

An Unusual Case Of Retained Foreign Body In Upper Fornix

Authors: •Charu Jain •V.K.malik •K.P.S. Malik •Kirti Jain •Sanjeev Kumar

College : Subharti Medical College, Meerut

Abstract - Retained foreign bodies account for a small but significant number of ocular trauma cases in ophthalmologic practice. This type of injury may occur in occupational context and can cause various complications in early or late stages of injury. We report an unusual case of urad dal seed (*Vigna mungo*) trapped in the upper conjunctival fornix for about three months. This article illustrates the importance of careful examination of upper fornix after everting upper lid in patients of refractory chronic conjunctivitis.

Introduction - Retained foreign bodies are frequently seen in ophthalmologic practice. Fairly large foreign bodies may remain hidden in the recess of upper fornix for a considerable period of time. They may produce severe irritation and some discharge. These cases are of particular interest as they may often be overlooked unless the upper lid is everted¹. There have been several reports on retained foreign bodies like wooden materials², contact lenses³, sutures⁴, dust particles⁵, hairs⁶, vegetative matter⁷, insects (beetle⁸, leeches⁹, caterpillar setae¹⁰, cotton wool ball¹¹, millet seed¹² etc but a retained urad dal seed (*Vigna mungo*) in the conjunctival fornix has not, to our knowledge, been reported previously. We report an unusual case of urad dal seed trapped in the upper conjunctival fornix for about three months.

Case Report - A 55 year old farmer presented at the outdoor department of Subharti Medical College, Meerut with diminution of vision in right eye for six months. On examination the unaided visual acuity in right eye was 2/60 improving to 6/60 with +3D sphere. The lids were healthy and there was no conjunctival congestion. Slit lamp examination of right eye revealed grade 3 nuclear sclerosis with posterior subcapsular cataract. Rest of the anterior and posterior segment

examination was normal. Regurgitation test was negative and syringing was patent. Intraocular pressure was 14.6mm Hg in both eyes. Examination of left eye was unremarkable. The patient was prescribed topical moxifloxacin four times daily and was posted for right eye cataract surgery after two days.

On the day of surgery, there was conjunctival congestion and mucopurulent discharge in medial canthus. Surgery was postponed and topical moxifloxacin and tobramycin was prescribed for one week. After one week, conjunctiva cleared and the patient was taken for cataract surgery. Peribulbar injection was given prior to surgery followed by massaging. As soon as the pad was removed, to our surprise, there was a pool of discharge in the eye (Fig1). The discharge was massive and confusing. On eversion of upper lid the palpebral conjunctiva was intensely injected (Fig 2). When pressure was applied on superomedial aspect of globe, suddenly something popped out. It was an urad dal seed (Fig 3). Then on repeated asking patient told that while threshing three months back, probably something entered his eye but as he had no symptoms (pain, foreign body sensation, lid swelling etc) so he ignored. Surgery was postponed and patient was prescribed topical antibiotics for another one week. Following removal of foreign body, conjunctival congestion and discharge cleared rapidly. Patient underwent uneventful cataract surgery with PCIOL implantation and had good post-operative vision.

Discussion-

It is quite common, especially in rural areas areas to see cases where vegetative foreign bodies have been retained in upper fornix for considerable periods. The upper fornix is a cul-de-sac with relatively low sensitivity. The presence of foreign



Fig 1

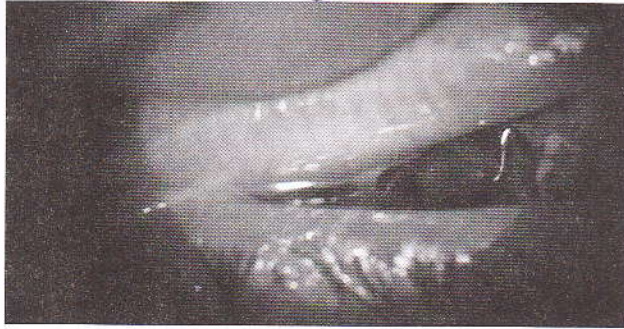


Fig 2



Fig 3

body in this area is often undetected by patients unless a local reaction has been set up. The patient may not recollect a history of foreign body penetration and a quiescent period of days to months may pass before the patient becomes symptomatic.

The reaction to vegetative matter varies¹³ and depends largely on concurrent introduction of micro-organisms at the time of injury. Contaminated vegetable matter frequently produces an acute pyogenic panophthalmitis. A common pathogenic reaction of a vegetative foreign body is chronic proliferative granulomatous response. However, in the absence of infection, vegetative matter may behave as a relatively inert foreign body. Several reports in the literature describe eyes remaining quiet for years with retained intraocular foreign body.

Foreign bodies in upper fornix usually present with discharge which is initially watery and later becomes mucopurulent¹⁴. The lashes stick together with discharge and when the lids are separated the conjunctiva appears healthy. The upper lid is edematous and there is intense reaction in the upper fornix (the intensity depends on the length of time during which the foreign body has been retained). Pain is usually absent. The vegetative matter must be removed as early as possible as they serve as a nidus for infection leading to various complications like granuloma, abscess or chronic discharging sinus.

This article, thus emphasizes the importance of careful examination of upper fornix for retained foreign body after eversion of upper lid in all cases where a mucopurulent discharge is present on one side only and where lacrimal obstruction and dacryocystitis are absent.

References-

1. Sihota R, Tandon R. Parson's Diseases Of The Eye, Publisher Reed Elsevier India Private Limited. 2011; 21/e: 375.
2. Banerjee A, Das A, Agarwal PK, Banerjee AR. Late spontaneous extrusion of a wooden intraocular foreign body. *Indian J Ophthalmol* 2003; 51: 83-4.
3. Zola E, Van der Meulen JJ, Lapid Gortzak R et al. A conjunctival mass in the deep superior fornix after a long retained hard contact lens in a patient with keloids. *Cornea*. 2008; 27(10): 1204-6.
4. Chung H. S, Feder R. S, Weston B. C, Bryar P. J. Suture reaction masquerading as a conjunctival malignancy. *Can J Ophthalmol*. 2006; 41: 207-9.
5. Villaseca A. Dust particles retained in the upper fornix. *Am J Ophthalmol*. 1977; 83(2): 188-90.
6. Adrian M, Lavina MD, Louise A et al. Unilateral follicular conjunctivitis with retained hair and Pseudomonas infection. *Arch Ophthalmol*. 2001; 119(6): 901-3.
7. Bhaduri G, Ghosh A. Vegetative intraocular foreign body of 25 years duration. *Indian J Ophthalmol* 2003; 51: 184-5.
8. Chung R S H, Chew R Y, Au-Eong K G. Coleoptera cincindelidae beetle in the eye. *Singapore Med J*. 2005; 46(10): 564-5.
9. Alcelik T, Cekic O, Totan Y. Ocular leech infestation in a child. *Am J Ophthalmol* 1997; 124: 110-2.
10. Horng CT, Chou PI, Liang JB. Caterpillar setae in the deep cornea and anterior chamber. *Am J Ophthalmol*. 2000; 129: 384-5.
11. Komolafe OO, Omolade CO. A ball of cotton wool masquerading as a conjunctival mass. *Niger Med J*. 2011; 52: 66.
12. Rudolf H. Bock. The upper fornix trap. *British J Ophthalmol*. 1971; 55: 784.
13. Duke Elder S. System of Ophthalmology. St. Louis: CV Mosby. 1972; 449-554.
14. Colley T. Foreign bodies in the upper conjunctival fornix. *British Med J*. 1930; 2: 600-1.