

# Broken intraocular lens haptic during cataract surgery

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## ABSTRACT

This is a case report describing a planned routine cataract surgery that was complicated intraoperatively by breakage of the trailing haptic of the intraocular lens. The possibility of lens implantation despite the broken haptic is discussed, and the patient's postoperative course one month after the surgery is described, in this report.

**KEY WORDS:** cataract surgery, intraocular lens

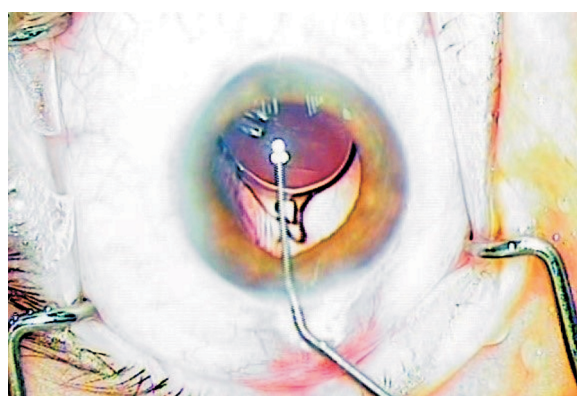
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## INTRODUCTION

We describe a planned routine cataract surgery that was complicated intraoperatively by breakage of the trailing haptic of the intraocular lens. The possibility of lens implantation despite the broken haptic is discussed, and the patient's postoperative course one month after the surgery.

## CASE REPORT

An 83-year-old man with age-related cataract was admitted for routine cataract surgery of the right eye. Best corrected visual acuity (BCVA) of the right eye was 20/80, and BCVA of the left eye was 20/30. The surgery was performed by Dr. Mallias under topical anaesthesia. At the end of the uneventful procedure an attempt was made to implant an Envista (Bausch & Lomb, USA) Intraocular lens (IOL) through a 2.2 mm incision. The Envista is a hydrophobic acrylic IOL. During the implantation, the trailing haptic was stuck between the cartridge and the plunger of the IOL injector. The surgeon tried to free the trailing haptic with a Sinsky hook, and during manipulation the trailing haptic of the IOL was broken (Fig. 1).



**FIGURE 1.** Broken intraocular lens haptic

The surgeon decided to implant the IOL with the broken haptic in the capsular bag. Despite the fact that the haptic was broken, no IOL dislocation was noticed postoperatively. The capsulorrhexis was about 5 mm. The incision was made temporally and the IOL was implanted in three to nine o'clock orientation.

Patient's BCVA was 20/25 on the first postoperative day, and the IOL was well centred in the capsular bag (Fig. 2).

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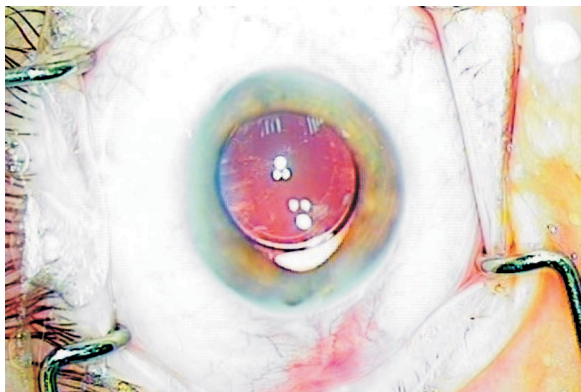


FIGURE 2. Well centred intraocular lens

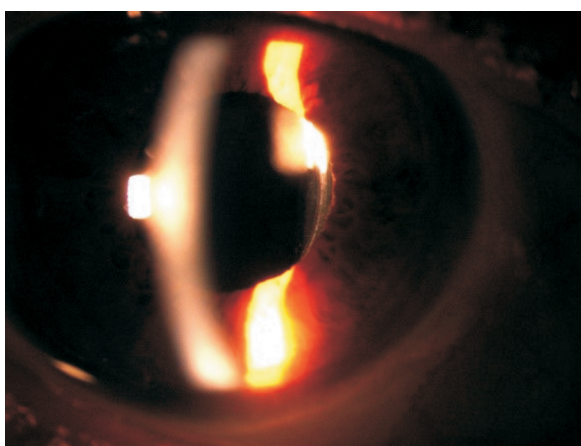


FIGURE 3. Well centred intraocular lens, one month after surgery

The patient was examined again one month postoperatively. Slit lamp examination with pharmacologic pupil dilation was performed, which showed that the IOL was still well centred inside the capsular bag (Fig. 3).

## DISCUSSION

There are some cases [1] of fractured IOL during surgery, but to our knowledge there is none reporting IOL placement inside the capsular bag. In all papers that we found in the literature, the surgeon removed the IOL when one haptic was broken. In cases where the IOL has to be removed, the surgeon has to either fold [2] the IOL or chop [3] it in half

and remove the two separate pieces with forceps. The purpose of this case report is to mention the fact that the IOL can remain well centred inside the capsular bag, even in cases where the one haptic is missing. Therefore, there is no need to replace the IOL.

The IOL haptic was stuck between the cartridge and the plunger of the injector probably due to misplacement of the IOL in the cartridge from the beginning, and not because of material malfunction [4]. At this point we would like to stress the fact that the viscoelastic was completely removed from the capsular bag at the end of the procedure, and this helped the anterior and posterior capsule to come in contact and help hold the IOL in place.

There are also cases in which the haptics spontaneously break inside the capsular bag, causing complications [5] that reduce the vision. Hopefully in this case, the one remaining haptic seems more than enough to maintain the IOL well centred inside the capsular bag. In other studies [6, 7], the IOL needs to be removed due to dislocation that consequently reduces the patient's vision. What should be taken into consideration in spontaneous haptic fractures is the further research about the material biocompatibility [5].

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