



An unusual foreign object on the intraocular lens

Kemal Örnek

To cite this article: Kemal Örnek (02 Mar 2026): An unusual foreign object on the intraocular lens, Clinical and Experimental Optometry, DOI: [10.1080/08164622.2026.2637676](https://doi.org/10.1080/08164622.2026.2637676)

To link to this article: <https://doi.org/10.1080/08164622.2026.2637676>



Published online: 02 Mar 2026.



Submit your article to this journal [↗](#)



Article views: 32



View related articles [↗](#)



View Crossmark data [↗](#)

CLINICAL PICTURE



An unusual foreign object on the intraocular lens

Kemal Örneke 

Department of Ophthalmology, Kırşehir Ahi Evran University School of Medicine, Kırşehir, Turkey

ARTICLE HISTORY Received 16 December 2025; Revised 19 February 2026; Accepted 20 February 2026

KEYWORDS Cataract; foreign object; intraocular lens; lens delivery system; lens module

A 69-year-old man underwent routine phacoemulsification surgery in his right eye. There were no pre-operative issues like pseudoexfoliation, small pupil, or shallow anterior chamber.

An intraocular lens (IOL) (Sensar 1-piece monofocal IOL GAB00, Johnson & Johnson Surgical Vision) was implanted using a preloaded IOL delivery system (SmartLOAD, Johnson & Johnson Surgical Vision) that was hydrated with an ophthalmic viscosurgical device as per standard protocol. The preloaded IOL was prepared by an experienced surgical nurse. The tip of the lens injector was easily inserted into the wound and the IOL was injected without any resistance in the plunger mechanism.

After centring the IOL in the capsular bag, an unexpected appearance was noted in the visual axis in the form of a numeral ('1') on the anterior surface of the IOL. Initially, this apparently 'man made' object raised suspicions of a defective IOL (Figure 1). After filling the eye with an ophthalmic viscosurgical device, the image was thought to be a piece of plastic adherent to the IOL. It was easily detached from the surface and removed through the main wound. A foreign object with a dimension of approximately 1 × 1 × 4 mm was observed. It was determined that, due to the shape and size of the object, it could easily pass through the wound (2.4 mm) inside the folded IOL. When the IOL delivery system was inspected cautiously, the foreign object was found to be a broken piece of the lens module (Figure 2).

A retained foreign object is a significant concern in routine cataract surgery.¹ The most common types are composed of metal, fibre, or plastic, originating from the surgical products. They are generally detected during surgery or via slit-lamp biomicroscope at follow-up visits. Metal foreign objects are mainly found in the iris tissue, fibre foreign objects in the anterior chamber or cornea, and plastic foreign objects on the IOL.¹ Andresen and Winther have shown plastic foreign objects behind the IOL after cataract surgery, related to the Monarch II (Alcon Laboratories) IOL delivery system.²

Surgical removal may be required if the foreign objects are not biocompatible or if the inflammation is unresponsive to medication.¹ Here, given the foreign object was centrally placed, it could have lead to damaging of the optic and would be visually significant. Fortunately, the IOL was clear without any indentation or scratching of the optic. In case of IOL damage, a replacement or exchange is necessary. The first step is to separate the anterior capsule from the IOL optic injecting an ophthalmic viscosurgical device between them. The next step is to lift the IOL out of the bag. After it is carried into the anterior chamber, there are various strategies to remove the IOL like cutting or folding techniques.

This case presents an unusual source of intraocular foreign object during cataract surgery. The manufacturing company should give further consideration to quality control and evaluate whether their product requires a redesign or modification in order to avoid unwanted complications.

