

A subconjunctival foreign body confused with uveal prolapse

Young Min Park, Hye-Shin Jeon, Hak-Sun Yu¹,
Jong-Soo Lee

There are cases in which the presence of a foreign body (FB) is difficult to diagnose based on history taking or clinical examination. We report a case of subconjunctival FB confused with uveal prolapse. A 68-year-old man, who had the history of pterygium excision in his right eye, complained of irritation and congestion in that same eye. He also had the history of growing vegetables in a plastic greenhouse. It seemed to be a suspected uveal mass bulging through a focal scleral thinning site. On the basis of slit-lamp magnification, the lesion was presumed to be a hard and black keratinized mass embedded under the conjunctiva. Histopathologically, the removed mass was revealed to be a seed of the dicotyledones. Patients who show signs of prolapsed uvea or scleral thinning, possibility of a subconjunctival FB should be considered as differential diagnosis. In addition, a removed unknown FB should be examined histopathologically.

Key words: Dicotyledones, pterygium surgery, subconjunctival foreign body, uveal prolapse

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 a FB. However, there are cases in which the presence of the FB is difficult to diagnose based on history taking or clinical examination.

Access this article online	
Quick Response Code:	Website: www.ijo.in
	DOI: 10.4103/0301-4738.136242

Departments of Ophthalmology, Pusan National University and Medical Research Institute, ¹Parasitology, School of Medicine, Pusan National University Hospital, Pusan, Korea

Correspondence to: Dr. Jong-Soo Lee, Department of Ophthalmology, School of Medicine, Pusan National University and Medical Research Institute, Pusan National University Hospital, 1-10, Amidong, Seo-Gu, Busan 602-739, South Korea. E-mail: jongsool@pusan.ac.kr

Manuscript received: 03.04.13; Revision accepted: 21.05.13

Case Report

A 68-year-old man, who had the history of pterygium excision in his right eye 10 years ago, complained of irritation and congestion in that same eye, which were developed approximately 1 week prior to his visit to our department. The patient did not have any other specific medical or ocular history. However, we noted that the patient grew vegetables in a plastic greenhouse. Slit-lamp examination showed a suspected uveal mass bulging through a focal scleral thinning site in the nasal region of the right eye [Fig. 1]. With the slit-lamp magnification, the lesion was presumed to be a hard and black keratinized mass. The mass was removed with a forceps and sent to a parasitologist for examination. The underlying sclera displayed mild thinning accompanied by inflammations. Topical therapy was started with 0.5% moxifloxacin solution 3 times a day, 0.1% fluorometholone solution 3 times a day, and dexamethasone ointment once a day. One month after the initial visit, the FB removal site was well-recovered. When the removed unknown FB was examined on a light microscopy, it was revealed to be not a parasite but suspected a larva state of an insect or seed of a plant [Fig. 2]. With botanist consultation, the FB was confirmed as a seed of the dicotyledones, which is a grouping formerly used for the flowering plants whose seed typically has two embryonic leaves. Considering the patient's history of growing vegetables, the FB might have entered the surface of conjunctiva accidentally during the work. However, if it is impossible to distinguish the precise identity of the FB, based on history taking or clinical examination, then the genetic information (18S ribosomal deoxyribonucleic acid sequence) of the organism need to be compared with those of other known organisms.



Figure 1: An unknown mass embedded under the nasal bulbar conjunctiva posterior to limbus which was initially misdiagnosed as uveal prolapse



Figure 2: Histopathologic features of a removed unknown foreign body. It was revealed to be a seed of the dicotyledones on light microscope examination (magnification $\times 100$)

Discussion

There are several reports on ocular FBs involving larvae or wings of insects, beans, and plants.^[1-5] Living organisms such as a larva or an insect wing can be diagnosed easily in most cases. However, a prolonged ocular FB combined

with inflammation or granulation, like scleral thinning or necrotizing scleritis after pterygium surgery, can be difficult to be diagnosed. Therefore, patients who display signs of prolapsed uvea or localized scleritis, possibility of a subconjunctival FB should be considered for differential diagnosis.

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Cite this article as: Park YM, Jeon H, Yu H, Lee J. A subconjunctival foreign body confused with uveal prolapse. Indian J Ophthalmol 2014;62:730-1.

Source of Support: This study was supported by a grant of the Korean Health Technology R and D Project, Ministry of Health and Welfare, Republic of Korea (A070001). **Conflict of Interest:** None declared.