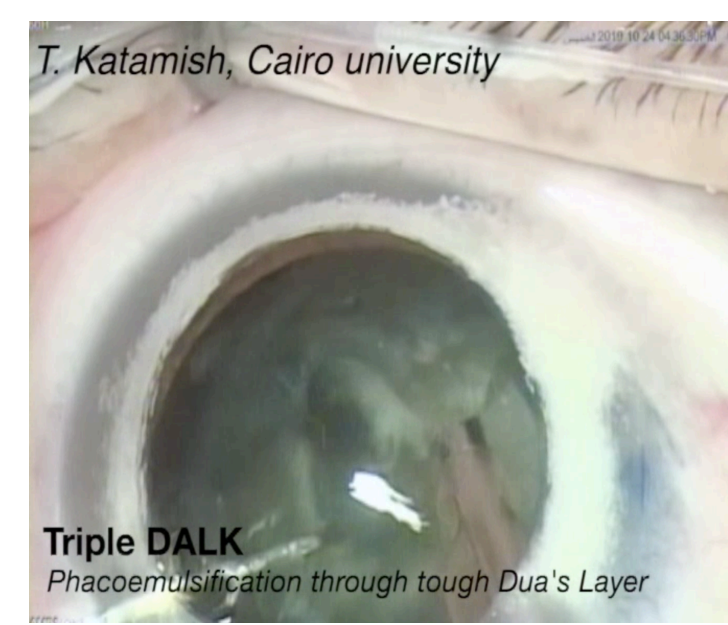
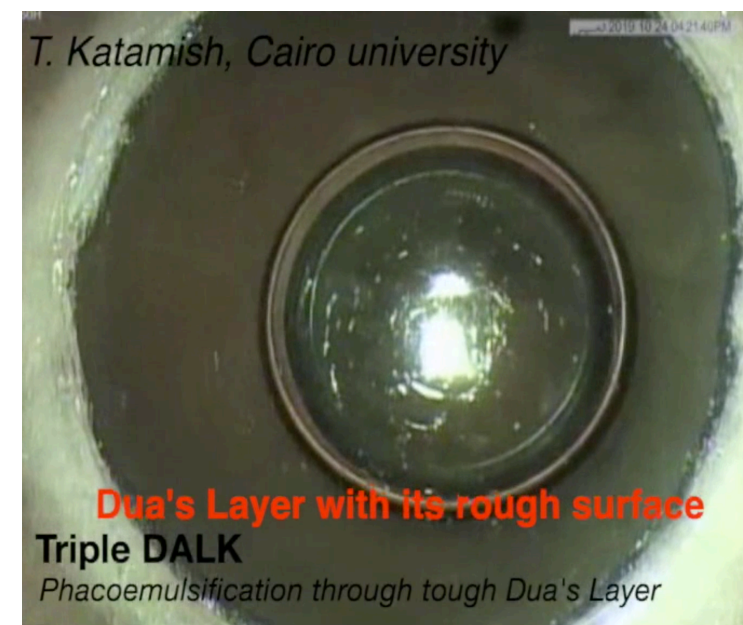


