

18th International Conference of the
Research Institute of Ophthalmology

RIO 2026

22 -23 JANUARY 2026
ROYAL MAXIM PALACE KEMPINSKI, CAIRO

Removal of Pupillary Membranes During Phacoemulsification

Hytham El-Shawaf
MD, FRCS, FICO

Research Institute of Ophthalmology
(RIO)



Introduction and Clinical Significance

- **What Are Pupillary Membranes?**

- Thin fibrotic, inflammatory, or pigment-laden membranes that restrict pupillary dilation.
- Seen in: chronic uveitis, trauma, ICE syndrome, pseudoexfoliation, post-surgical fibrosis.

- **Why They Matter in Cataract Surgery**

- **Poor dilation increases risk of:**

- Iris trauma & bleeding
- Capsulorhexis complications
- Incomplete visualization of the nucleus
- Prolonged surgical time

Evaluation

- **Clinical Evaluation**

- Examine for:
 - Degree of synechiae vs. free membrane
 - Pigmented vs. fibrotic morphology
 - Signs of chronic inflammation
- Assess iris integrity and risk of bleeding.

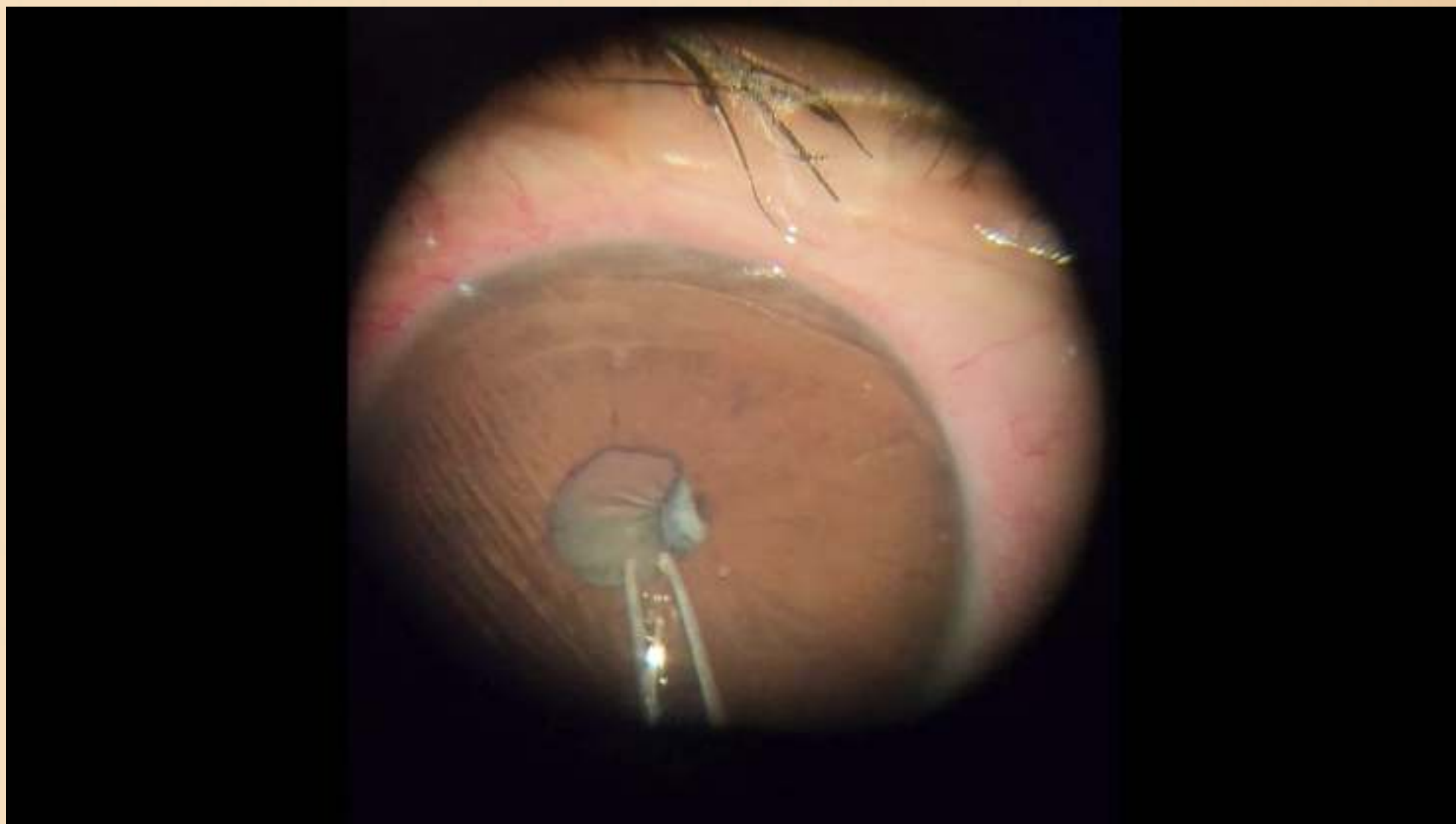
- **Diagnostic Considerations**

- Anterior segment OCT (if available) to assess adhesions.
- Evaluate risk factors (e.g., tamsulosin, diabetes, uveitis).

Intraoperative Technique: Step-by-Step

1. **Intracameral epinephrine:** may be used to further dilate synechia free areas, help in reducing bleeding.
2. **Viscoelastic :** Soft-Shell Technique protects endothelium and well forms the AC.
3. **Identifying a start point:** Using a capsule forceps grasp the membrane in front of the anterior capsule, at the pupillary margin.
4. **Peeling:** Exert a centripetal pull and when the membrane starts to separate move in circular motion.
5. **Frequent Regrasps.**
6. **Adding OVD as needed to maintain adequate AC Depth.**
7. **Retrieve the membrane.**





