

DROP DOWN DEAD!!

(Dead Bag Syndrome)

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CASE 1

60 years old man

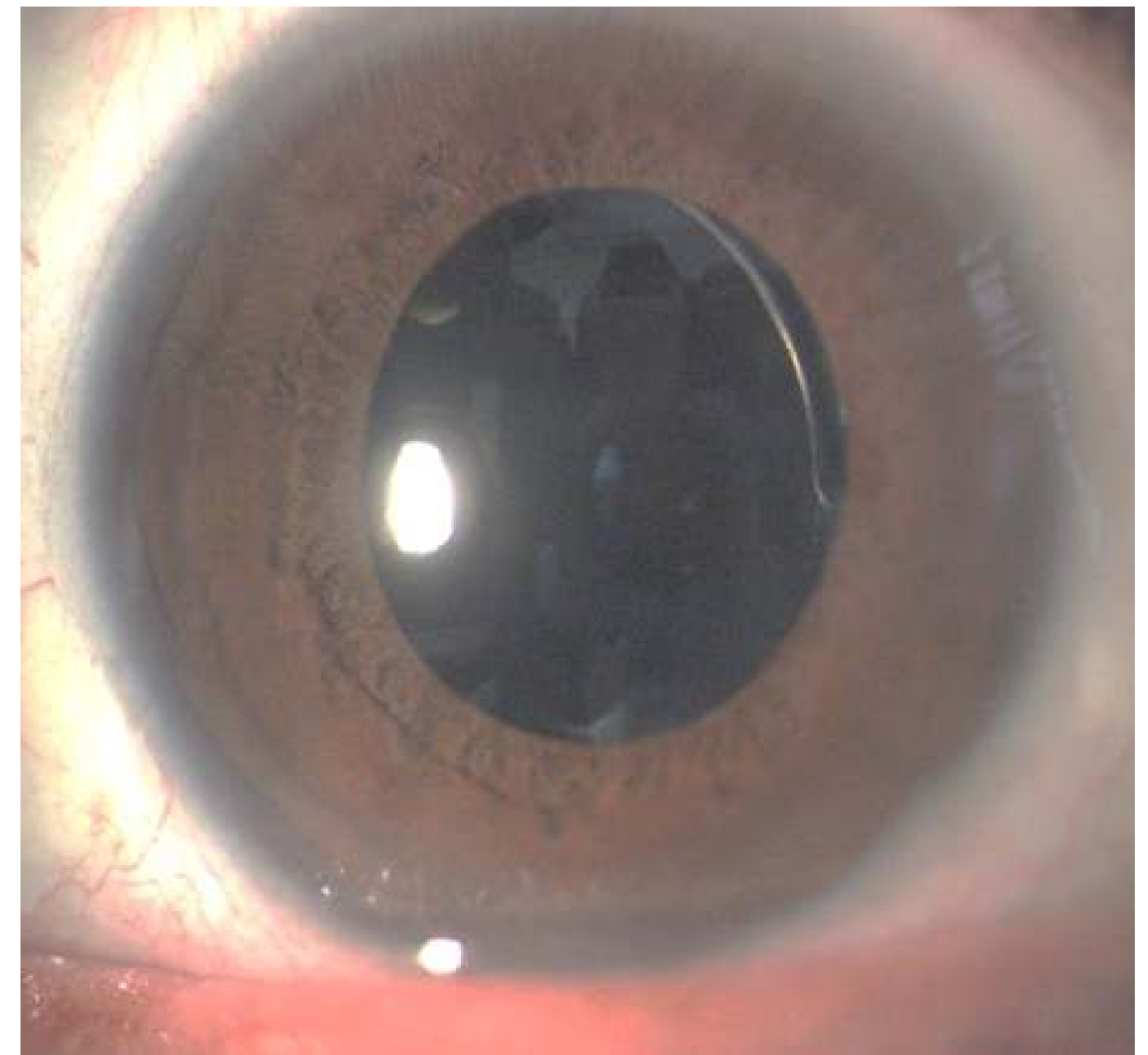
Complaint: OD drop of vision

PMH: HTN, DM, BPH

POH: OU Phaco+IOL x 10 years.

	OD	OS
BCVA	0.7	0.5
IOP	20	30
A/S	Phacodonesis	Pseudophakic

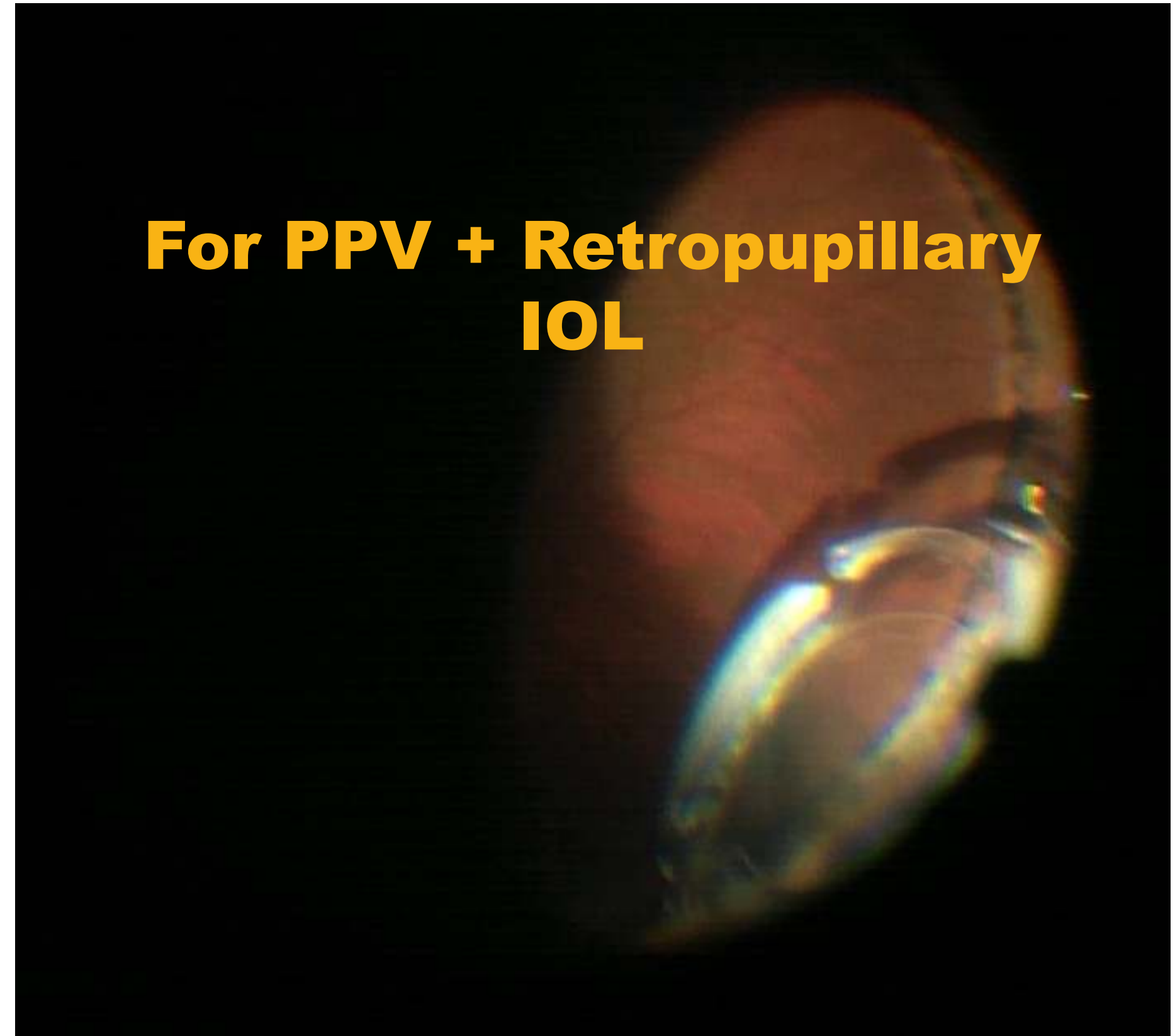
Discharged: on anti-glaucoma ttt and follow up