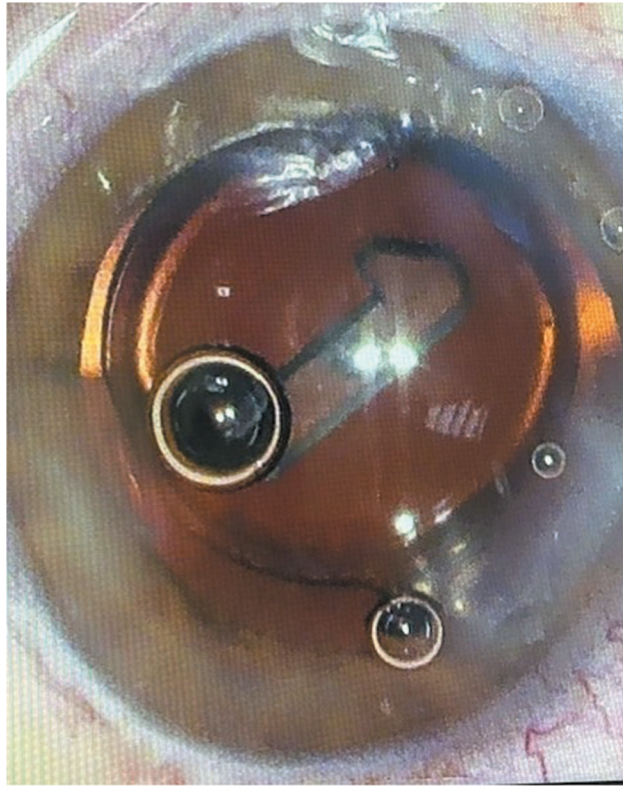


Figure 1. Foreign object in the form of a numeral ('1') on the anterior surface of the intraocular lens.

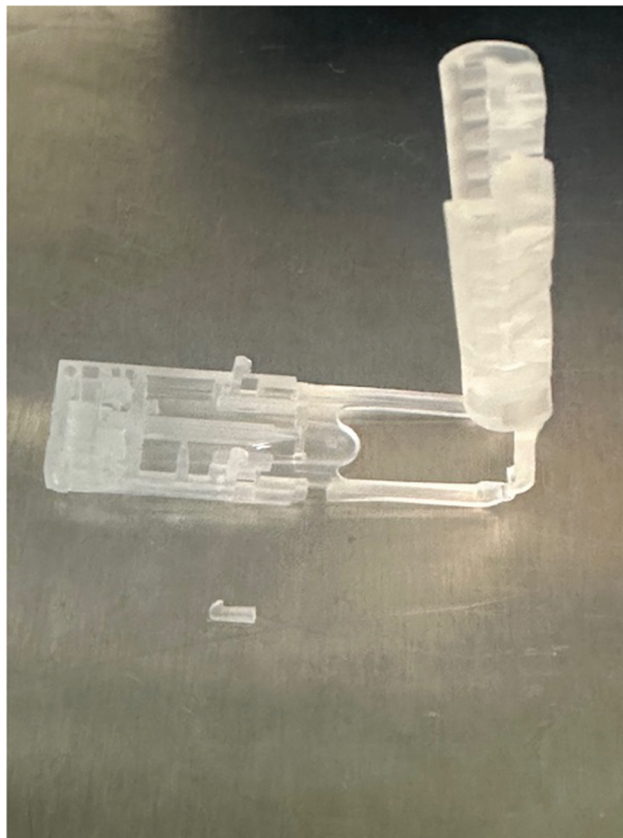


Figure 2. Lens module with the broken piece removed from the eye.

Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Kemal Örnek  <http://orcid.org/0000-0002-7745-1892>

References

1. Kang C, Wang E, Chomsky A, et al. Retained foreign objects after routine cataract surgery: a systematic review. *Graefes Arch Clin Exp Ophthalmol*. 2024;262:1181–1193 doi: [10.1007/s00417-023-06286-9](https://doi.org/10.1007/s00417-023-06286-9)
2. Andresen J, Winther JB. Intraocular plastic foreign bodies, introduced via the monarch II intraocular lens delivery system. *Acta Ophthalmol Scand*. 2007;85:460–461 doi: [10.1111/j.1600-0420.2006.00871.x](https://doi.org/10.1111/j.1600-0420.2006.00871.x)