



Congenital Lacrimal Fistula: A Case Report

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Abstract

Congenital lacrimal fistulas are rare developmental disorders of the lacrimal drainage system in which there is an abnormal connection of the lacrimal canaliculus or the sac to the skin. We here report a case of 21 years male who presented with pin point discharge from the inferomedial aspect of medial can thus of his right eye. The discharge was expressed out with the help of cotton buds. A diagnosis of lacrimal fistula was made after performing syringing, fluorescein dye disappearance test and lacrimal dacryocystography. He was prescribed oral antibiotics to which he responded well. He refused for any surgery since it was the first episode and he had no complaints after the course of antibiotic treatment. He is on regular follow up and is symptom free.

Keywords: congenital lacrimal fistula, infection.

Introduction

The development of the lacrimal drainage system commences at 6 weeks of gestation. The ectoderm destined to be the lacrimal drainage system embeds itself into the surrounding mesenchyme and forms an epithelial cord. The cord extends cephalad and caudad to reach the nasal and ocular ends of the pathway.¹ If development is affected during this time, many congenital anomalies of the lacrimal system may occur. The most common anomalies are punctal atresia, canalicular atresia, dacryostenosis, sac diverticula, and congenital fistula^{2,3,4} Lacrimal fistula, which are supernumerary lacrimal canaliculi connect the common canaliculus or lacrimal sac to skin are estimated to occur one in every 2000 births.⁵ We here present a case of 21 year old male patient who presented with mild infection of his congenital

lacrimal fistula, was treated for the infection, is on regular follow up and doing well.

Case Report

A 21 year old male patient presented to the Eye OPD with chief complaints of thick discharge seen from the right side of the root of his nose since morning. He gave the history of a defect in his skin here, since birth, and which never caused any problem to him till date. On examination there was thick discharge seen on the inferomedial aspect of the medial canthus of the right eye as shown in Figure 1. A tentative diagnosis of congenital lacrimal fistula was made, discharge expressed with the help of cotton buds (as shown in Figure 2) and oral antibiotics and antiinflammatory and analgesics along with topical antibiotics prescribed for a period of five days. After five days the patient

was relieved of all his symptoms. Lacrimal syringing was performed, which was normal with no fluid overflow from the ostium of the fistula. The fluorescein dye test was normal. The dacryocystography confirmed the diagnosis of lacrimal fistula. He refused treatment for the fistula since it was his first episode and he had been relatively symptom free otherwise. He is on regular follow up.



Discussion

Congenital lacrimal fistulas are rare developmental disorders of the lacrimal drainage system. They are also called lacrimal anlage ducts and are supernumerary lacrimal canaliculi that connect the common canaliculus or the lacrimal sac to the skin as a result of aberrant budding.^{6,7,8} Majority of these fistulae are lined by columnar epithelium, but rarely columnar or cuboidal epithelium has been noted.⁵

Most of the patients with lacrimal fistula are asymptomatic. Of the symptomatic group of patients, the most common presenting complaint is epiphora or mucoid discharge from the canaliculus. In

addition coughing or blowing one's nose may cause clear discharge.⁹ There may also be redness of medial canthal angle, or or constant tearing during crying. A mucocele can be found if associated with nasolacrimal duct obstruction.¹⁰

They usually occur in isolation but sometimes may be associated with Thalassemia, Preauricular fistula, Hypospadias, Balanced 6p and 13 translocation, CHARGE syndrome, VACTERL, Naso-orbital meningocele, Ectrodactyly-ectodermal dysplasia-clefting syndrome, Down syndrome.¹¹

The diagnosis is made mostly clinically. To confirm the diagnosis nasolacrimal syringing, fluorescein dye disappearance test and/or intubation dacryocystography are done.¹²

As most of the cases are asymptomatic so no treatment is required. Symptomatic fistulae can be treated by procedures like probing, fistulectomy and dacryocystorhinostomy.⁴

The present case had been asymptomatic for 21 years, presented with a single episode of mild infection, so he refused any treatment. Also he has been kept on regular follow up to see for any recurrence.

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