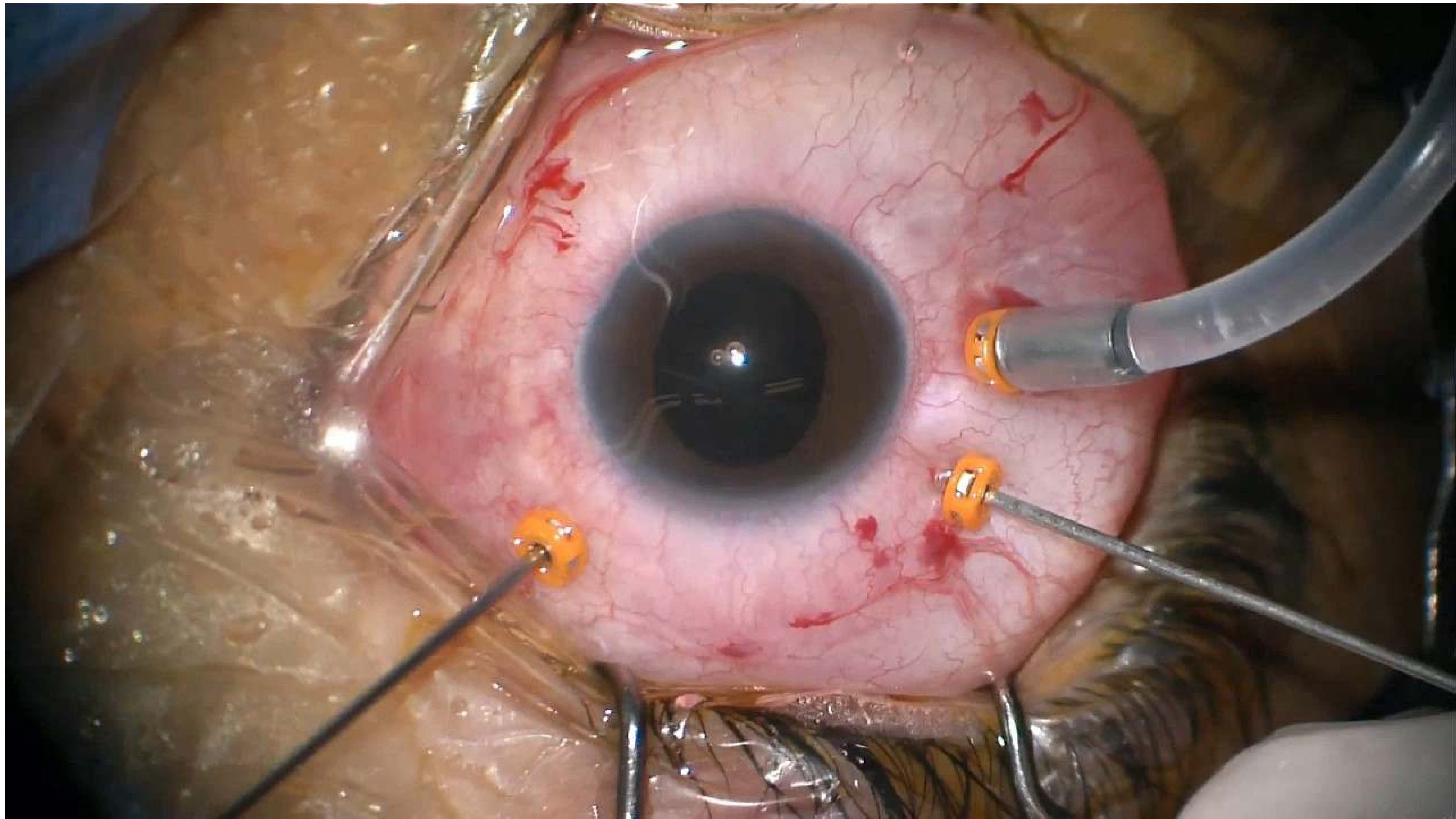


2 weeks later

Presented with : OD VA drop to CF

**For PPV + Retropupillary
IOL**

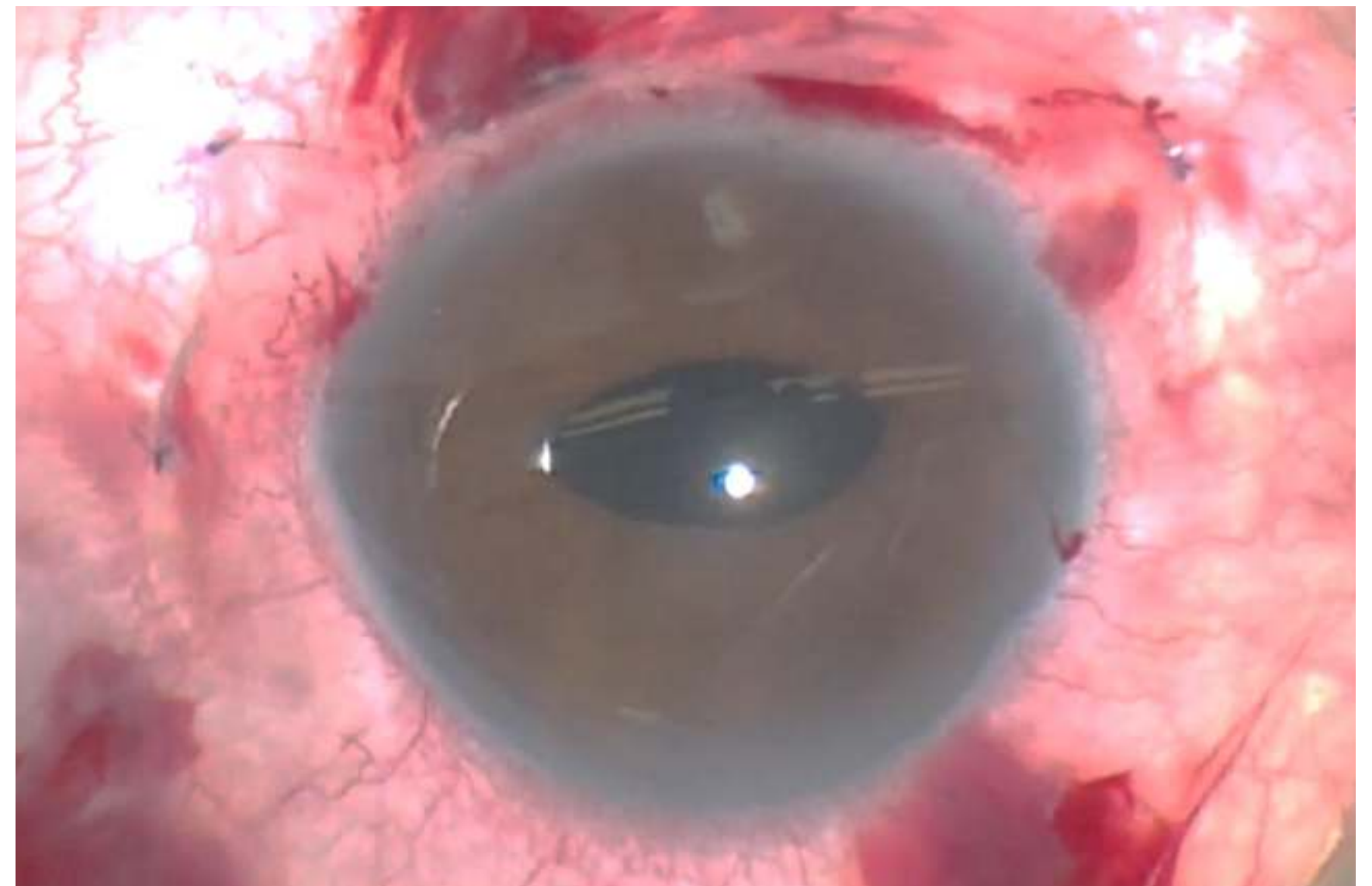




CASE 1

Postoperative

	OD
BCVA	0.8
A/S	Iris claw well enclaved



CASE 2

54 years old man

Visited in 2016 for check up..

C/O

- Checkup

POH

- Surgery: OU Phacoemulsification (Phaco+IOL) surgery x 17 y [Dr Abdallah Hassona]

MH

- Diabetic x 24 y, type 2 on Insulin
- Hypertensive
- Bronchial Asthma (BA)

OD	← 60 mm →	OS
+0.50 / -0.50 x 57° +1.75	0.50	0.00 / -0.25 x 71° +1.75
+1.00 / -1.25 x 99°	AR	+0.50 / -0.50 x 96°
+1.00 / -1.25 x 100° +2.50	1.00	+0.50 / -0.50 x 95° +2.50
+1.00 / -1.25 x 100° +2.50	1.00	+0.50 / -0.50 x 95° +2.50
[AP- 30-Mar 12:33]	17	[AP- 30-Mar 12:33]

CASE 2

54 years old man

In October 2019..