# Phacoemulsification through the tough Dua's Layer in BB DALK, A thrilling experience



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Cairo University  
**2020**



# Types of Big Bubbles

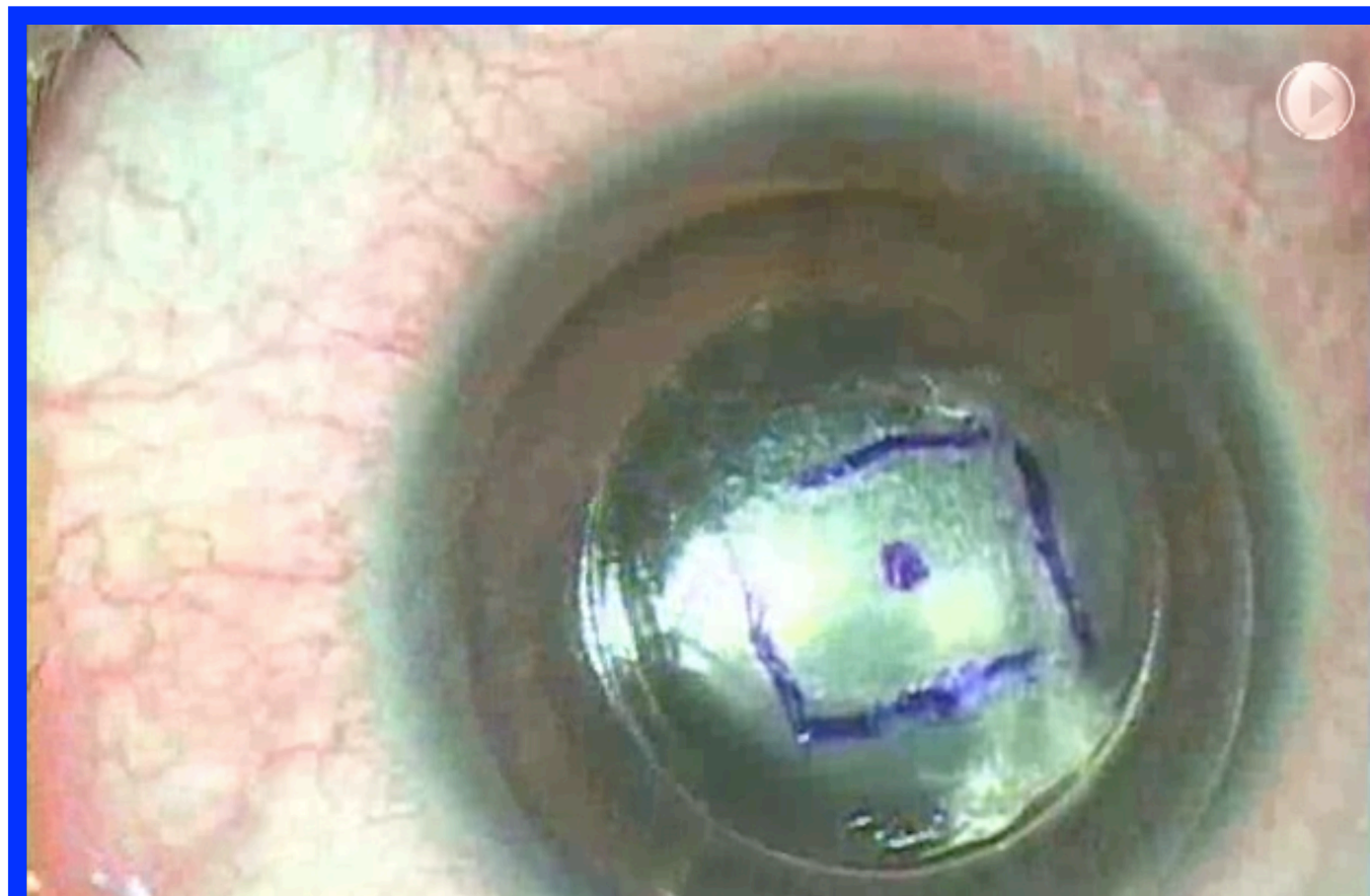
(according to Dua's Layer)

