Retained Wooden Intraocular Foreign Body for Over Five Decades: A Rare Case of Late Diagnosis and Successful Removal

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Abstract

Purpose: To report a rare case of a retained wooden intraocular foreign body (IOFB) discovered decades after trauma, highlighting its clinical presentation and management.

Observations: A 69-year-old male presented with decreased vision in his left eye. He had a history of ocular trauma 54 years ago. Slit-lamp examination revealed a foreign body embedded in the anterior chamber, surrounded by iris atrophy. The patient underwent successful phacoemulsification with Intra ocular lens implantation and foreign body removal. Histopathology confirmed a wooden IOFB.

Conclusion: Organic intraocular foreign bodies can remain inert for decades without significant inflammation. Timely diagnosis and surgical intervention can result in good visual recovery. Retained IOFBs should always be considered in patients with a remote history of ocular trauma and unexplained anterior segment findings.

Key-words: Intraocular foreign body (IOFB) , Ocular trauma, Intra ocular lens implantation

INTRODUCTION

Retained intraocular foreign bodies (IOFBs) are uncommon causes of long-term ocular morbidity. Organic IOFBs, particularly those made of wood or vegetative matter, are even more unusual due to their tendency to incite inflammatory reactions. However, in rare cases, they may remain quiescent for years or even decades. We report a unique case of a wooden IOFB retained in the anterior chamber for over 50 years before being diagnosed and is removed during cataract surgery.

CASE REPORT

A 69-year-old male farmer presented with diminished vision in his left eye. He had a history of ocular trauma to the same eye at age of 15, for which he received treatment from a local ophthalmologist. He experienced intermittent pain and redness in the years following the injury. However , there have been no such episodes in the last 15 years following the treatment.

Unaided visual acuity in the left eye was 6/60, improving to 6/36 with best correction. Slit-lamp examination revealed a healed, full-thickness corneal scar of 2mm at the 1 o'clock position. A foreign body was noted embedded in the iris at the 11 o'clock position, with surrounding iris atrophy (Figure 1 and 2). Anterior chamber was quiet, and pupil reactions were normal. The lens showed nuclear sclerosis grade 2 with posterior polar cataract. Fundus examination was unremarkable.

A B-scan ruled out any posterior segment foreign bodies (Figure 3). The patient was planned for phacoemulsification with IOL implantation and foreign body removal.

Surgery was uneventful. The foreign body was removed from the anterior chamber and sent for histopathology, which confirmed a 0.5 mm wooden fragment. Postoperatively, the patient was prescribed intensive topical steroids and antibiotics. At one-month follow-up, the eye was quiet and best-corrected vision had improved to 6/9 (Figure 4).

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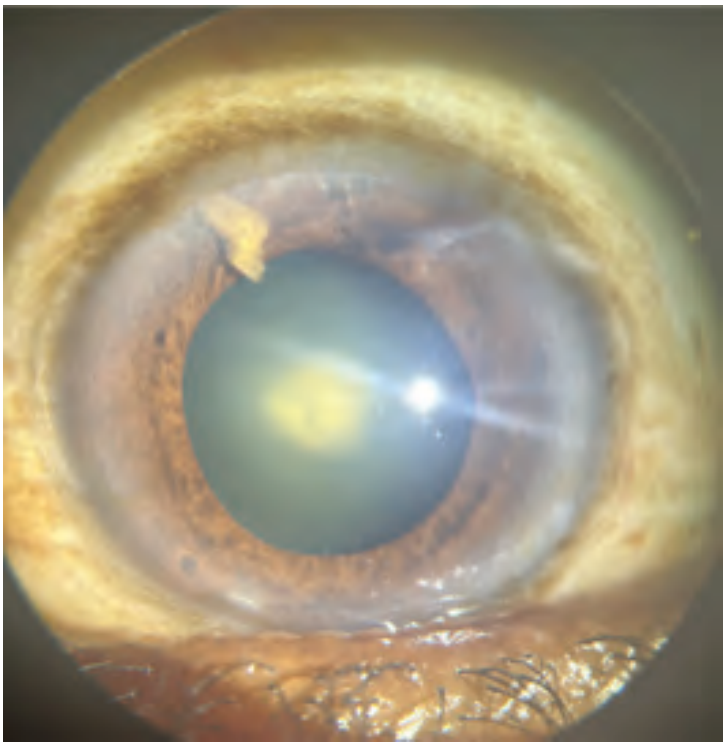

Figure 1: Slit-lamp diffuse illumination photograph of the left eye showing a healed corneal scar at 1 o'clock and an intraocular foreign body embedded at the 11 o'clock position on the iris.