He came complaining of **Lt eye drop of vision without history of trauma.**

Decision: **IOL Exchange**

C/O

- OS "Drop of Vision" x 5 y

POH

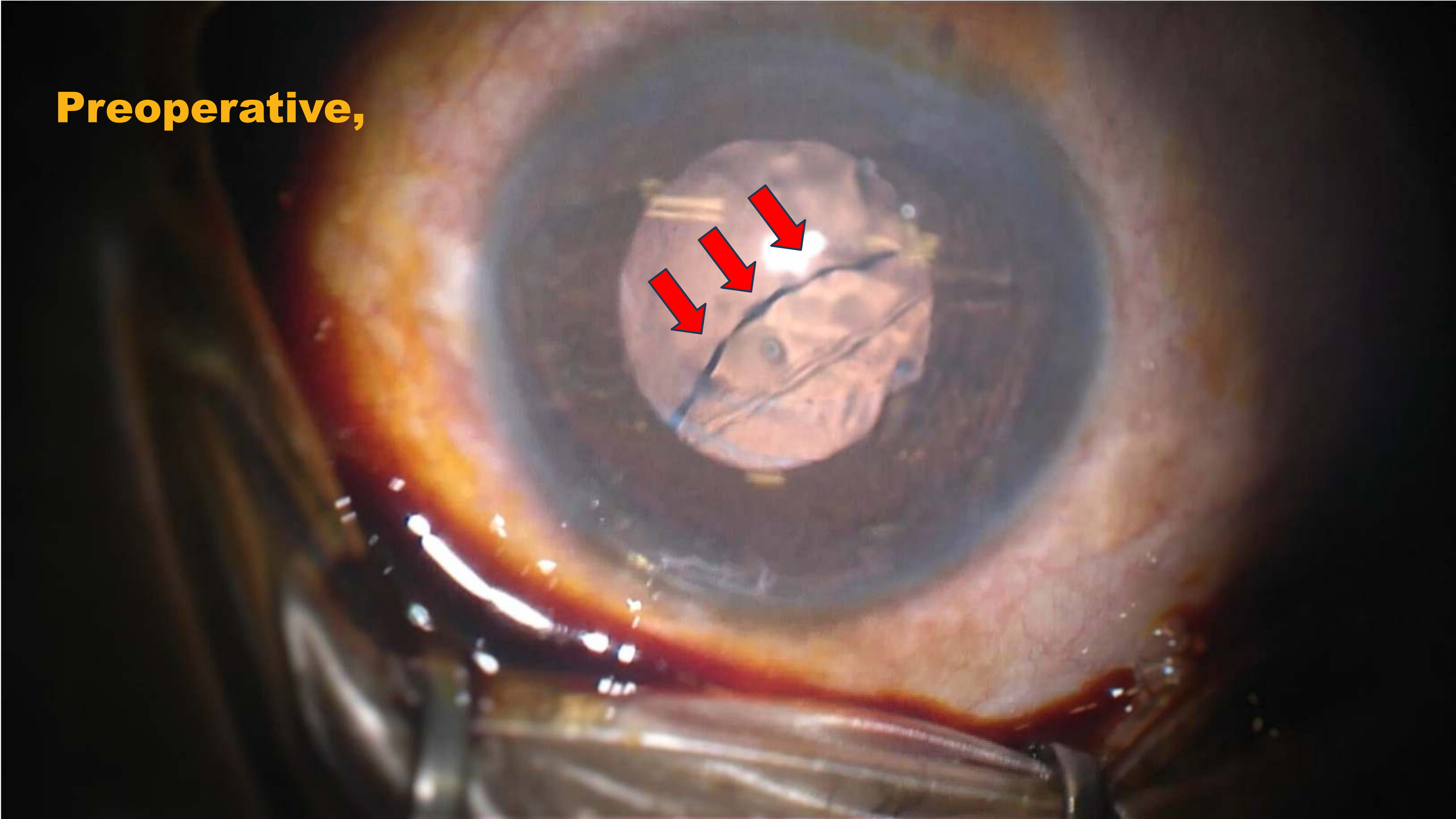
- **Diagnosed As:** OS Dislocated IOL [in Khartoum]
- **Surgery:** OS Phacoemulsification (Phaco+IOL) surgery x 16 y
- **Surgery:** OD Phacoemulsification (Phaco+IOL) surgery x 12 y

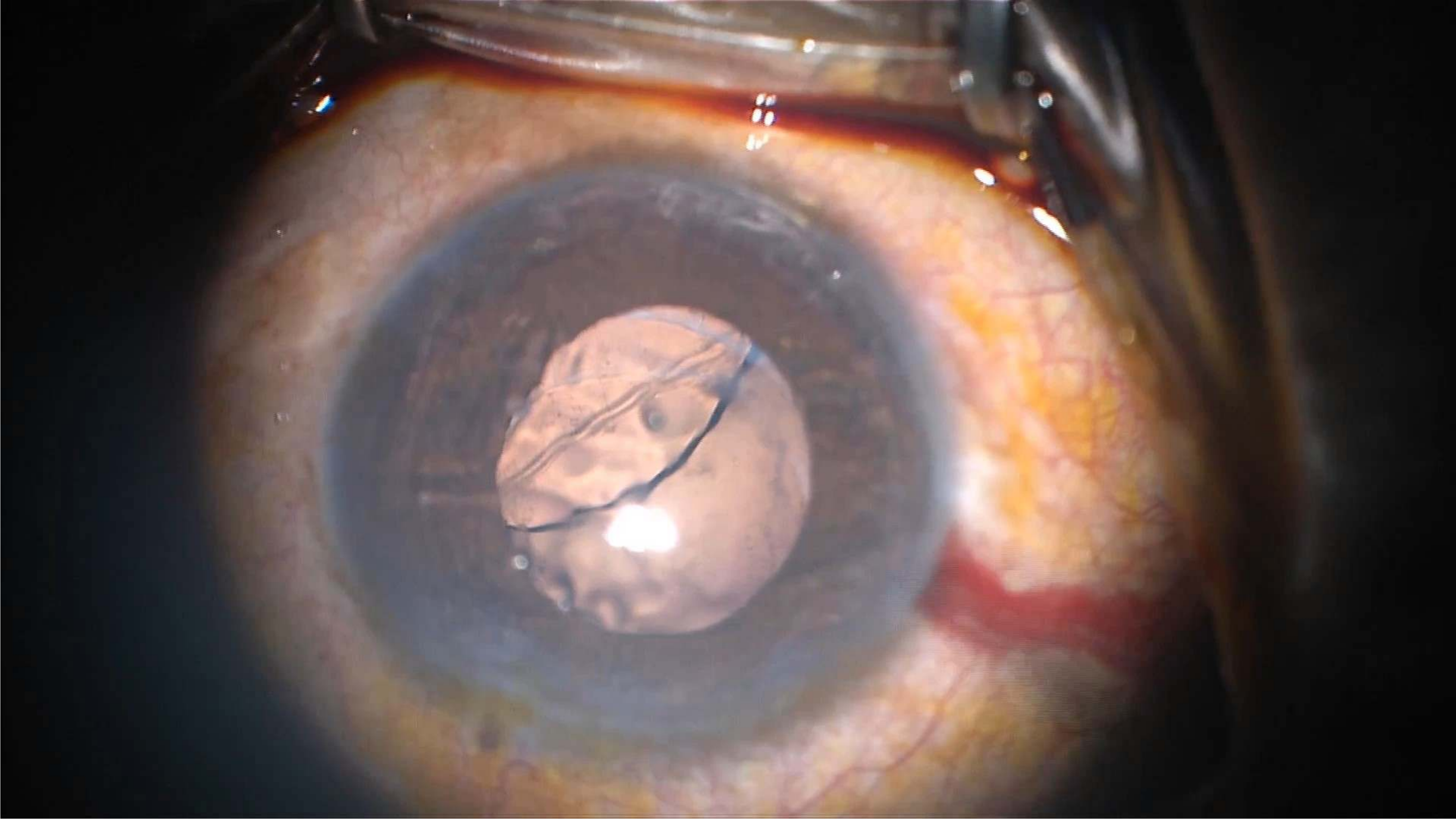
MH

- Diabetic x 25 y on Insulin -> not controlled
- Hypertensive

OD	60 mm	OS
	0.50 D	CF (100 cm)
+1.25 / -1.50 x 95°	AR	+10.50 / -0.75 x 95°
+1.00 / -1.25 x 95°	SR	
[AP- 30-Oct 10:00]	21 IOP	33 [AP- 30-Oct 10:00]
[GAT- 30-Oct 10:20]	16 IOP	28 [GAT- 30-Oct 10:20]
Normal Reaction	P	Normal Reaction
	AS	
- Pseudophakic		- Aphakia

Preoperative,





CASE 2

Postoperative



C/O

- "Follow-up" [he says light is too bright OS]
- "Foreign Body Sensation"

POH

- **Surgery:** OU Phacoemulsification (Phaco+IOL) surgery x 15 y
- **Surgery:** OS IOL Exchange surgery

OD	61 mm				OS
	1.00	D		D	0.70
+1.25 / -1.50 x 90°			AR		-0.25 / -1.50 x 70°
+0.75 / -0.75 x 100° +2.50	1.00		SR	1.00	-0.50 / -1.50 x 70° +2.75
+0.75 / -0.75 x 100° +2.50	1.00		Presc. (Add)	1.00	-0.50 / -1.50 x 70° +2.75
[AP- 12-Feb 11:00]	19		IOP	18	[AP- 12-Feb 11:00]
Normal Reaction			P		Normal Reaction

