

A Photo Essay

Intraoperative Optical Coherence Tomography of a Dislocated Intraocular Lens

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PRESENTATION

An 88-year-old female with pseudoexfoliation syndrome presented with sudden vision loss and was found to have a dislocated one piece intraocular lens (IOL) that was resting on the retina. She underwent 23-gauge pars plana vitrectomy, IOL explantation, and anterior chamber IOL insertion. Intraoperative optical coherence tomography (EnFocus iOCT; Leica, Wetzlar, Germany) was used to assess the position and vault of the IOL on the retinal surface [Figure 1a]. Utilization of iOCT enabled the surgeon to safely grasp the IOL with forceps in the location with the greatest vault in order to minimize any potential trauma to the retina [Figure 1b].

DISCUSSION

Intraoperative optical coherence tomography (iOCT) is an exciting new tool in the ophthalmology surgical realm. In the past few years, its clinical value has been demonstrated in both posterior and anterior segment surgeries.^[1,2] The PIONEER study showed that while iOCT adds 4.9 minutes to a procedure, it alters decision making in 48% of lamellar keratoplasty cases and 43% of membrane peeling cases.^[3] Similarly, the

DISCOVER study showed that iOCT altered surgeon decision making in 38% of lamellar keratoplasty cases and 19% of membrane peeling cases.^[4] Our case is the first reported case of using iOCT to successfully explant a dislocated IOL without causing any retinal breaks.

Declaration of Patient Consent

The authors certify that all appropriate patient consent forms were obtained.

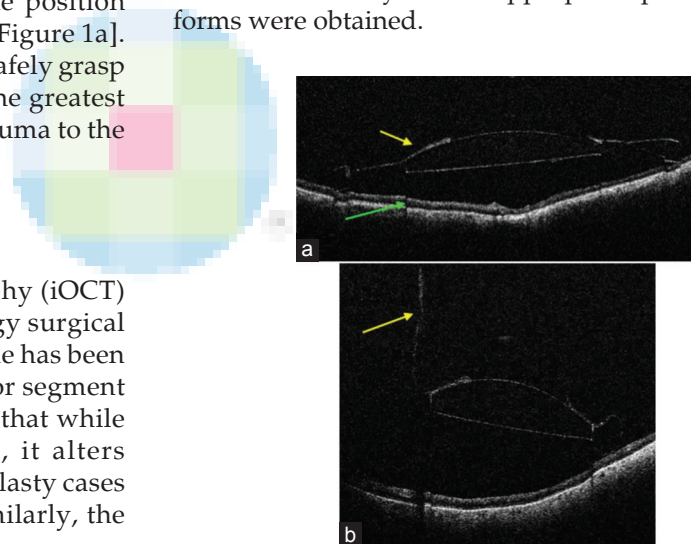


Figure 1. (a) Still image from iOCT showing the position of the IOL (yellow arrow) on the retinal surface (green arrow). (b) Still image from iOCT showing the haptic of the IOL being safely grasped by intraocular forceps (yellow arrow).

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Conflicts of Interest

There are no conflicts of interest.

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