

LATE SPONTANEOUS IN-THE-BAG INTRAOCULAR LENS DISLOCATION IN PATIENTS WITH UVEITIS (ID56727)

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PURPOSE : Analyze of 2 cases of late spontaneous in-the-bag intraocular lens dislocation in patients with uveitis.

DESIGN : Retrospective case serie with literature review

PATIENTS & METHODS: All case records of eyes with chronic uveitis that had phacoemulsification with IOL implantation, at a referral uveitis clinic between were retrieved and analyzed.

RESULTS

a total of 81 eyes of 62 patients with chronic uveitis underwent phacoemulsification with in-the-bag IOL implantation under steroid cover from February 2000 to December 2014, with a peroperative control of inflammation. Out of these 81 eyes, 2 eyes of 2 patients had experienced late in-the-bag IOL dislocation (2,84%).

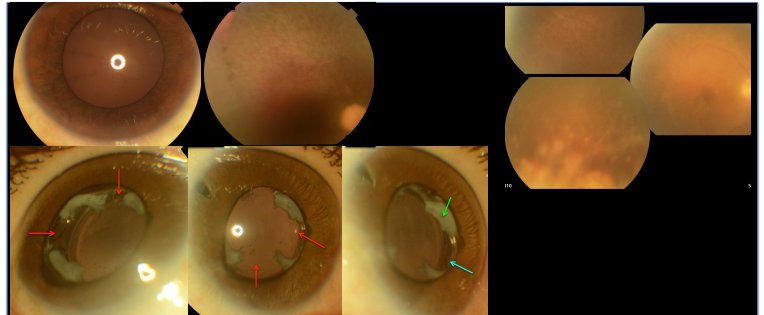


Figure 1. One-piece acrylic in-the-bag dislocation in case 1
Up: ocular status before cataract surgery: posterior subcapsular cataract (left). Fundus (right) showed peripheral and diffuse cicatricial pigmentary retinal scars and papillary pallor as sequellae of presumed herpetic panuveitis.
Down: one-piece acrylic IOL within the capsular bag the day after anterior Yag capsulotomy. Note capsular bag fibrosis (green arrow). IOL haptics dislocated (blue arrow). Deformation of sphericity: the optic lost its initial biconvex shape to become more spherical. The 4-point Yag capsulotomy created an enlargement of the anterior capsular diameter (red arrow).

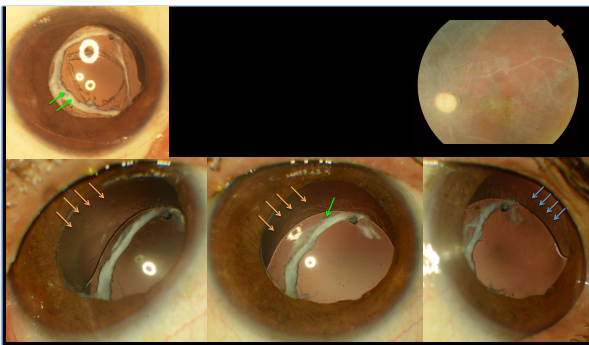


Figure 2 : one-piece acrylic IOL dislocated inferiorly in case 2:
Up left: 3 years after PKE+IOL: posterior yag capsulotomy.
Up right: actual fundus statut.
Down: actual statut: Note anterior capsular bag fibrosis (green arrow). The zonule was disrupted in the superior-nasal quarter of the zonule (arrow orange) and not disrupted in the supero-temporal quarter (blue arrow). The IOL is significantly dislocated inferiorly and crossing the center of the pupil.

	aetiology	Age at time of PKE+IOL	Recurrence of uveitis after PKE+IOL	Delay	Decreased BCVA	Bag contraction	Capsular fibrosis	Optic more spheric	Zonule dehiscence	Management	Out-come
Case 1	herpes	22, F	yes	PKE+IOL: 2011 Dislocation: 2015	6/60→6/120	yes	yes	yes	no	Anterior yag capsulotomies	Initial improvement 6/120→ 6/60 Then, recurrence
Case 2	Behcet disease	38, M	yes	PKE+IOL: 2005 PC Yag : 2008 Dislocation: 2017	6/30→6/60	no	yes	no	yes	PPV + explantation proposed	?

Comments

The weakening of the zonules is probably one of the major factors leading to late-in-the-bag IOL dislocation, as identified in literature from different situations: pseudoexfoliation, prior vitrectomy surgery, trauma, high myopia, retinitis pigmentosa and connective tissue disorders [3]. None of the 2 cases here had any of these preexisting factors. The **recurrent inflammation** near the zonules could probably also be another major factor. In the 2 cases, anterior capsular contraction was noted. This **capsular fibrosis**, promoting **capsulorrhexis phimosis**, was reported in all cases by Davis in a series of 86 late in-the-bag spontaneous IOL dislocation, seems to be more specific of uveitic patient, and induce probably a zonular dehiscence. In another hand, **chronic use of steroids** may also play a major role in contributing toward IOL-in-the-bag dislocation. In case 2, we did not observe a bag contraction and the sphericity of the optic's IOL was not modified. This is probably due to the ulterior posterior Yag capsulotomy which open the capsular bag and lead more place for the optic which is not compressed.

The management of late in-the-bag IOL dislocation is not standard, and should be case-by-case decision, based on the present clinical status of the patient. A conservative management by anterior capsular yag expansion to try to induce a spontaneous re-positioning of the IOL was not a good option, as we observed in the case 1 with the recurrence of the dislocation. **Different surgical options were reported** with good outcome: re-fixation of pre-existing IOL, iris fixation IOL, scleral/iris sutured PCIOL, pars plana vitrectomy with IOL refixation in the bag, IOL removal and pars plana scleral fixated IOL. Ganesh and al, the single largest case series of late-in-the-bag IOL dislocation in uveitic patient, suggested that **PPV may play a major role in controlling the inflammation** too, and showed that around 69% eyes maintained their vision even after 22 years of follow-up, after PPV with scleral fixation IOL or IOL re-fixation. **The choice of different surgical approaches for fixation and positioning of the IOL, lens repositioning or lens exchange**, seems to depend more on surgeon's preference that out-come results, with controversial results in different reports.

Conclusions: In-the-bag dislocation of IOL is a rare late complication in uveitic eyes. The good options of restoring vision in these high-risk eyes should be individualized and based on clinical status of each case.

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