RIO 2026

Postoperative Care

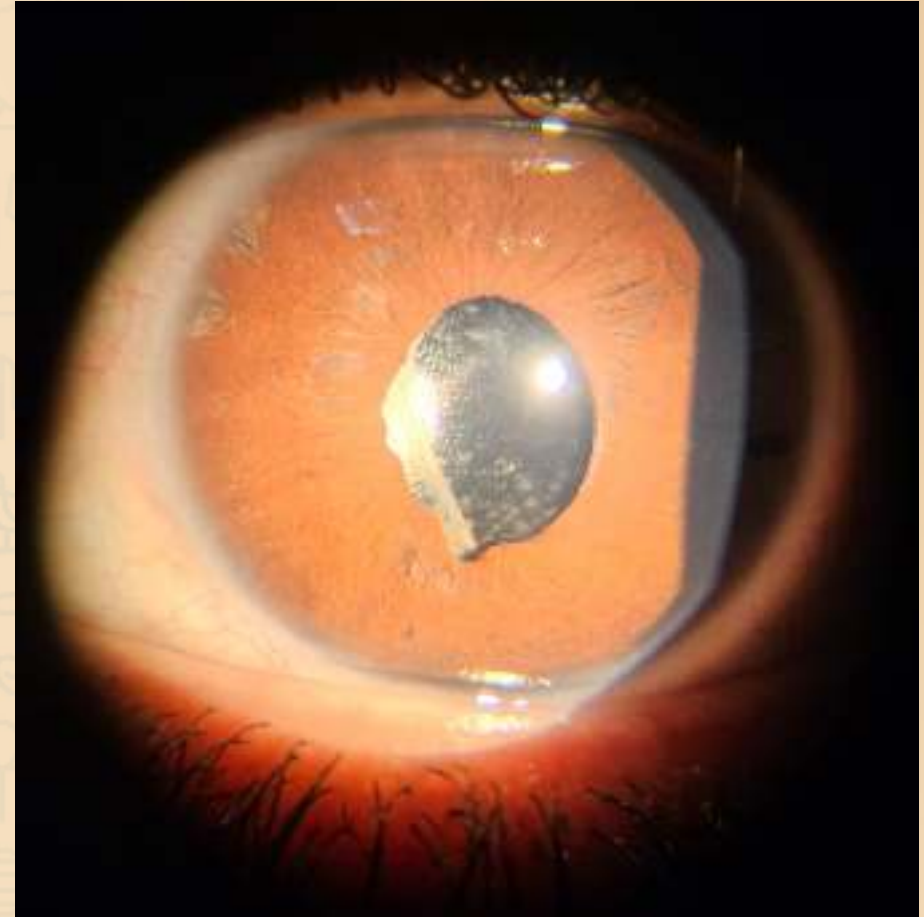
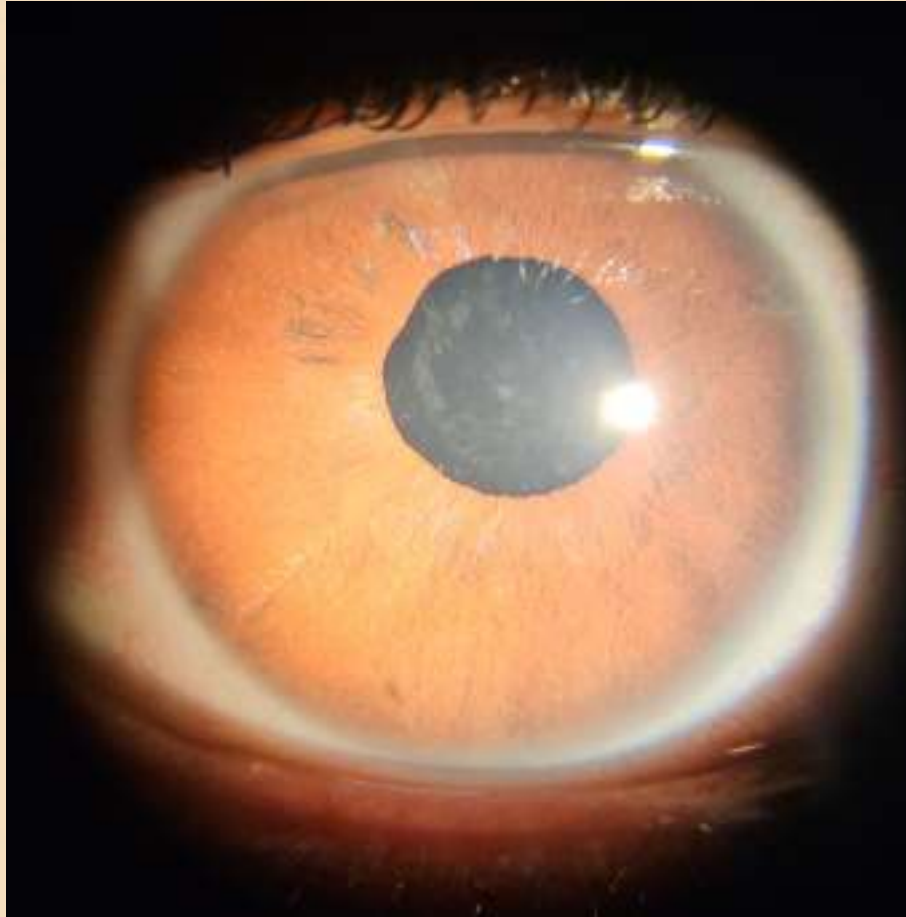
Essential Steps

- Monitor closely for:
 - Postoperative Inflammation
 - Use intensive steroid regimen
 - Consider NSAIDs
 - In uveitis: may require perioperative systemic therapy
 - CME (cystoid macular edema)
 - IOP spikes

Adjunctive Measures

- Subconjunctival steroid injection if needed
- Cycloplegics

Peeling vs Mini-Sphincterotomies





Thank You !

RIO 2026