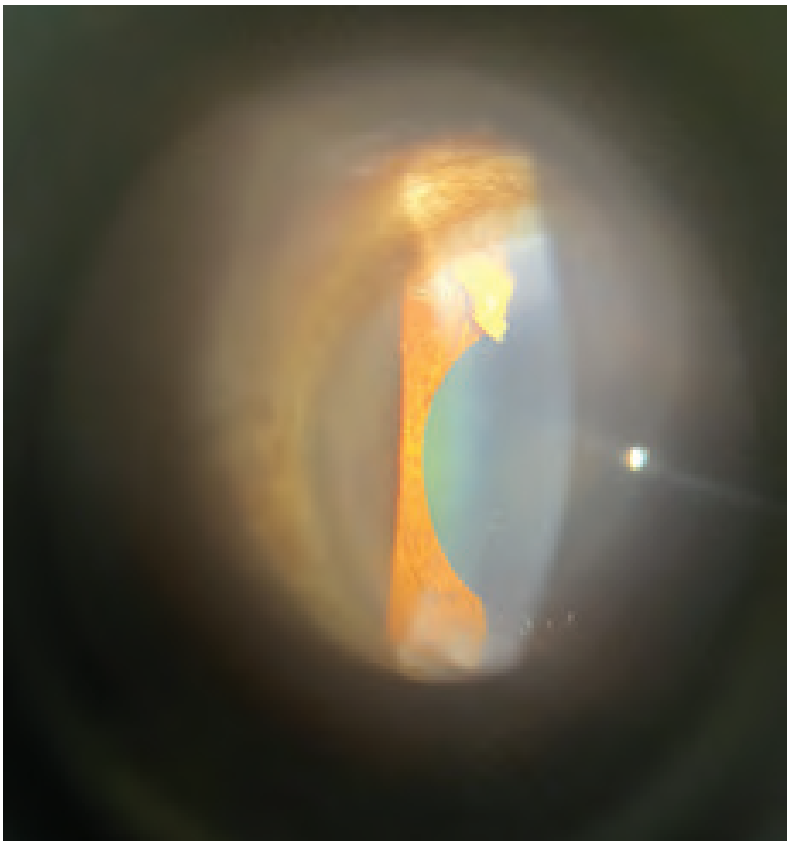

Figure 2: Slit-lamp slit illumination highlighting the intraocular foreign body embedded in the iris at 11 o'clock, with surrounding iris atrophy.

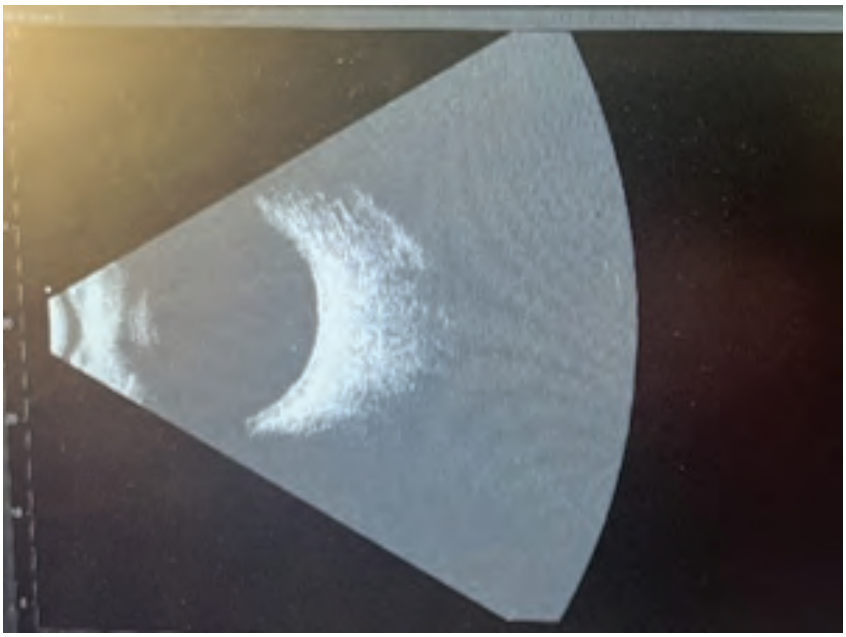

Figure 3: B-scan ultrasonography of the left eye showing a normal posterior segment without evidence of a retained intraocular foreign body.