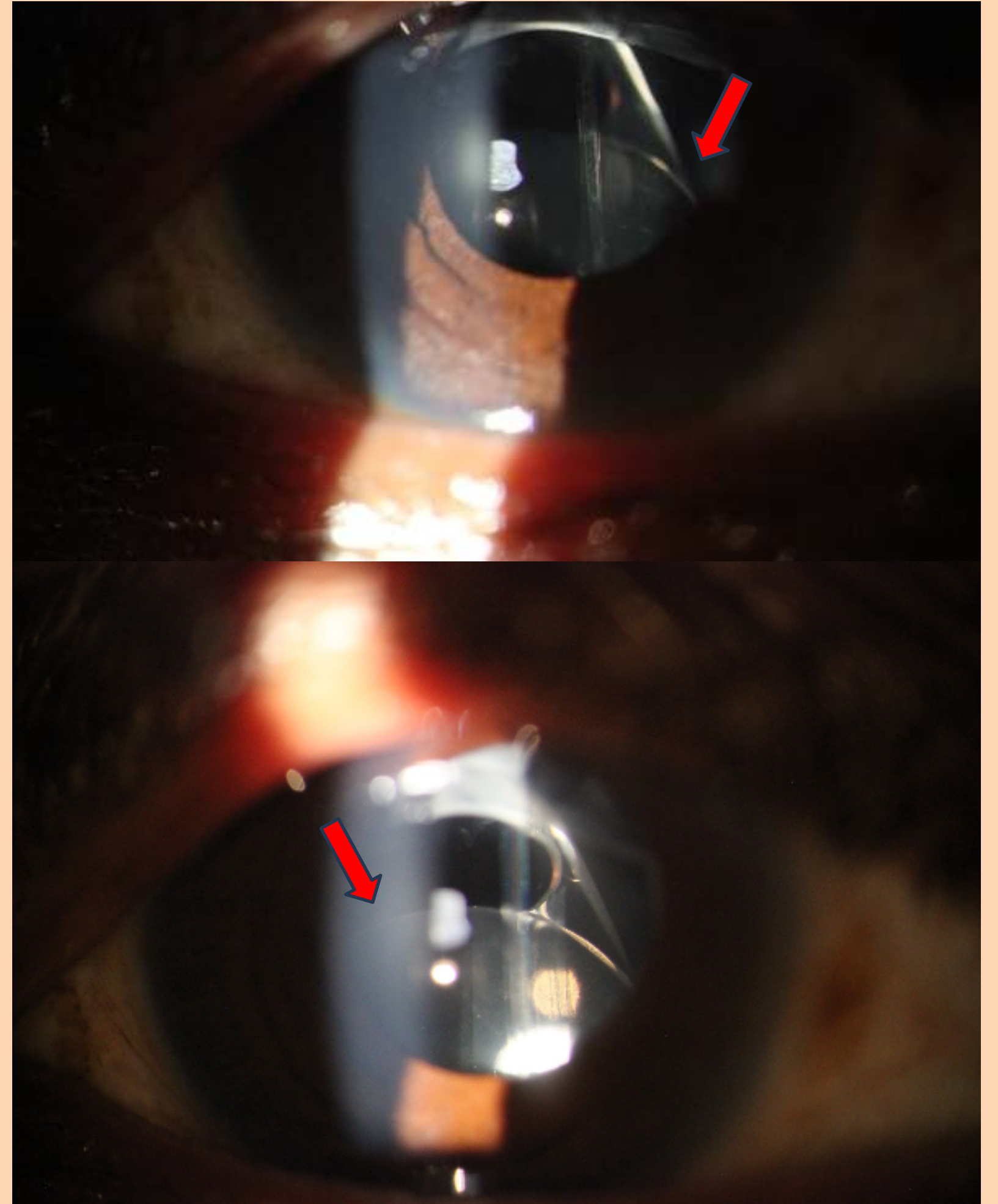
CASE 2

5 years after later,

He came back in **November 2024** for a check up..

