹⁻¹³ Black race, birth trauma, Down's syndrome and collodion babies, have been equally associated with increased prevalence.¹⁴

Patients may be treated medically with hyperosmotic agents, antibiotics and patching; or surgically by applying temporary tarsorrhaphy using mattress sutures.¹⁵

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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 important to prevent desiccation. Moreover, it is vital to highlight the efficacy of non-invasive and affordable use of bed-side prepared hypertonic saline pack.

Case Presentation

9-hour old male presented to the eye clinic on account of fleshy swelling of both upper lids. Child was born to a 25-year-old para 0 woman. Mother registered for antenatal care at a primary health center at 28 weeks of gestation and was regular with antenatal care visits. Pregnancy was uneventful and was carried to term. Labour lasted for less than three (3) hours. Delivery was taken by a traditional birth attendant and was via spontaneous vaginal delivery. No postnatal complications.

She was admitted to the sick baby's unit and was thoroughly evaluated by paediatricians who eventually invited the Ophthalmology team. Systemic examination was unremarkable.



Figure 1: Newborn with everted and swollen upper eyelids



Figure 2: Hypertonic saline soaked gauze over everted lids



Figure 3: Normally positioned eyelids after 2 weeks of management

On examination, both upper lids were found to be everted, oedematous and congested (figure 1). Further ocular examination was impeded by the ocular swelling. Hypertonic guaze pack was applied and crepe bandage was placed over the gauze pack and around the head to hold the gauze securely in place. This was changed twice a day (figure 2). The hypertonic saline was constituted by adding table salt to 9% normal saline until saturation point when

solutes are seen. It is then soaked in gauze and applied over the prolapsed conjunctival chemoses. This maintains a constant osmotic effect thus drawing water from the chemosed conjunctiva. Gutt 0.3% Gentamicin 1 drop tds, Occ. 1% Chloramphenicol nocte and Gutt 5% Salacyn 1 drop qds were applied to both eyes for five days. Five (5) days after commencement of treatment, lids were properly positioned, conjunctiva was quiet, cornea was clear, anterior chamber had good depth, pupils were round, regular and briskly reactive, iris was brownish and lens was transparent. There was good red reflex in both eyes. However, there was still mild swelling at which point hypertonic saline patch was stopped but topical treatment continued. After about 2 weeks of treatment, swelling had completely resolved (figure 3) and there was no notable ocular complications.

Discussion

Congenital upper eyelid eversion is an uncommon presentation¹. Reported cases of congenital upper eyelid eversion are often bilateral and this agrees with our findings as the index patient presented with bilateral upper lid eversion. However, others like Sarkar et al and Panshak et al^{4,16} have reported unilateral cases of congenital upper lid eversion. This raises some questions about whether underlying genetic or anatomical factors might predispose certain individuals to unilateral versus bilateral presentations, warranting further investigation.

Despite various hypotheses like the speculation that pressure exerted on the baby while passing through the birth canal during delivery may cause venous stasis within the eyelids, which may also induce marked chemosis and conjunctival prolapse with resultant eversion of the eyelids.⁵ However, method of delivery is unlikely a predisposing factor as cases have been reported following cesarean section.^{13,17} The precise aetiology of congenital upper eyelid eversion has not yet been established.¹⁸ This resonates with our findings as both ocular examinations and thorough systemic review by paediatricians failed to identify a probable cause. This difficulty in establishing aetiology may pose a barrier to commencement of treatment in some facilities, predisposing to complications such as infection or conjunctival desiccation. This should not be the case as there are numerous documented cases of the success with conservative management. Our index case adds to the existing pool of evidence.

Most cases of congenital upper eyelid eversion are managed conservatively with hypertonic saline and

antibiotic ointments.^{4,18-20} Consistent with existing literature, our patient responded favourably to the use of hypertonic saline gauze and Chloramphenicol ointment.

The hypertonic saline packed gauze and salacyn eye drop combination appeared to accelerate the resolution process. This portrays the possibility that combination of bed-side prepared hypertonic saline and salasyn drops (5% saline) could enhance the outcomes in conservative management of congenital upper eyelid eversion.

Conclusion

The use of hypertonic saline packed gauze under sterile condition is effective in conservative management of congenital lid eversion and has the added advantage of being affordable for indigent patients most of whom live in developing countries.

Ethical Consideration: The tenets of the Helsinki declaration and the National code of Health research were adhered to. The purpose and benefits of the study was explained to the parents in details and an informed consent was obtained. Confidentiality was also guaranteed.

Consent: Consent was obtained from Patient's parents before the photographs were taken

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Conflicts of interest: None to disclose

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