**TYPE 1 BB**



*Characteristic White edge*

**TYPE 2 BB**



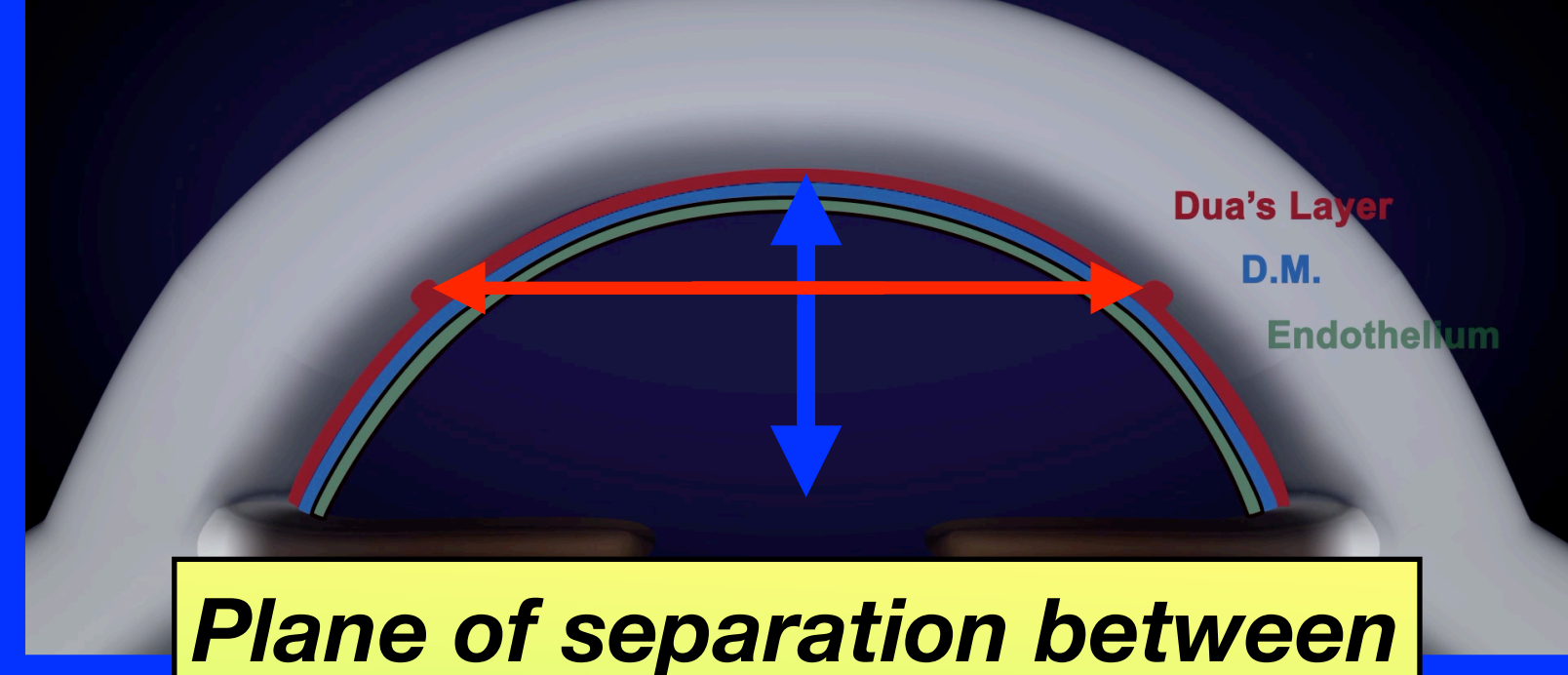