On examination, the Rt eye appeared to be **dislocated..**

Confirming diagnosis of **Dead Bag Syndrome**

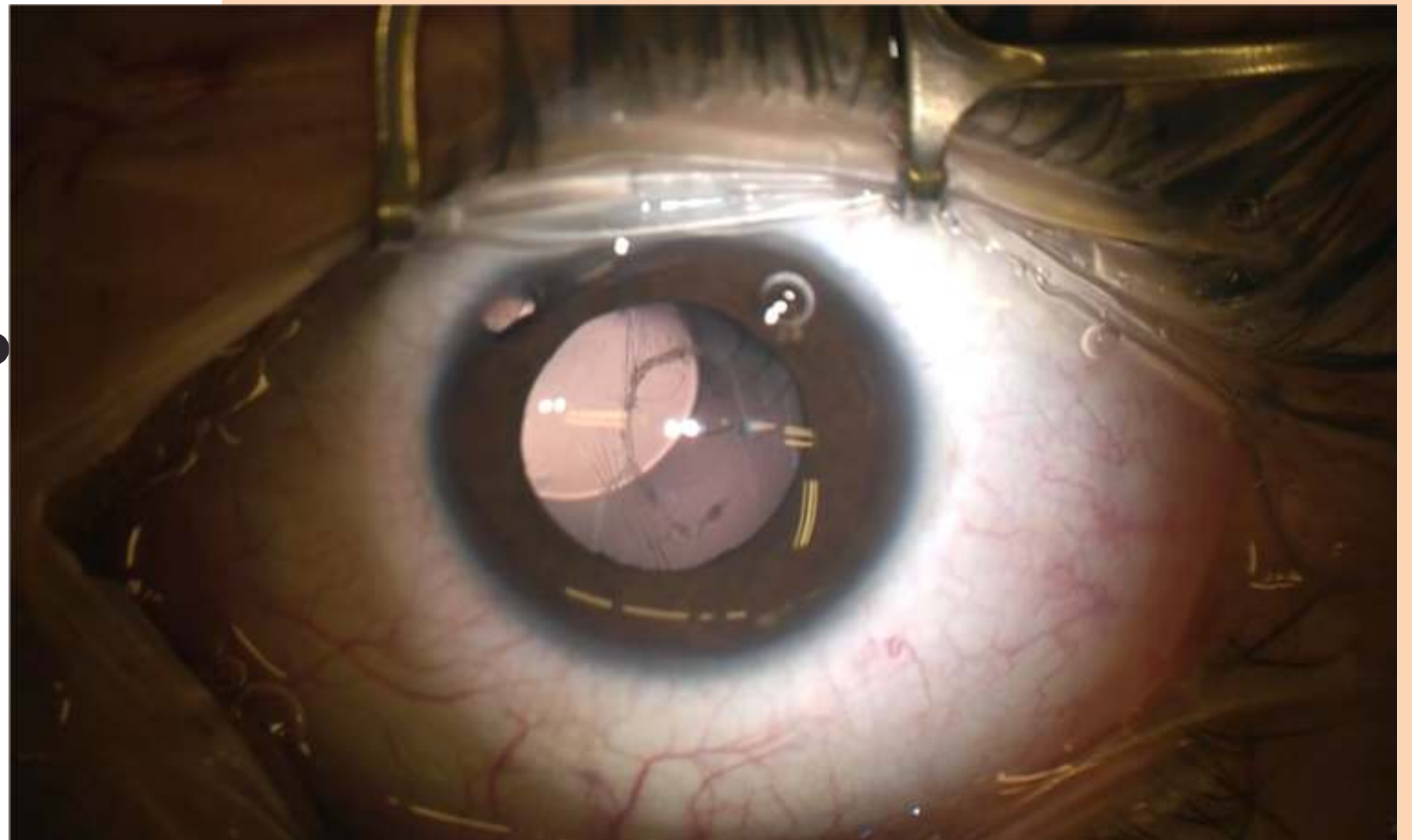


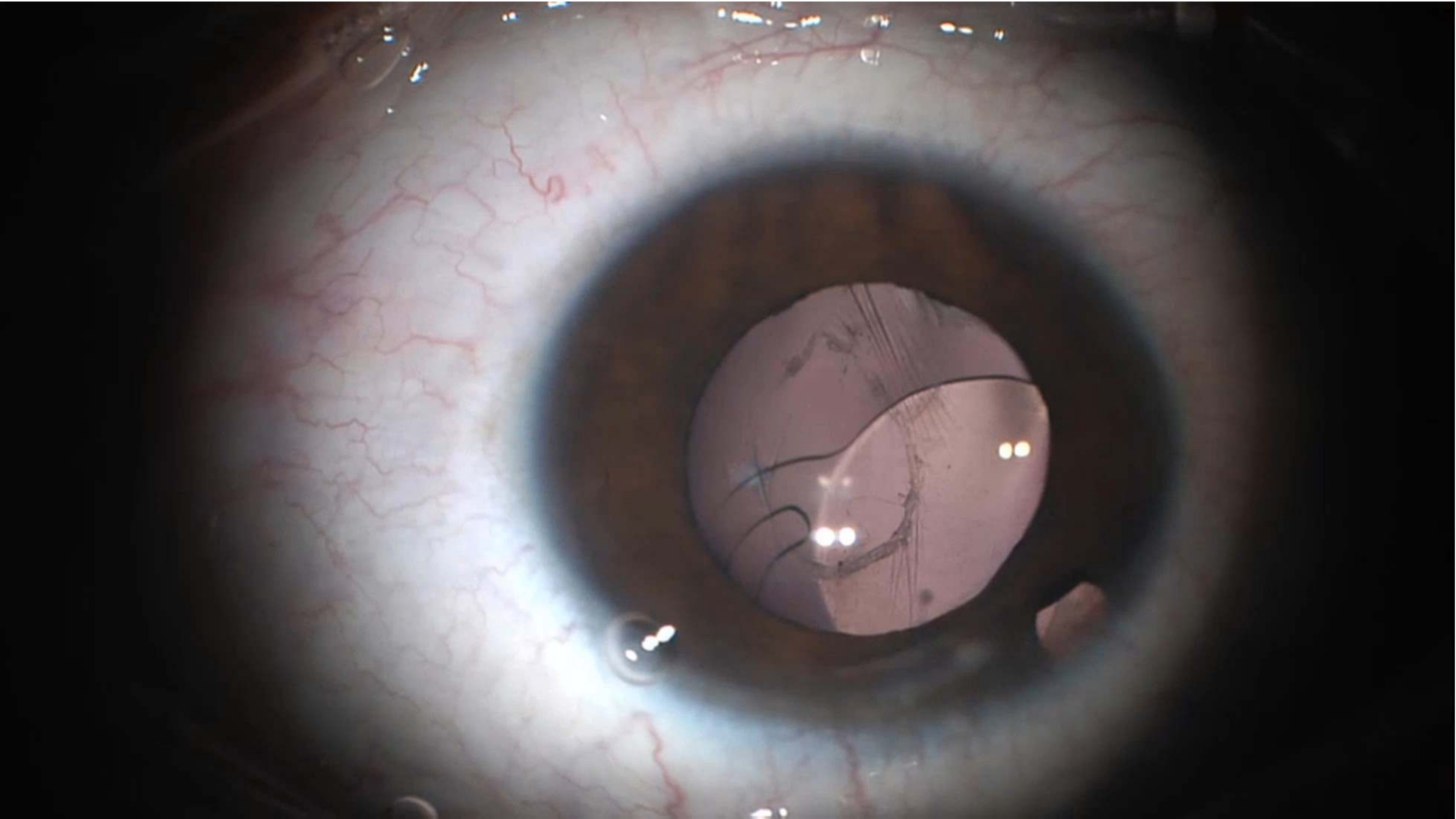
CASE 3

52 years old man

POH: OU Phaco + IOL x 12 years ago

**Presented with Lt dislocated IOL,
without history of trauma**

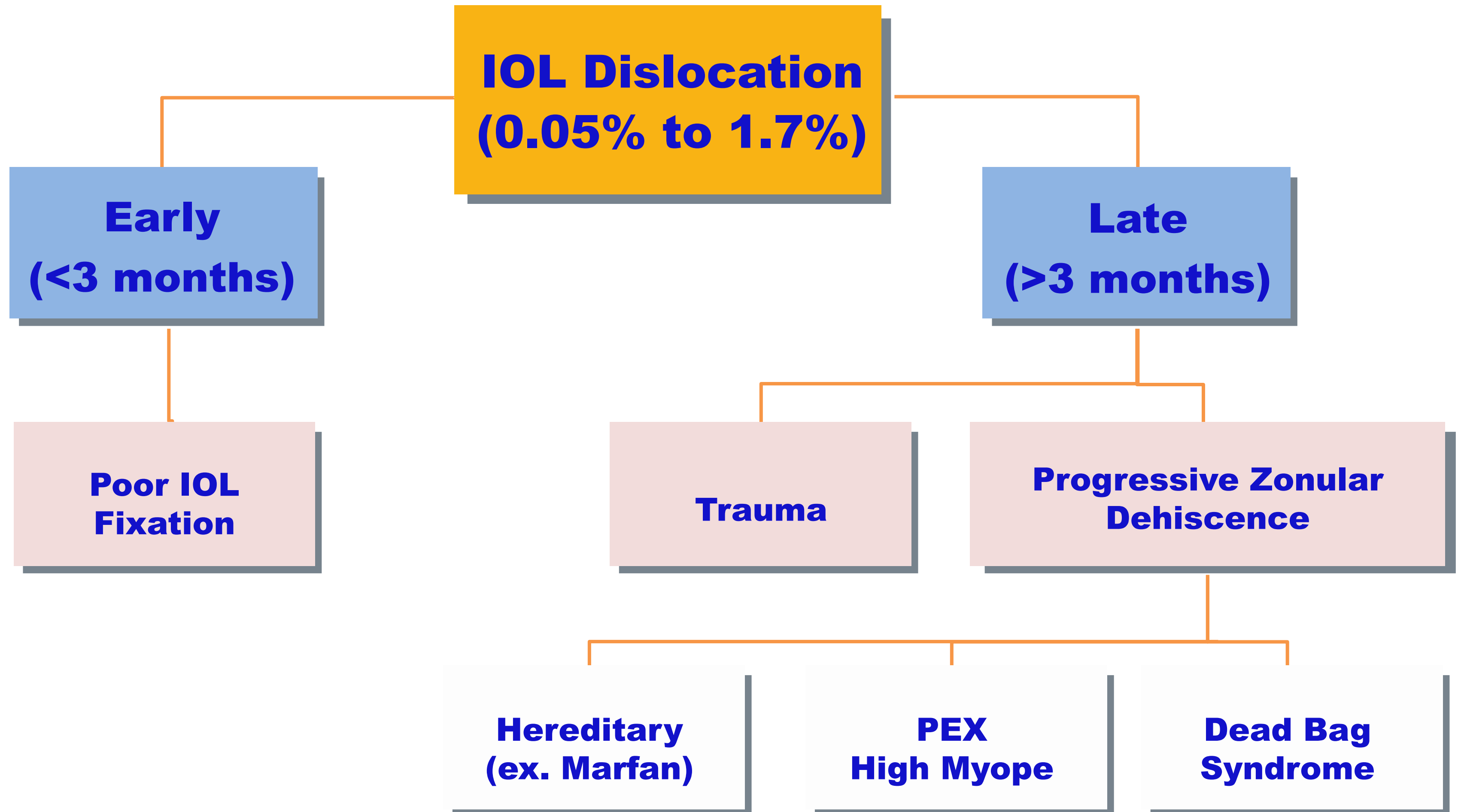




CASE 3

Postoperative,

OD	← 60 mm →	OS
	0.40 D	0.80 D
-2.50 / -1.25 x 140°	AR	+0.50 / -0.50 x 150°
-1.75 / -1.00 x 140° +2.50	1.00 SR	1.00 0.00 / -0.50 x 150° +2.50
-1.75 / -1.00 x 140° +2.50	1.00 Presc. (Add)	1.00 0.00 / -0.50 x 150° +2.50
[AP- 25-Aug 12:19]	20 IOP	17 [AP- 25-Aug 12:19]
Normal Reaction	P	Normal Reaction



What Should Normally Happen After Phaco ?

Disruption of
the blood-
aqueous-
barrier

Immune
response in
the lens
epithelial cells

Migration and
proliferation

Sometimes
PCO.

