

Phaco-vitrectomy Why, how & when

By

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- * A clear intraop. view of the fundus is critical to performance of efficient & complication free vitroretinal surgery.
- * Circumstances can arise intraop. that may obscure the surgeon's view inside the eye.
- * Some of these situations can be accounted during preop. Planning such as combining cataract with vit. surgery.

WHY & HOW TO DO

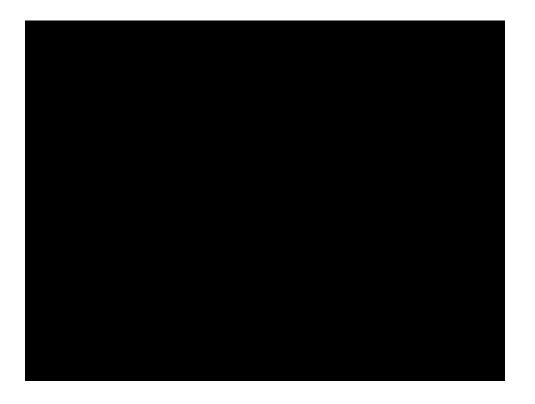
- 1- A combined phaco-vit. has dual benefits for the patient:
- * Better postop. Visual results without waiting for further surgery
 - * Reduced total cost.
- 2- It reduces patient frustration with cataract progression postop, that may decrease V.A.
- 3- It also avoids the risk of iatrogenic trauma to the lens during ext. vit.
- 4- A delayed phaco after vit. may also carry higher risk for complications as capsular tear, nucleus dislocation & zonular laxity.





WHEN WE DO

- * Significant cataract , the decision is fairly straightforward.
- * Minimal or no cataract, the decision has to be taken considering several factors:
 - Patient age
 - Vitreoretinal pathology
 - Need for foreseeable future procedures



Pathophysiology

- 1- Cataract that are not visually significant preop. sometimes progress intraop. with longer procedure times & increased exposure to fluid turnover & osmolarity gradient.
- 2- Diabetic patients are at higher risk for these changes.
- **3** Trauma to the lens intraop. can lead to decreased surgeon view.
- 4- Recent studies indicate removal of the vitreous lead to increased oxygen tension within the eye -----oxidation of the lens fibers & progression of nuclear sclerotic cataract.





Dissadvantges of Phaco-Vit.

- 1- Decreased accuracy of IOL power calculation as in RD & Vitromac. Tr.
- **2-** More postop. Inflam. with higher rate of P.C.O. esp. Diabetics.
- 3- Pupillary capture & IOL malposition may occur.
- **4-Pupillary miosis & corneal edema** intraoperatively.



CONCLUSION

- * Optimal anterior segment status facilitates efficient vitreous surgery.
- * The vitreoretinal surgeon should be able to overcome issues that could compromise retinal surgery & create the best possible conditions for the likehood of achieving the surgical goal.