*Characteristic Clear edge*



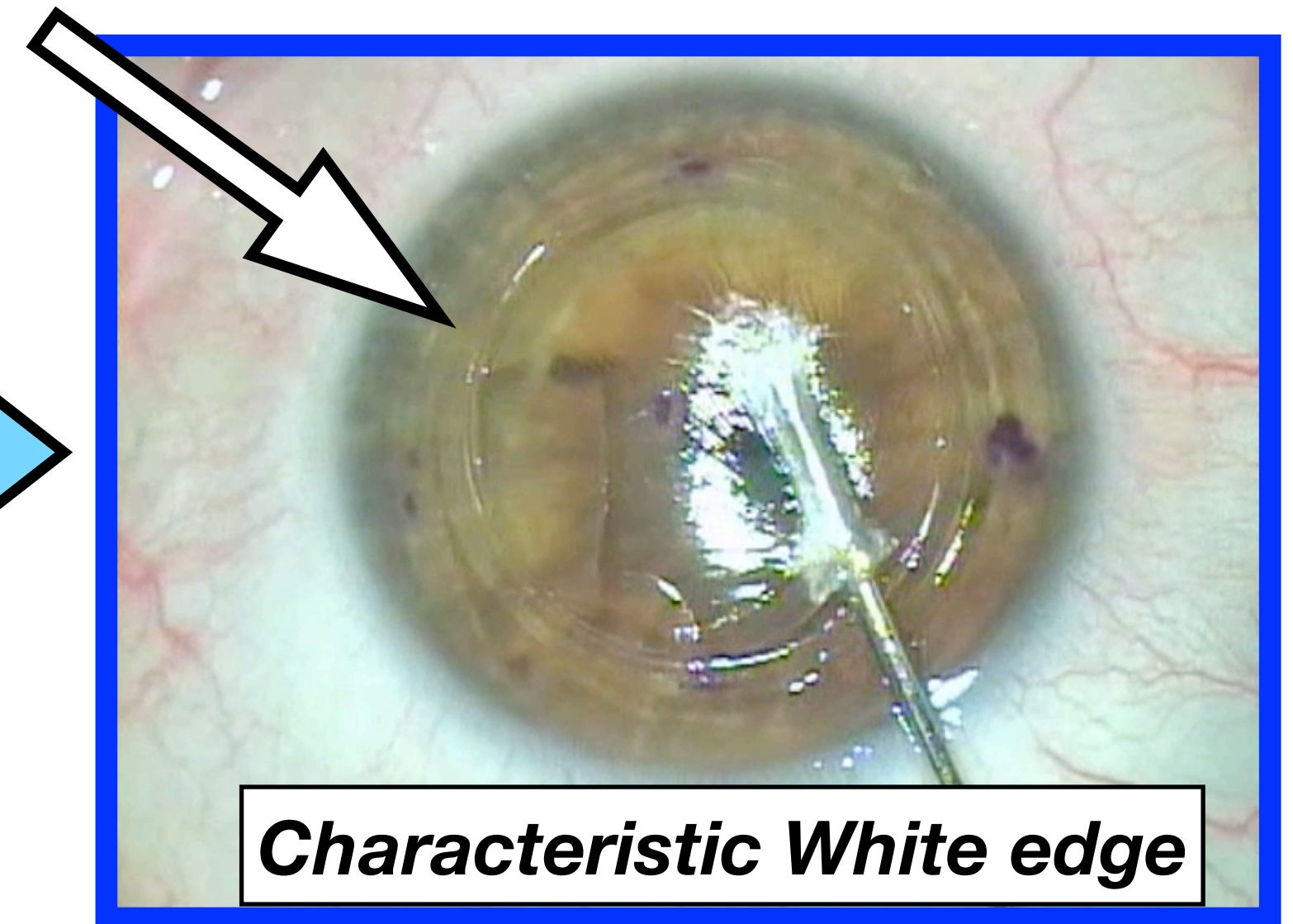
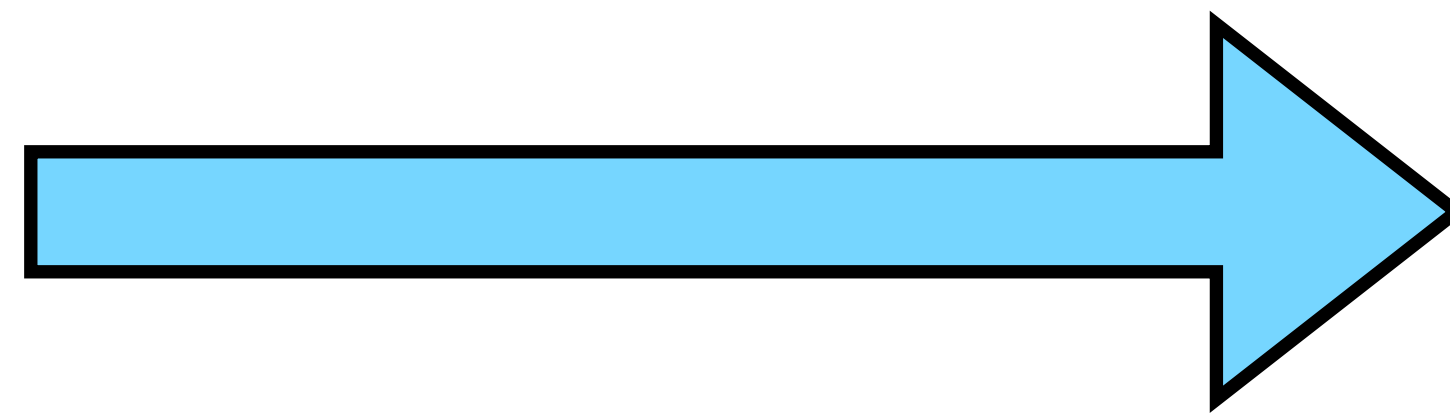