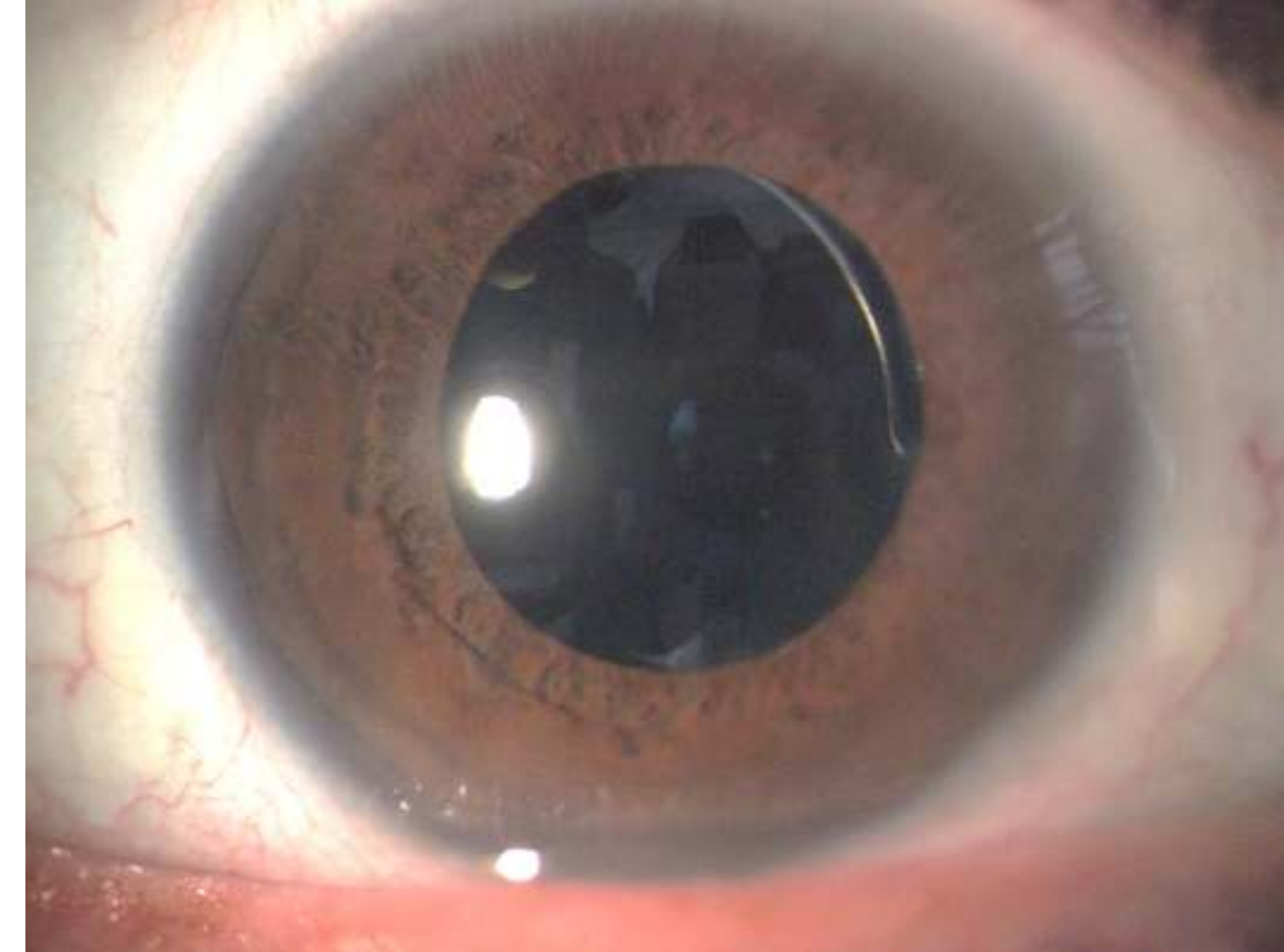


مستشفيات الوطنى للعيون
WATANY EYE HOSPITALS

Dead Bag Syndrome

- > **Late** Dislocation Of An Intraocular Lens (IOL)
- > In a capsule that has **remained clear** after surgery (i.e. without signs of fibrosis or proliferative change)

but has become **diaphanous and floppy.**



مستشفيات الوطنى للعيون
WATANY EYE HOSPITALS

Literature

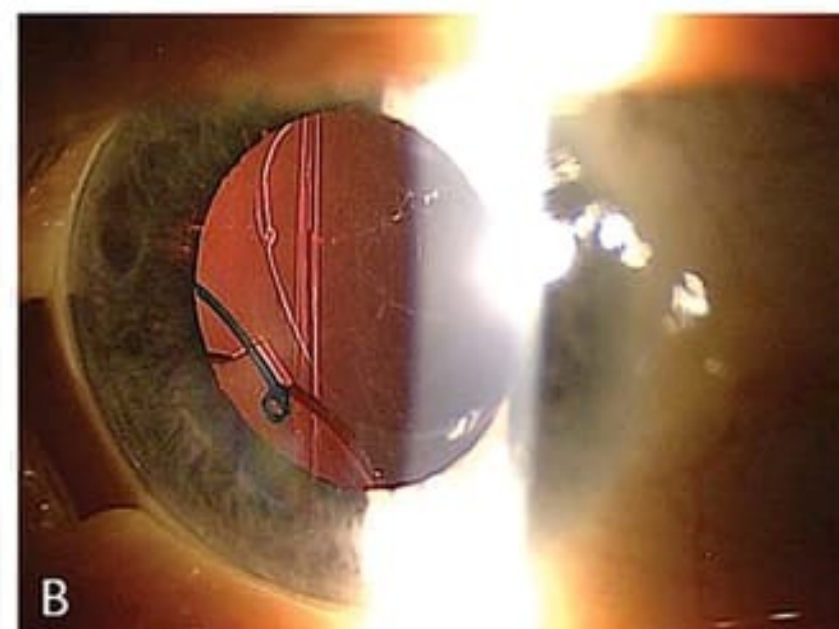
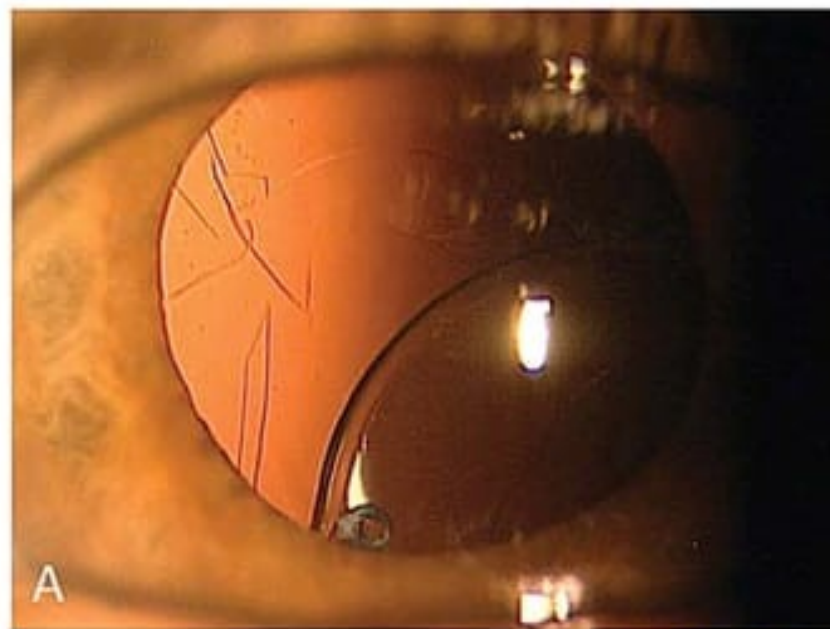
Clinical and histopathological findings in the dead bag syndrome

*Catherine Culp, MD, Phillip Qu, MD, Jason Jones, MD, Nicole Fram, MD, Gregory Ogawa, MD,
Samuel Masket, MD, Nick Mamalis, MD, Liliana Werner, MD, PhD*

- > First published Feb 2022
- > 8 cases
- > All phacos were uneventful
- > Mean time between phaco and presentation: 10 years

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IOL decentration inside of
the bag (A & B)



IOL- capsular bag complex
decentered (D & E)

Bilateral dead bag syndrome

Rashmi Nayak, MS, Vijaya Pai H, MS, Shailaja S, MS

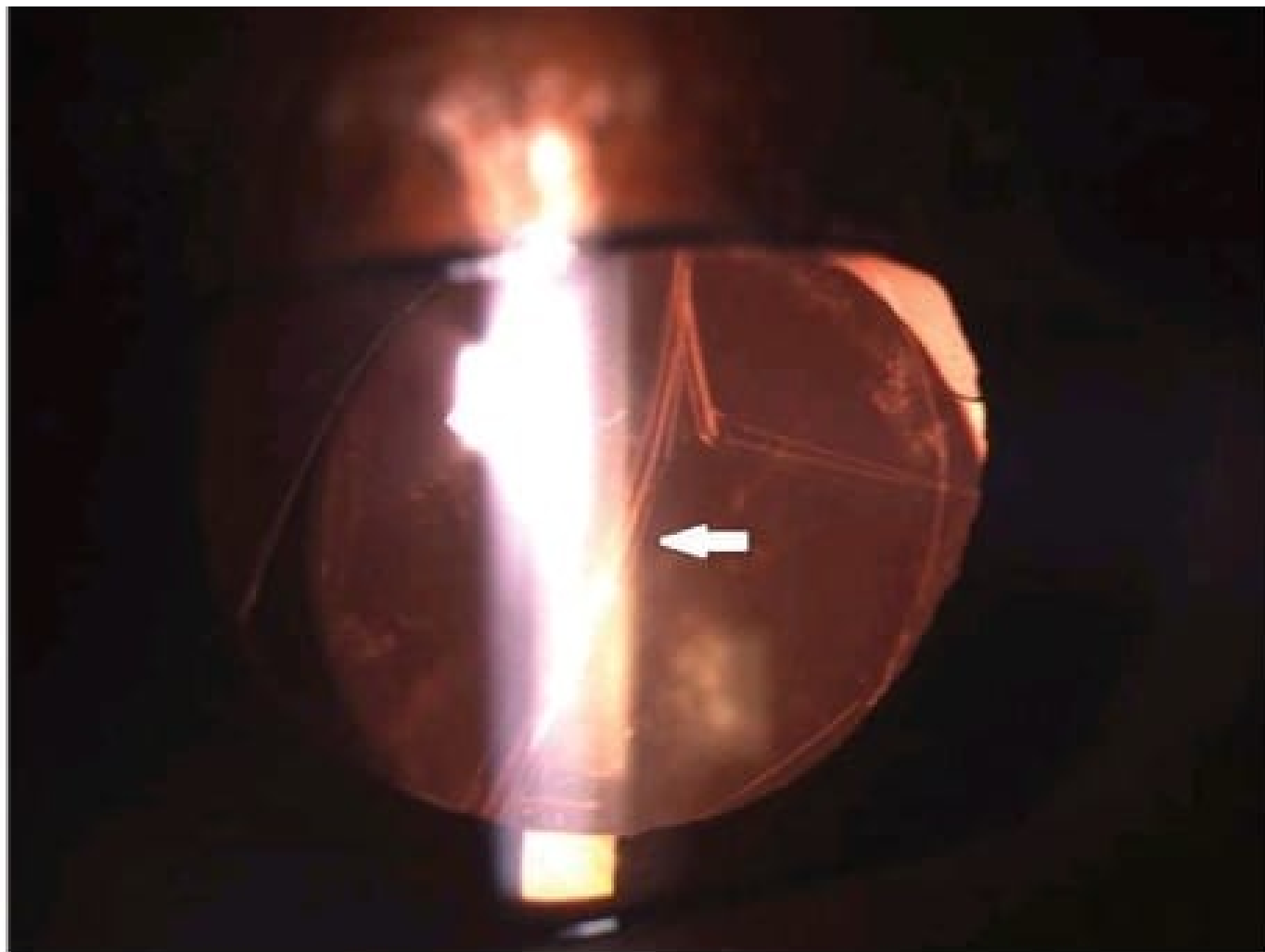


Figure 1. Slitlamp photograph of the right eye showing posterior capsular tear (*white arrow*) in an otherwise clear bag.

