The sting of a honey bee: An unusual subconjunctival foreign body

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Ocular foreign bodies (FBs) are often encountered in clinical practices. However, there are cases in which the presence of the FB is difficult to diagnose based on mere history taking and/ or clinical examination. We herein present a case of unusual subconjunctival foreign body in the form of the sting of a honey bee in a 63-year-old farmer. This was removed from the superior forniceal subconjunctival space in toto with forceps under a microscope in the operation theater. This case emphasizes the need to elicit a complete history and a careful ocular examination with double eversion of the eyelid to avoid missing any foreign

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body lodged in the fornices and subconjunctival space in patients who complained of foreign body sensation.

Key words: Double eversion of the eyelid, ocular foreign bodies, sting of a honey bee, subconjunctival foreign body

Ocular foreign bodies (FBs) are often encountered in clinical practices. In most cases, medical history referring to the nature of injury may be enough to suggest the presence of an FB. However, there are cases in which the presence of the FB is difficult to diagnose based on mere history taking and/or clinical examination.^[1,2]

Case Report

A 63-year-old farmer complained of irritation and congestion in his right eye. It had begun 1½ months before his consultation. The patient revealed that his face had been attacked by honey bees when working on a farm. Soon after, his face was swollen. Although, with treatment, it resolved within 1 week, his swollen face had made it impossible for him to open his eyes. This led to another accident, in which he had fractured his right leg, damaging the neck of the right femur.

He had got himself treated for the fracture, which took over 1 month. In that time, he had consistent irritation and FB sensation in the right eye, but being immobilized by his fracture, he delayed consulting an eye doctor.

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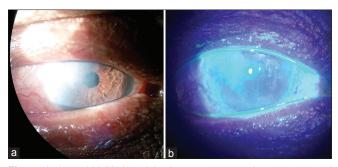


Figure 1: (a and b) Mild eyelid edema, conjunctival congestion and multiple vertical corneal abrasions involving superotemporal quadrant of the cornea



Figure 2: The sting of a honey bee after being removed from the superior forniceal subconjunctival space



Figure 3: Clear cornea 1 week after foreign body removal

At presentation, the visual acuity in his right eye was 20/20. The slit-lamp examination showed mild eyelid edema, conjunctival congestion, multiple vertical corneal abrasions involving superotemporal quadrant of the cornea [Fig. 1a and b], normal pupil and anterior chamber. No FB was noted on everting the upper lid. 0.5% moxifloxacin eye drop four times a day and 1% carboxymethylcellulose eye drop six times a day in the right eye for 1 week were prescribed to decrease the inflammation.

The patient returned after a week but reported continued irritation and foreign body sensation in his right eye with no relief of symptoms from the medication. The patient was then shifted to the operation theater for careful examination under the microscope. On double eversion of the right upper lid, we found a residual honey bee sting of approximately 2 mm size in the subconjunctival space. This was removed in toto with forceps with all aseptic precautions [Fig. 2]. We consulted a zoologist to confirm that the FB was the sting of a honey bee. The patient was prescribed 0.5% moxifloxacin eye drop four times a day and 1% carboxymethylcellulose eye drop six times a day in the right eye for 1 week. After 1 week, the patient reported symptomatic relief. The cornea was clear [Fig. 3].

Discussion

Foreign body sensation in the eye is one of the most common symptoms that confronts the ophthalmologist. It frequently presents as a smarting or gritty sensation in the conjunctiva that may be puzzling when no apparent abnormality is found on slit-lamp biomicroscopic examination. Smarting, slight pricking, and grittiness are subjective sensations that may be attributed to an underlying allergic or irritative condition. At times, the origin of these presenting features may be considered psychosomatic. In either situation, being unable to arrive at a correct diagnosis, the ophthalmologist might prescribe a topical antibiotic and soothing eye bath.^[3]

There are several reports on ocular FBs involving larvae or wings of insects, beans, and plants.^[1,2,4-7] A variety of foreign bodies may enter the conjunctival sac as it is exposed to the atmosphere.^[1] Usually, conjunctival foreign bodies are found in the subtarsal sulcus. In this case, we could remove the sting of the honey bee (comprising the barb and poison sac) from the subconjunctival space of the superior fornix, and that too only after double eversion of upper lid under the microscope in the operation theater. Therefore, in patients presenting with itching and FB sensation and multiple corneal abrasions, the possibility of superior forniceal subconjunctival FB should be considered for differential diagnosis. Any patient with chronic unilateral conjunctivitis or corneal signs should have a lid eversion, and on strong suspicion, a double lid eversion should be done on slit lamp. Of course, there is also the option of examination under operating microscope, which offers many advantages.

Conclusion

This case of a honey bee sting lodged in the eyelid emphasizes the need to elicit a complete history from patients who complained of foreign body sensations. Such comprehensive history taking should also be accompanied by a careful ocular examination with double eversion of the eyelid to avoid missing any foreign body lodged in the fornices and subconjunctival space.

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Conflicts of interest

There are no conflicts of interest.

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