# TYPE 1 BIG BUBBLE

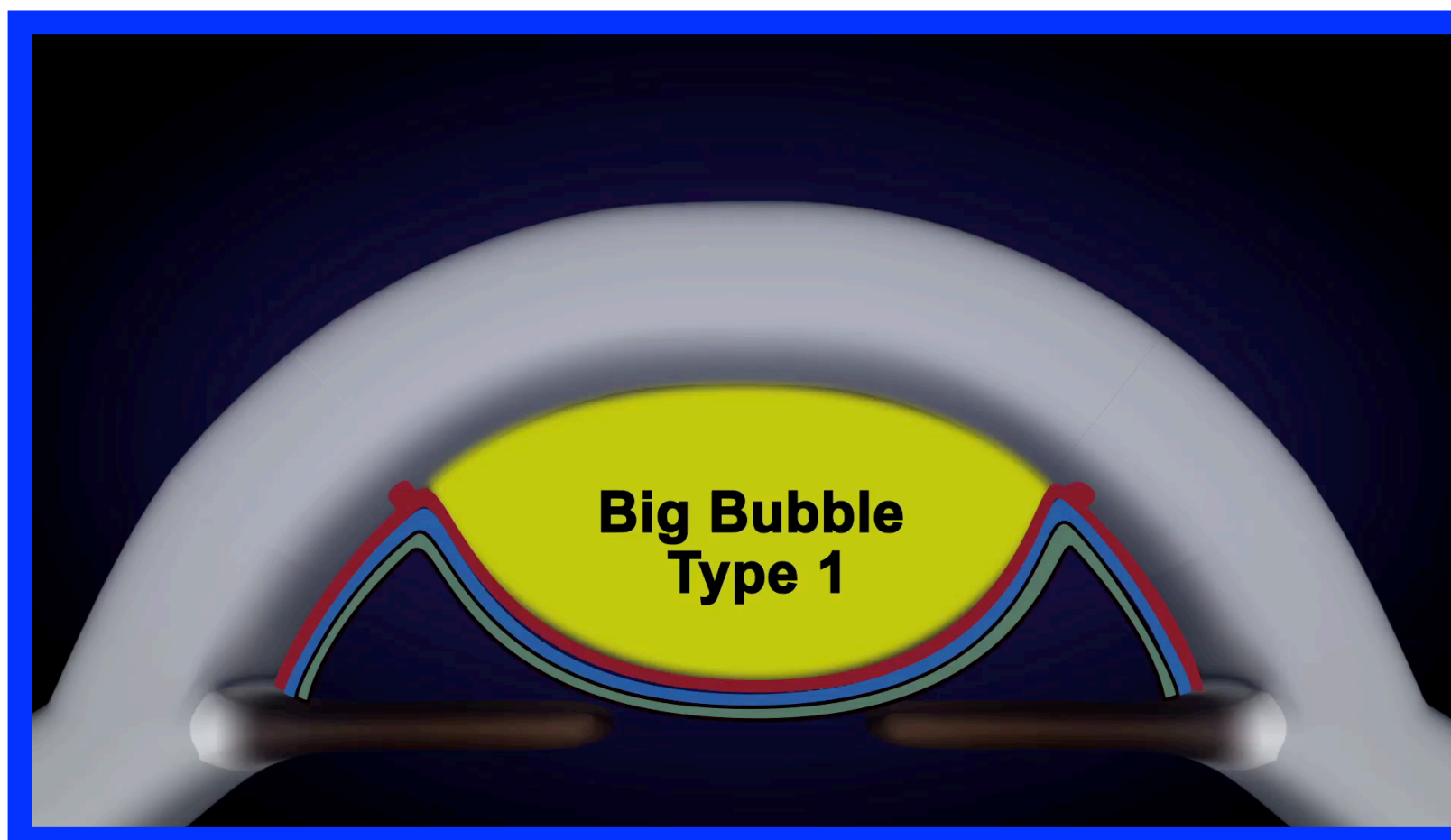
*Starts from center to periphery  
Maximum diameter **8.5 mm***