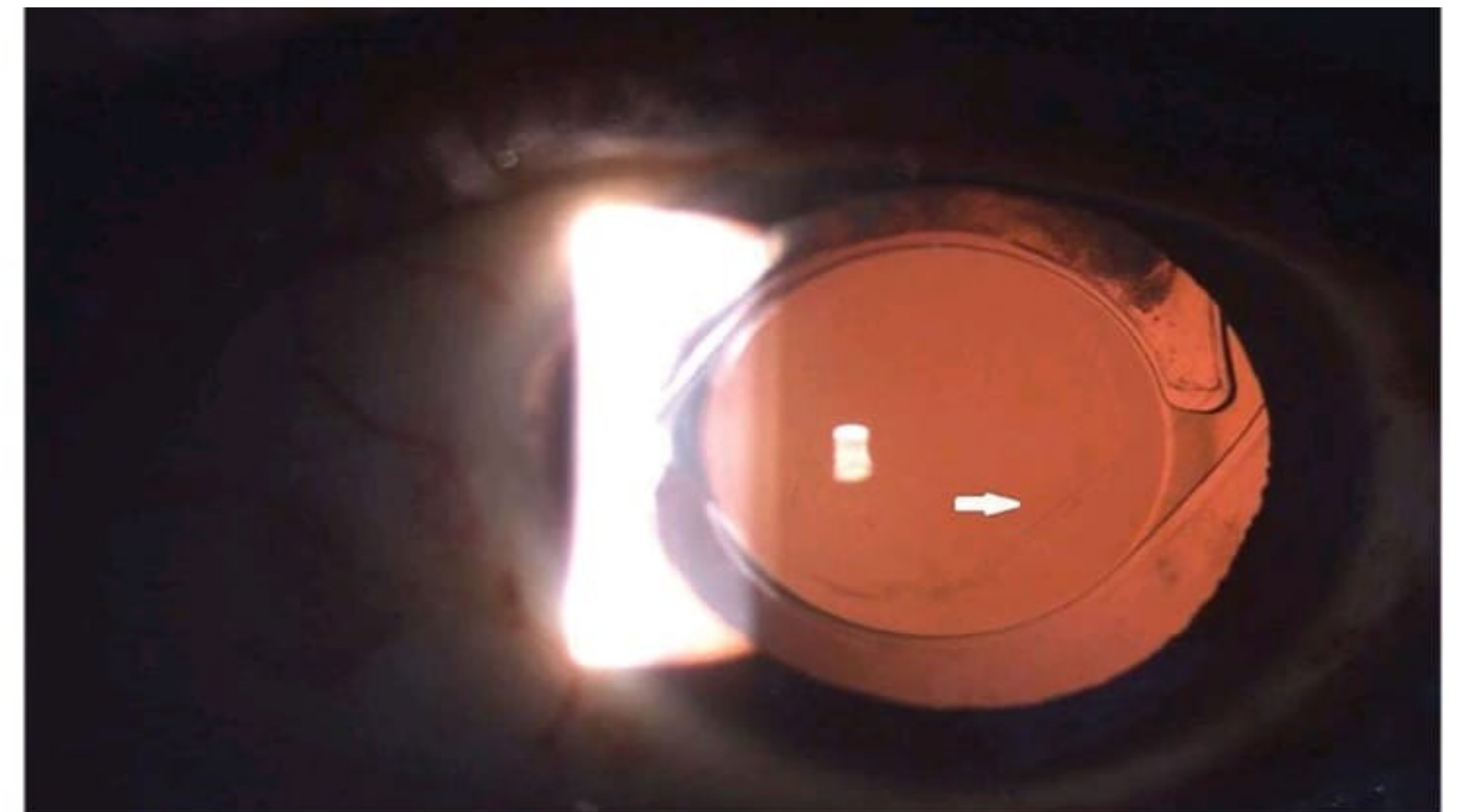


Figure 4. Slitlamp photograph of the left eye showing clear posterior capsule with a tear (*white arrow*), with well-centered IOL.

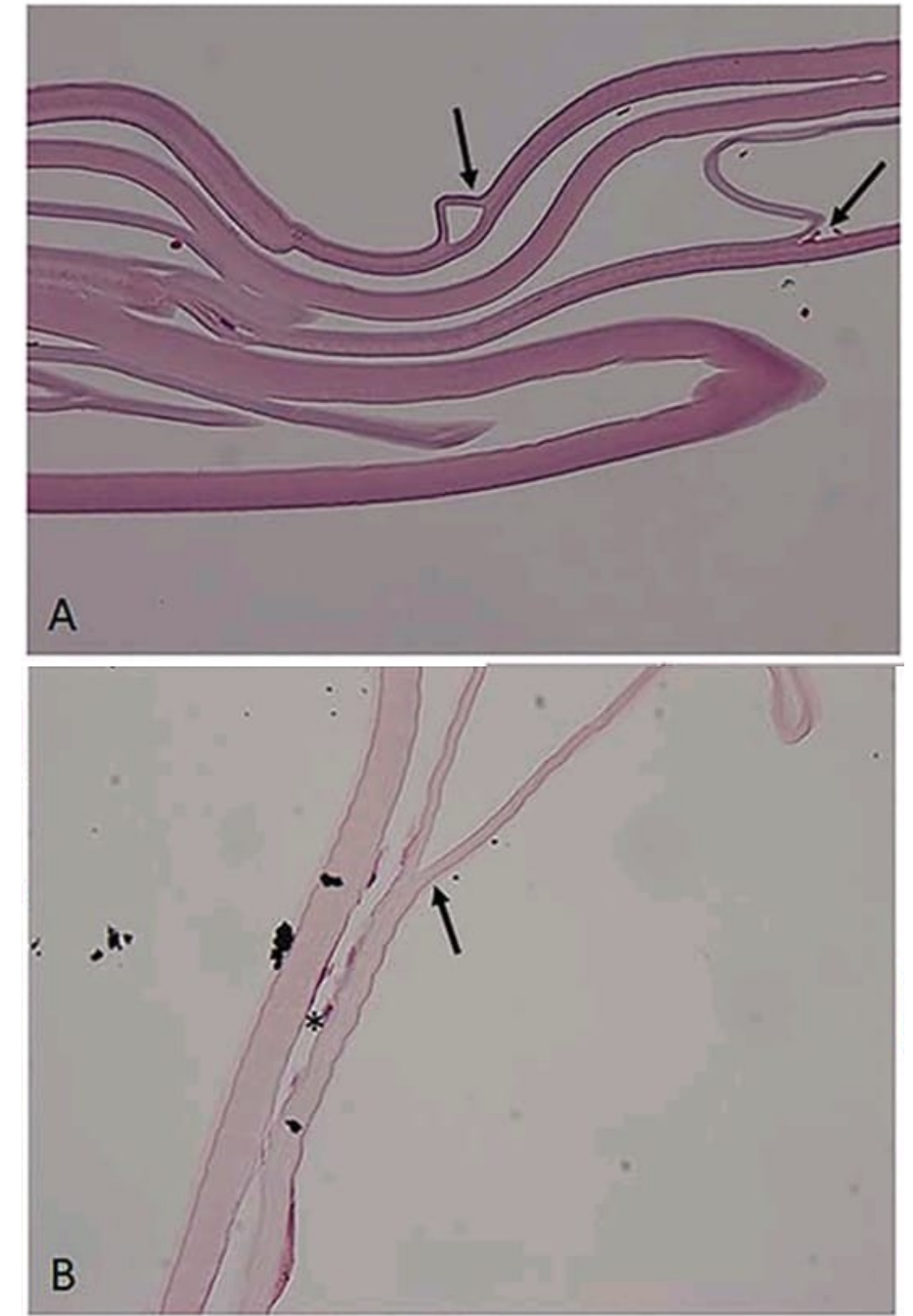
Spontaneous rupture of post capsule (bilateral) - No H/O trauma - Left 4 years after the right

