Case Report

A Rare Case Report of Posterior Ectopic Cilia in a 41-Year-Old Saudi Male

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Keywords

Posterior ectopic cilia · Acquired posterior ectopic cilia · Conjunctiva

Abstract

There is a wide spectrum of ciliary anomalies; however, ectopic cilia are the rarest of the ciliary anomalies. We report, to the best of our knowledge, the third worldwide case of this eyelid anomaly in the inferior palpebral conjunctiva and the first with a long-term follow-up of 18 months without recurrence following excision. The 41-year-old Saudi male presented with posterior ectopic cilia in the palpebral conjunctiva of the left lower eyelid. This rare anomaly was not associated with other findings. Eighteen months after complete excision of the cilia (along with the adjacent conjunctiva and tarsal plate), there was no recurrence of the ectopic cilia. This case highlights the importance of considering ectopic cilia when patients present with focal punctate keratopathy and the importance of excision of the cilia along with the adjacent conjunctiva and tarsal plate to prevent recurrence.

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Introduction

Ectopic cilia are considered one of the rare presentations of congenital anomaly of eyelid lashes in ophthalmology clinics. They are an unusual choristomatous abnormality in which a cluster of lashes grows in a location remote from the eyelid margin [1].

In this entity, ectopic cilia are divided into two categories according to the region of origination of the cilia – the anterior type, in which the cilia stem from the anterior part of the tarsal plate and protrude through the eyelid skin and the posterior type, in which the cilia originate from the posterior part of the tarsal plate and protrude either from the eyelid margin or through the palpebral conjunctiva [2]. The exact etiology of the posterior variety of this congenital anomaly is not well known [3].

We report, to the best of our knowledge, the first case of this congenital eyelid anomaly in Saudi Arabia which occurred in a 41-year-old Saudi male who presented with posterior ectopic cilia in the palpebral conjunctiva of the left lower eyelid. The patient provided written consent for the photography and its publication.

Case Report

A 41-year-old Saudi male presented to our clinic complaining of chronic hyperemia, irritation, and tearing of the left eye. His symptoms had lasted for approximately 6 years and he had visited multiple eye clinics. The usual intervention included epilation of the cilia, which recurred after a few weeks.

The patient acknowledged that his symptoms improved when the hair follicle was left for long periods, since the irritating sensation and the tearing would decrease as the length of the cilia increased. The patient's initial screening revealed normal visual acuity and intraocular pressure with an unremarkable family and ophthalmic history except for the current complaint. The patient had no history or clinical signs of periorbital atopic eczema, allergic dermatitis or preseptal cellulitis. Slit lamp examination demonstrated one hair follicle on the left lower palpebral conjunctiva, which was seen on eversion of the lower eyelid. This was associated with mild palpebral conjunctival hyperemia and mild, focal, punctate keratopathy of the inferior left cornea. There was no associated subcutaneous mass or pigmented lesion (Fig. 1).

The rest of the anterior and posterior segments were within normal limits for both eyes. The management plan was subsequently discussed with the patient and we decided to excise the follicle. The posterior ectopic cilia were subsequently excised, along with the adjacent conjunctiva and tarsal plate.

The patient tolerated the procedure well and was discharged on topical antibiotics and steroids with follow-up in 1 week. The patient was subsequently seen on multiple visits, at monthly intervals, for more than 18 months and no recurrence was observed consequent to the last excision.

Discussion

Ectopic cilia are rarely found in humans, but they have been reported in the veterinary literature. The origin of ectopic cilia is still not clear. While anterior ectopic cilia are congenital, posterior ectopic cilia are usually acquired due to chronic inflammation [4]. Ectopic cilia should not be confused with cilia inversum in which a lash grows inwards away from the lid margin [5].

One of the possible differential diagnosis that can be considered in such cases is congenital distichiasis, which is a rare condition where abnormal thin lashes are observed to emerge from the ostia of the meibomian glands of the eyelids. It should be clinically differentiated from ectopic cilia, which are usually thicker and well pigmented, similar to normal lashes [6].

According to the histopathological analysis, ectopic cilia in the palpebral conjunctiva may be associated with the anatomical features of the crypts of Henle as well as chronic inflammation. Ectopic cilia in the palpebral conjunctiva are acquired aberrant cilia, in contrast to anterior ectopic cilia, which are congenital [7].

We report a patient with ectopic cilia of the posterior surface similar to those cases reported by Hase et al. [7] and Dinc and Yildirim [8]. Surgical removal of ectopic cilia is the treatment of choice. Recurrence can occur at the original site due to an incomplete surgical excision; however, with complete excision of the cilia (along with the adjacent conjunctiva and tarsal plate) and an 18-month follow-up, there was none [4].

To date, this is the third case of inferior palpebral posterior ectopic cilia reported in the world and this is the first case reported in Saudi Arabia.

Statement of Ethics

Research was conducted ethically in accordance with the World Medical Association Declaration of Helsinki. The patient provided written consent for the photography and publication.

Conflict of Interest Statement

The authors have no conflicts of interest to disclose.

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None.

Author Contributions

Both authors contributed to the conception or design of the work and acquisition of the data; drafting the work and revising it critically for intellectual content; final approval of the manuscript for publication; agreement to be accountable for all aspects of the work.

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Fig. 1. Posterior ectopic cilia in the left lower palpebral conjunctiva.