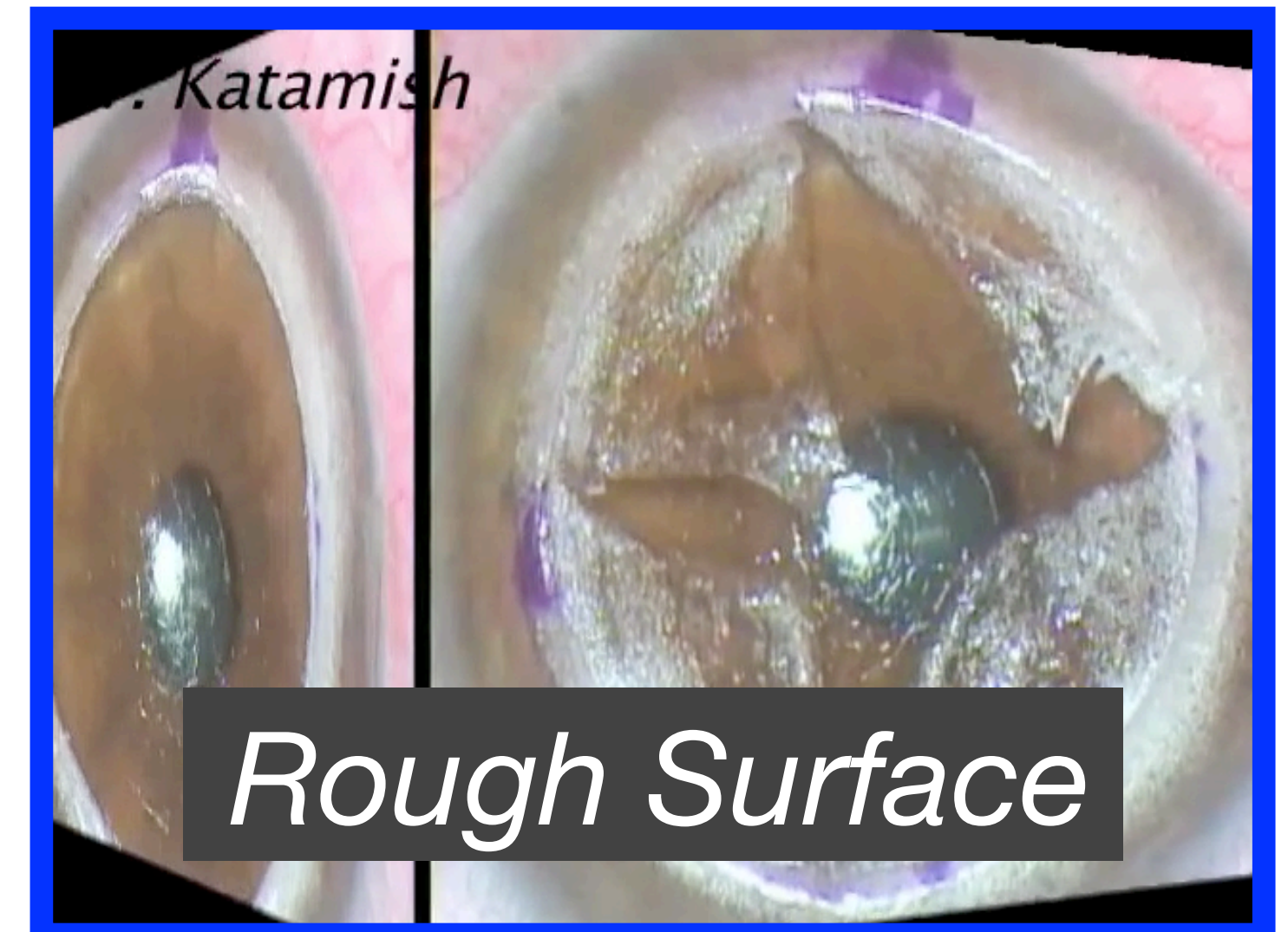
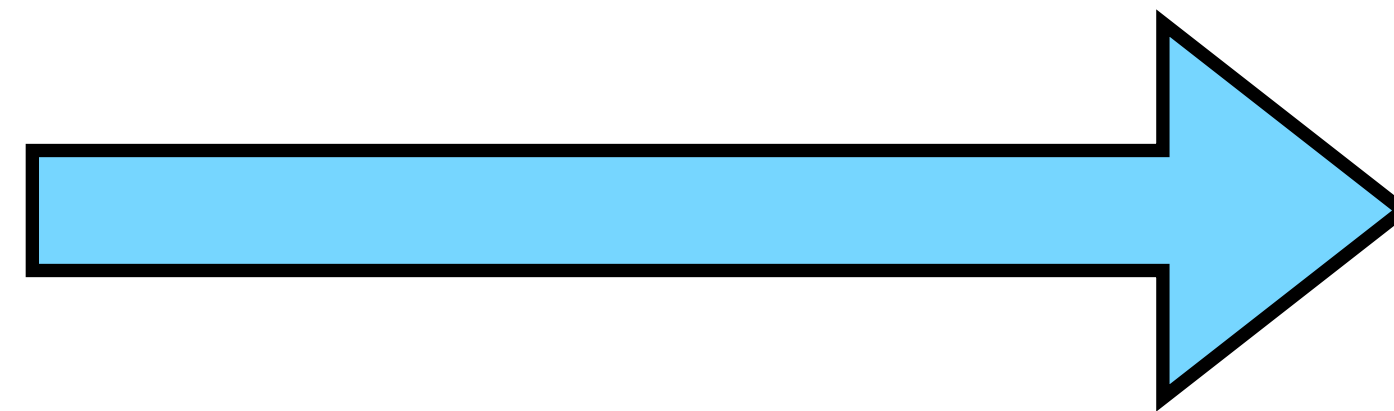
*Plane of separation between  
Stroma & Dua's Layer*