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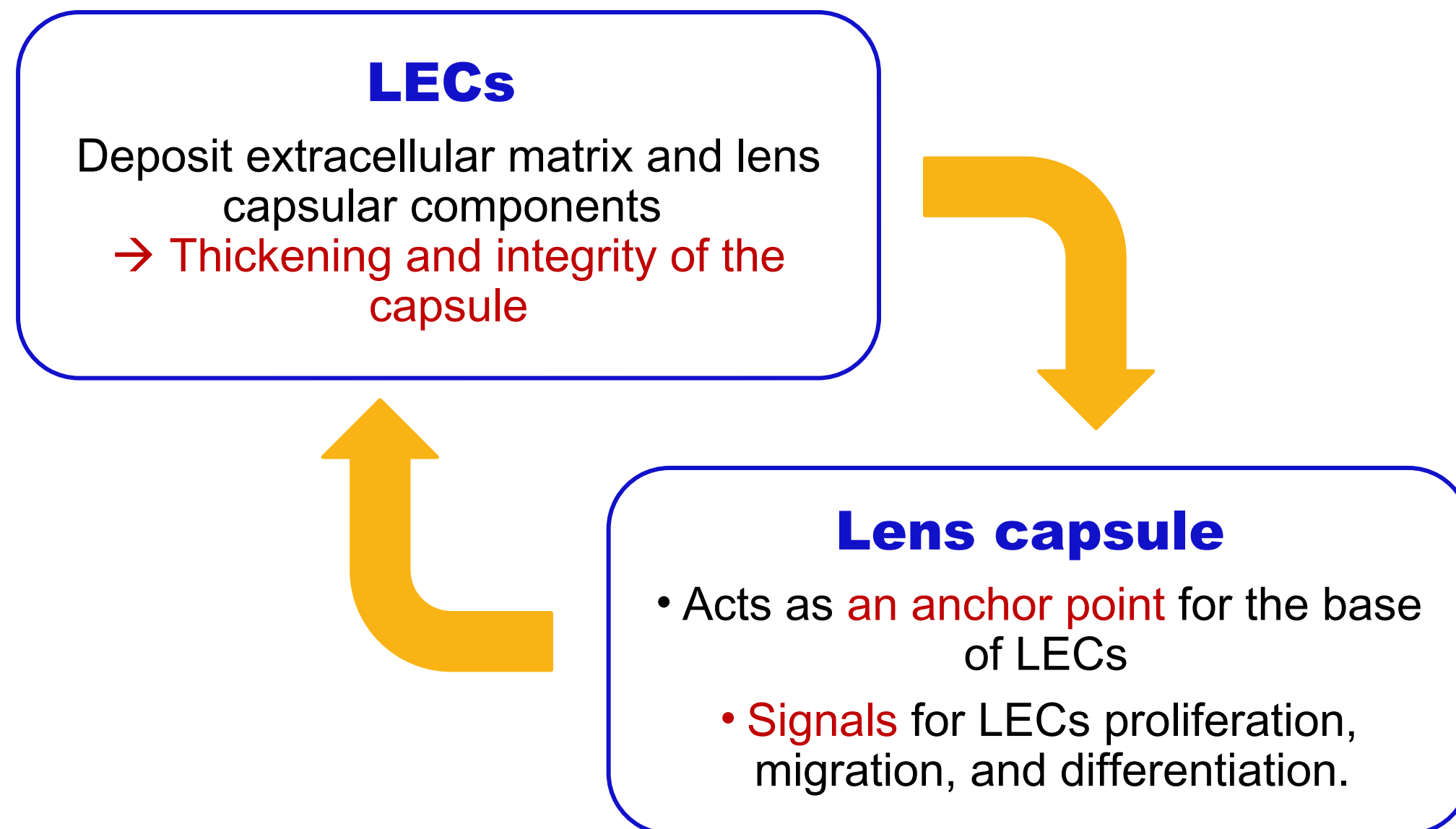
**After explanting the IOL bag complex,
they were analyzed under the
microscope.**

- Clear capsules.
- Capsular splitting (black arrow).
- LECs (lens epithelial cells) were completely absent (image A) or rare (asterisk in image B).



Normally,

Lack of PCO or capsular fibrosis = loss of all lens epithelial cells (LECs) after cataract surgery



Histopathological section showing *nucleated lens epithelium* and the *lens capsule*, stained with H&E

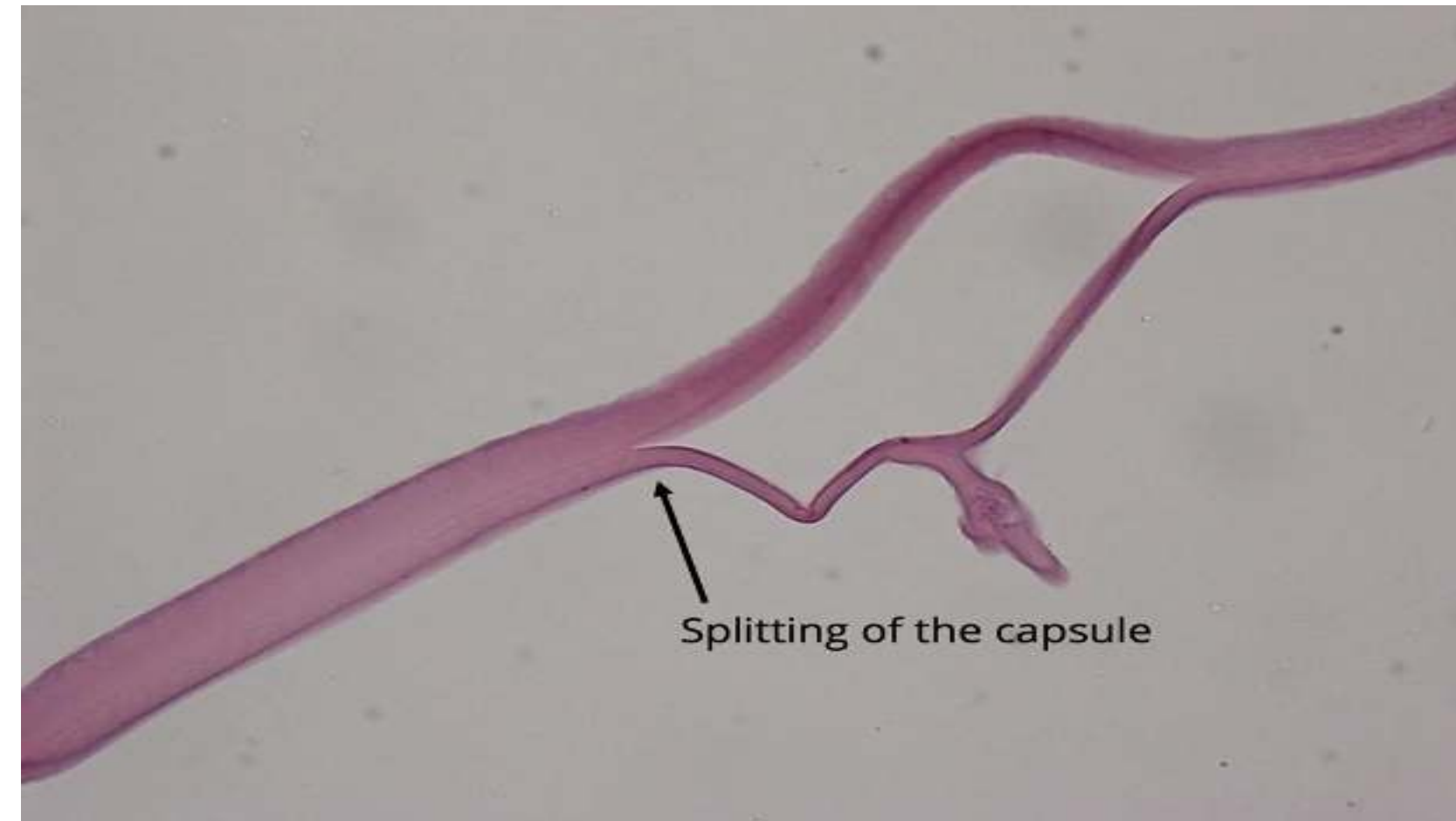
In Dead Bag Syndrome,

**LECs
are lost**



Lens capsule splitting

- Weakness of zonular attachment
- IOL dislocation



Histopathological section from a case of *suspected dead bag syndrome*, stained with H&E

In Dead Bag Syndrome, Risk Factors:

- » Young age
- » Insufficient amount of LECs from **prior capsular damage** (i.e. excessive capsular pressure in an intumescent cataract)
- » From removal of lens epithelial cells by **cleaning/polishing** the capsule during cataract surgery??
(Debatable: Polishing does NOT remove epithelial cells at the equator)



Take Home Message

- ✉ Dead bag syndrome is one of the causes of late IOL dislocation
- ✉ A clear bag +/- posterior capsular tear
- ✉ It is a recent entity with limited data
- ✉ No known cause or association with a particular IOL type
- ✉ Management is case-by-case





THANK YOU