

# PHACOEMULSIFICATION WITH CAPSULAR SUPPORT IN CATARACT WITH MILD PHACODONESIS



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THERE IS NO CONFLICT OF INTEREST



# ABSTRACT

**PURPOSE:** Phacoemulsification is a widely utilized surgical technique for cataract removal. Cases involving mild phacodonesis (e.g. in pseudoexfoliation) and poor mydriasis present particular challenges for the ophthalmic surgeon. To improve surgical stability and outcome, iris retention hooks are used for capsular support in the Ophthalmology Clinic of G.H.T. G. Papanikolaou.

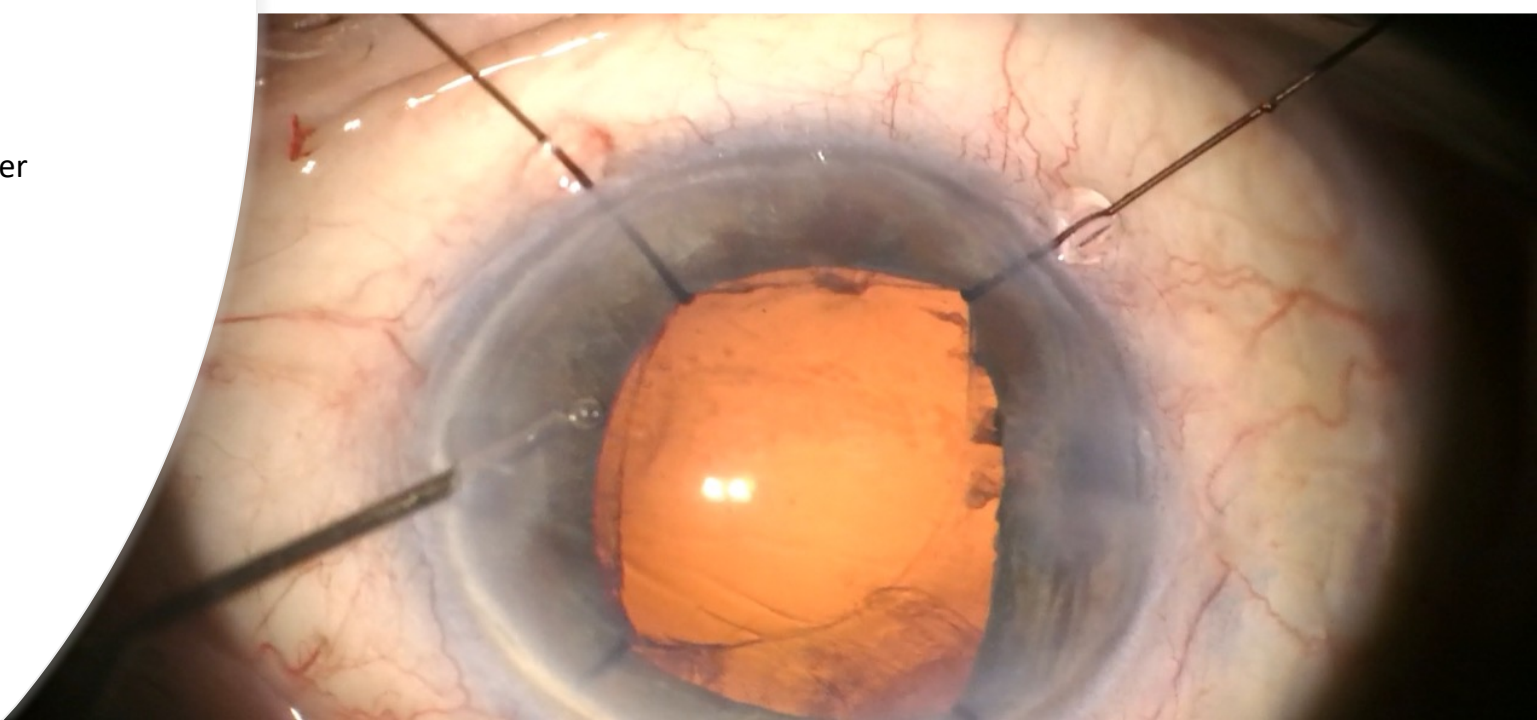
**METHODS:** After careful capsulorhexis, iris retention hooks are inserted at the 4 o'clock and 8 o'clock positions to provide capsular support. In some cases, additional support hooks may be utilized.

**RESULTS:** The capsular support ensures stability of the lens capsule during phacoemulsification as well as stable mydriasis, facilitating surgery by reducing risk of complications and duration of procedure.

**CONCLUSIONS:** Capsular support is an immediate need in cases involving unstable zonules and mild phacodonesis.

# METHODS

- Continuous curvilinear capsulorhexis (CCC) performed under viscoelastic
- Two iris retention hooks inserted at 4 o'clock and 8 o'clock positions supporting the capsular bag
- Additional hooks placed if needed for better stability
- Hydrodissection and hydrodelineation done to free lens matter
- Phacoemulsification
- Cortical cleanup performed with irrigation/aspiration
- Foldable intraocular lens implanted in capsular bag
- Viscoelastic removed, hooks withdrawn
- Wound hydrated and checked for leakage



# RESULTS

- The capsular support hooks provided scaffolding that allowed **safe rotation of nucleus during segmentation and phacoemulsification**
- **Zonular stress and collapse of anterior chamber depth** was prevented
- There was markedly **reduced tendency** for the iris to prolapse and pupil to constrict during cortex removal
- **Well-centered and stable capsular bag** intraocular lens placement achieved
- Use of additional hooks did not cause injury to iris tissue or vitreous face
- Surgery was facilitated with **faster phaco times** and **reduced overall complications**



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## CONCLUSION

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Capsular support meets  
immediate need in **unstable  
zonular and phacodonesis cases**

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**Iris retention hooks are an  
effective solution for support**



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