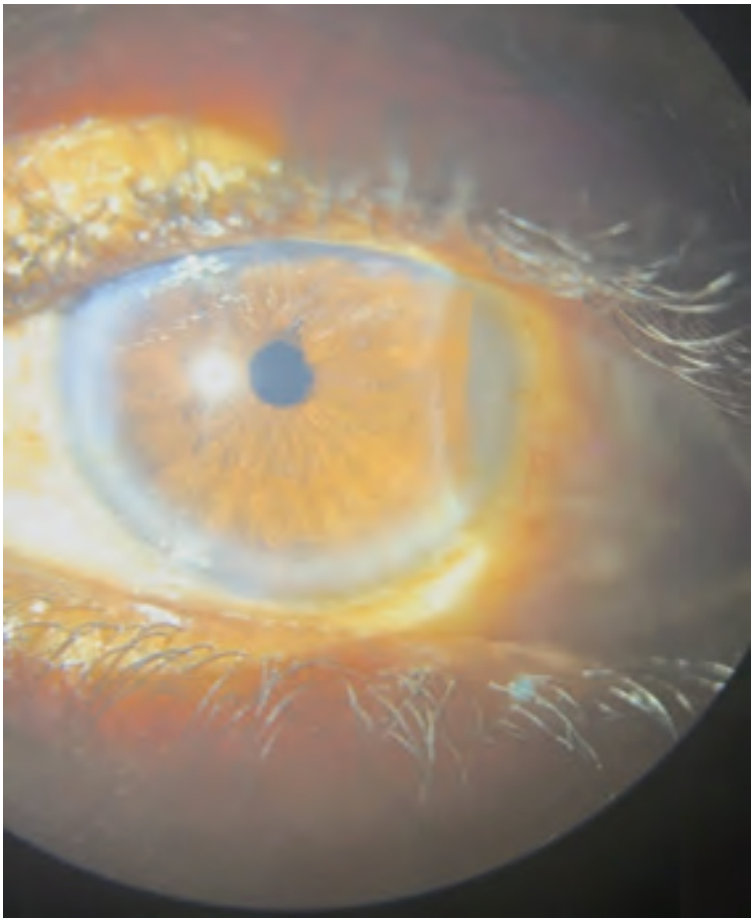

Figure 4: Postoperative slit-lamp photograph at one-month follow-up showing a clear cornea, quiet anterior chamber, and well-centered intraocular lens.

DISCUSSION

IOFBs may remain undetected for years, especially if composed of inert materials or lodged in non-visual structures. Wooden foreign bodies typically elicit inflammatory reactions due to their organic nature and potential microbial contamination. However, in rare cases, as in our patient, they may remain inert and asymptomatic.

Non-metallic foreign bodies usually have a lower velocity than metallic; they penetrate the cornea and tend to remain in the anterior chamber. The reaction set up in the anterior chamber depends on the extent of irritation caused to the adjacent structures, that is, the corneal endothelium, iris and lens.[1,2] The reaction to vegetative matter varies[2,3] and depends largely on concurrent introduction of microorganisms at the time of injury. Mild inflammation secondary to sporophytic yeast or fungi has been reported.[4] Contaminated vegetable matter frequently produces an acute pyogenic panophthalmitis.[2] Retained intraocular foreign bodies may lead to the formation of pearly epidermoid cyst.[5] However in the absence of infection vegetative matter akin to wood may behave as a relatively inert foreign body.[5] Several reports in the literature describe eyes remaining quiet for years with retained intraocular foreign bodies.[2,6,7]

This case emphasizes the importance of considering old trauma in differential diagnoses, especially when encountering unexplained corneal scars or iris changes. A detailed history and slit-lamp evaluation remain invaluable tools.

CONCLUSION

Wooden IOFBs can remain asymptomatic for decades. Careful slit-lamp examination, even in the absence of active inflammation, may reveal retained material. Timely surgical removal can restore vision and prevent complications.

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CONFLICTS OF INTEREST

There are no conflicts of interest.

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