

## **RPE protection from IFCG staining**

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### **Purpose:**

Aim of this presentation is to show the usefulness and the effectiveness of the employment of TA and PFCL in protecting EPR and Müller cells in the macular hole level, during the staining phase by IFCG for the removal of MLI in macular hole surgery.

### **Methods:**

At the end of TA vvpp and after extirpation of posterior hyaloide we inject a reasonable amount of TA on the retinic surface by the macular hole, to protect EPR. Staining with IFCG and removal of MLI follow. Finally, silicone tamponade. 1) PFCL bubble (a small one, paying attention to maintain firm the globe). 2) Plenty of TA; everything has removed except on the bundle interpapillo-macular macula level and on the papillary level.

### **Results:**

TA removal from the macular hole doesn't highlight the colouring of RPE. It appears already completely protected from the TA store which flows in the hole. The same effect has obtained by a little PFCL bubble.

### **Conclusion:**

Nothing is more effective than IFCG in highlighting and removing MLI. Many studies seem to prove by now that combination of endovitreous IFCG and endolighting in MLI peeling is toxic, both for EPR and for Müller gangliar cells stratum. Use of TA to protect the macular hole, combined with a temporary suspension of illumination, preserves these structures from damages resulting from exposition to IFCG during that surgery time. Small PFCL bubble acts blocking the way, thanks to the PFCL hydrophily, gaining the protection from the contact with EPR.

### **Take-home message:**

TA and PFCL operate as a real "plug" which bar the contact between RPE and IFCG, making use of the advantages of the last.