Case Report

Eyelash in Pterygium and under Conjunctiva: Two Rare Cases

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Abstract

Two cases with an eyelash in pterygium and conjunctiva were presented in this work. A 76-year-old woman presented with bilateral ocular irritation, itching, and visual loss without any history of trauma or ocular surgery. On slit lamp examination, there was a pterygium closing the visual axis of the right eye. Careful slit lamp examination revealed also an eyelash in the pterygium in the right eye. A 36-year-old woman presented with complaints of redness, and itching in her right eye. She had undergone a penetrating keratoplasty on the right eye one year ago. On slit lamp examination, an eyelash was seen that had a 3 mm portion of it under the conjunctiva. The other portion of the eyelash was lying on the conjunctiva extending to the limbus. A broken lash may rarely be seen under conjunctiva or even the pterygium probably due to predisposing conjunctival disorders even without any history of trauma or surgery.

Keywords: Cilia; Conjunctiva; Eyelash; Foreign body; Pterygium

1. Introduction

Eyelashes can be seen in different anatomical parts of the eye after falling out of their follicles. They can be observed in a meibomian gland orifice, lacrimal punctum, conjunctiva, or the skin of the eyelid (Gutteridge, 2002). Intraocular cilia are rare and usually associated with a history of trauma and surgery. Location of the intraocular cilia is variable. They may be located in the anterior chamber, iris, lens, vitreous, and retina (Gopal et al, 2000; Humayun et al, 1993). We, herein, describe a case of cilia in the pterygium tissue without a history of trauma or surgery. To our knowledge, this is the first report of cilia in the pterygium tissue. In addition to this case, a second case is presented that is of the subconjunctival cilia, which we hypothesize as the preliminary condition of the first case.

2. Case Reports

2.1. Case 1
A 76-year-old woman presented complaining of longstanding, bilateral ocular irritation, itching, and visual loss. She did not have any history of trauma and ocular surgery. Visual acuity was

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measured by counting fingers with the right eye and by the perception of light in the left eye. On slit lamp examination, there was a pterygium over the nasal canthus of the right eye extending 7 mm to the cornea. The visual axis was closed by the fibrovascular tissue. In the pterygium, there was a foreign body that appeared to be cilia (Fig. 1). Her left eye had a small nasal pterygium, which was extending 2 mm to the cornea and a mature cataract. In both eyes, the anterior chamber was quiet. Funduscopic examination was not performed because of the closed visual axis. Ultrasonography (combined A and B scans) showed echogenically clear vitreous and flat retinas in both eyes. The patient underwent pterygium surgery for the right eye with subconjunctival anesthesia. The pterygium was dissected away from the cornea and resected. After Tenon’s tissue dissection from the sclera, the edges of the conjunctiva were closed with 8/0 vicryl sutures in the area of the defect. The eyelash was removed from the pterygium.

2.2. Case 2
A 36-year-old woman presented with complaints of redness, increasing itching, and rubbing in her right eye. She had undergone a penetrating keratoplasty on the right eye one year ago because of corneal scarring due to a perforating trauma. On slit lamp examination, there was an eyelash that had a 3 mm part of it under the conjunctiva starting 2 mm from the inferomedial limbus. The other portion of the eyelash was lying on the conjunctiva extending to the limbus (Fig. 2). The free eyelash was removed with a forceps.

Fig 1. The eyelash in the pterygium.
Fig 2. 3 mm part of eyelash under the conjunctiva.

3. Discussion

Reports of an eyelash in the eye and ocular surface are uncommon. Cilium as a foreign body can occur in different parts of the eye such as the anterior chamber, iris, vitreous, lens, and retina. Intraocular cilia are typically a consequence of ocular penetrating trauma or surgery (Gopal et al, 2000; Humayun et al, 1993). After cataract surgery, a lash migration into the clear cornea was reported (Etter and Kim, 2008). After perforation, a lash was observed in the anterior chamber, which is the most frequent location. A decision to do surgery is multifactorial. Location of the cilium, accompanying inflammation and ocular injuries affect the physician’s decision (Gutteridge, 2002; Gopal et al, 2000; Humayun et al, 1993; Kargi et al, 2003).

Loose lashes can be observed lying on the lids, in the conjunctival sac or in the tear meniscus. As a part of a dermolipoma, cilium can grow in the conjunctiva (Gutteridge, 2002). Occasionally a loose lash can penetrate the ocular surface. Gutteridge et al, showed an eyelash, which had penetrated the conjunctival layers into the subconjunctival space. Also, they observed lashes in the meibomian gland orifice, in the lacrimal punctum and at the skin of the eyelid (Gutteridge, 2002; Agarwal et al, 2003). As a rare complication, after subTenon anesthesia, subconjunctival cilium has been reported to be present (Aslam, 2007). In one of our cases, we observed an eyelash under the pterygium tissue. In the other case, a part of the cilium was under the conjunctiva. Conjunctival scarring predisposes entrapment of cilia by making folds and blind recesses in the conjunctiva (Mimura et al, 2011). In addition, conjunctival disorders are factors for
In such cases, the cilia were entrapped in the layers of the pterygium. Eyelashes presumably may be localized in the pterygium by mechanical force, especially by a rubbing action.

Our first case had itching for many years and usually was rubbing and scratching her eyes. This can be the reason why the lash was at the pterygium formation. She had pterygium involving both of her eyes.

Our second case involved a lash that was obviously larger. Subconjunctival cilia can be a mechanical irritant and include granuloma formation (Kiesel, 1961). Pterygium also has inflammatory cells infiltrated in it. Hence, in our case, the lash in the pterygium tissue can predispose inflammation.

Subconjunctival cilia can be symptomatic or asymptomatic. Mimura et al., reported an asymptomatic subconjunctival cilium without hyperemia or edema (Mimura et al, 2011). George and Silvestri reported subconjunctival cilia. In this case, the patient had complained about recurrent foreign body irritation (George and Silvestre, 2006).

In our cases, the patients had complaints of irritation and itching. We thought that the pterygium itself might cause foreign body sensation in our first case. In the second case, the part of the eyelash lying on the conjunctiva can be a reason for complaints. It is our hypothesis that our second case may be a preliminary condition of the first case. An eyelash going under the conjunctival fold is probably pushed under conjunctiva by rubbing. To our knowledge, we have reported the first case of cilia as a foreign body in the pterygium tissue.

We conclude that a cilium that arrives at the conjunctival fornix may locate and persist beneath conjunctival folds. Afterwards, it may go under the pterygium tissue by perforating conjunctiva as the result of a patient rubbing the eye. This cilium may also cause the growing of the pterygium, by stimulating inflammation. It should be kept in mind that a foreign body such as cilium may exist in the tissue.

References


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