

CASE REPORT

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Primary fistulectomy of congenital lacrimal fistula: A case report

Muhammed Mustafa Kurt, Cetin Akpolat, Ferhat Evliyaoglu

Okmeydani Training and Research Hospital Department of Ophthalmology, Istanbul, Turkey

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Abstract

A 13-month-old male patient presenting with epiphora and discharge in his left eye present since birth was assessed in our clinic. Epiphora and an orifice of fistulae next to the left nasal root were identified via physical examination. Punctual mucoid discharge was observed following a massage of the left lacrimal sac. Chronic lacrimal fistulae were diagnosed in terms of stain outflow from the fistula orifice following a trypan blue injection to the lacrimal sac under general anesthesia. The patency of the distal nasolacrimal duct was confirmed by performing lavage following the fistulectomy procedure. The epiphora disappeared and the nasolacrimal passage was open in post-operative care.

Keywords: Lacrimal apparatus, congenital, fistula, fistulectomy

Introduction

Congenital lacrimal fistula (CLF) is a rare developmental anomaly of the nasolacrimal drainage system and has been reported to have an incidence of 1 in 2,000 births. It is defined as an epithelialized inner wall of the pathway extending between the skin and the common canalicul, lacrimal sac, or nasolacrimal ductus. Most cases are unilateral and are usually located inferiolaterally to the medial cantus [1].

CLF is asymptomatic in most cases and may be overlooked due to its small size. Some cases are symptomatic, and the clinical presentation is in the form of epiphora and mucus discharge from the punctum or fistula orifice [2]. In this study, we aimed to assess eared that the two groups have a significant statistical difference.

Case Report

A 13-month-old male patient was admitted to our clinic with epiphora and discharge in his left eye. The parents stated that even though long-term massage was applied, the condition did not improve. In a physical examination following a massage on the left lacrimal sac, in addition to mucus discharge from the punctum, a fistula orifice was detected approximately 3 mm inferiomedially to the medial canthus.

The case report was conducted in accordance with the principles of the Declaration of Helsinki. Written informed consent was obtained from the parents of the patient for publication of this case report, accompanying images, and any additional related information. A lacrimal system evaluation was performed under general anesthesia. Fluid flow was seen from the fistula orifice after lacrimal irrigation. Trypan blue was injected into the lacrimal sac, and CLF was diagnosed subsequent to leakage of the stain from the fistula orifice (Figure 1).



Figure 1. The leakage of trypan blue from the fistula orifice following its injection to the lacrimal sac

*Corresponding Author: Cetin Akpolat, Okmeydani Training and Research Hospital Department of Ophthalmology, Istanbul, Turkey,
E-mail: akpolatcetin@yahoo.com

An incision of approximately 0.5 cm was made to the edge of the fistula orifice. Following the excision three-quarters of the fistula, the remaining portion was cauterized to preserve the sac. The integrity and impermeability of the lacrimal sac was confirmed via lacrimal irrigation. The skin and subcutaneous tissue was sutured with 6.0 vicryl. The epiphora disappeared in the post-operative period. No recurrence was observed at the 6-month follow-up.

Discussion

CLF is a rare anomaly and is usually asymptomatic. Especially in pediatric patients, it can be easily overlooked due to the smallness of the fistula orifice. Although CLF is often unilateral and isolated, it is rarely seen bilaterally. Bilateral cases are usually familial or sometimes accompanied by Thalassemia, Down syndrome, VACTERYL anomaly or CHARGE syndrome [3-6]. In this case report, there were no accompanying systemic anomalies. Observation is mostly sufficient in asymptomatic cases, whereas the definitive treatment is controversial in symptomatic cases [7]. Fistulectomy can be performed in isolated or combined form. If the lacrimal sac is intact and a nasolacrimal duct obstruction (NLDO) is not present, primary fistulectomy is sufficient [8]. If an NLDO is present, besides fistulectomy, probing can be performed or a bicanalicular silicone tube can be implanted depending on the age of patient. If the lacrimal sac is not intact, combined dacryocystorhinostomy with a fistulectomy will increase the chances of success [9,10].

Conclusion

In our case, the primary fistulectomy technique was performed because the lacrimal sac was intact. Intra-operative lavage was performed, and it was observed that the distal tip of the nasolacrimal duct was patent. The epiphora disappeared post-

operatively without any recurrence during the study period.

Competing interests

The authors declare that they have no competing interest.

Financial Disclosure

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