*Characteristic White edge*



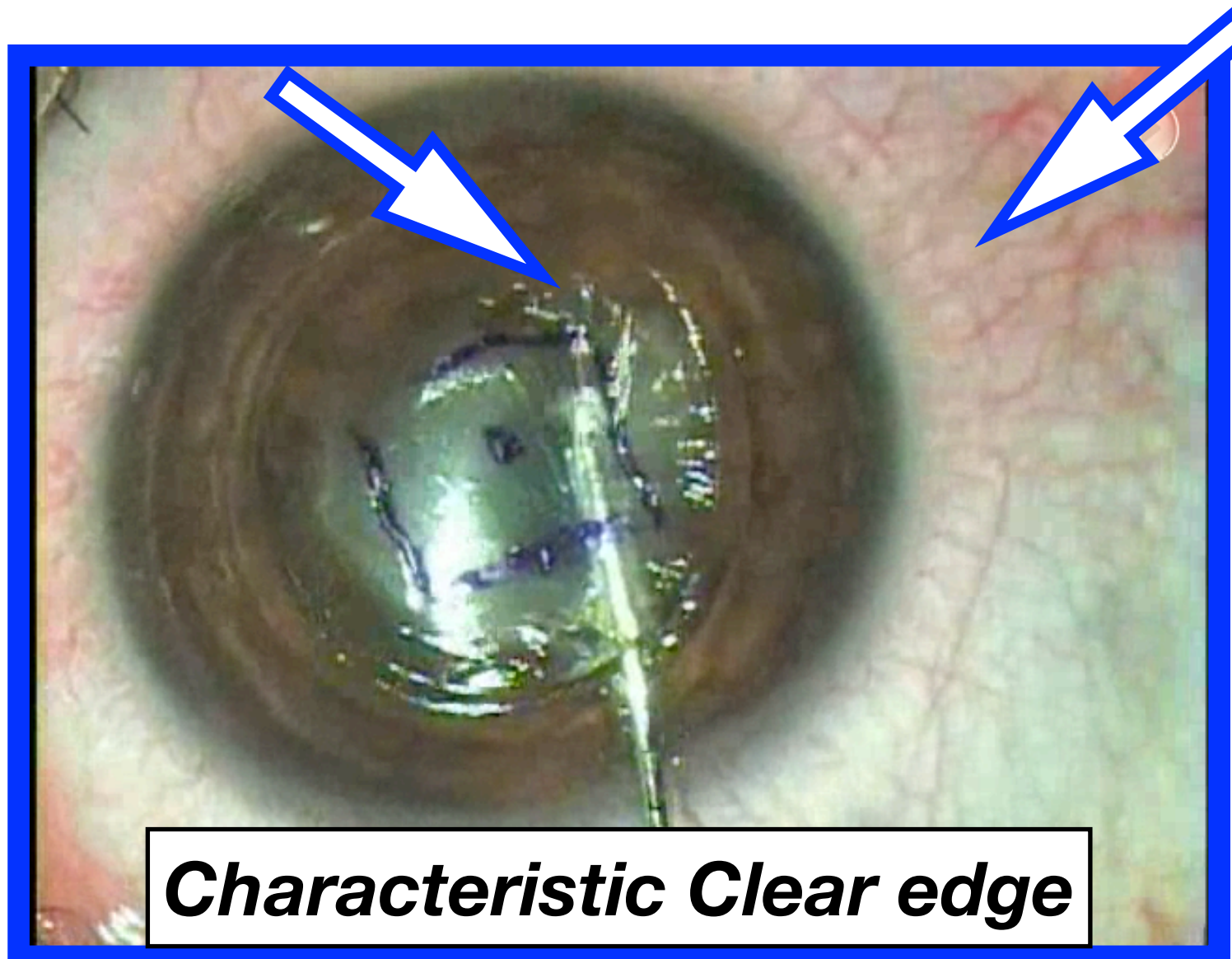
**Big Bubble  
Type 1**



*Rough Surface*



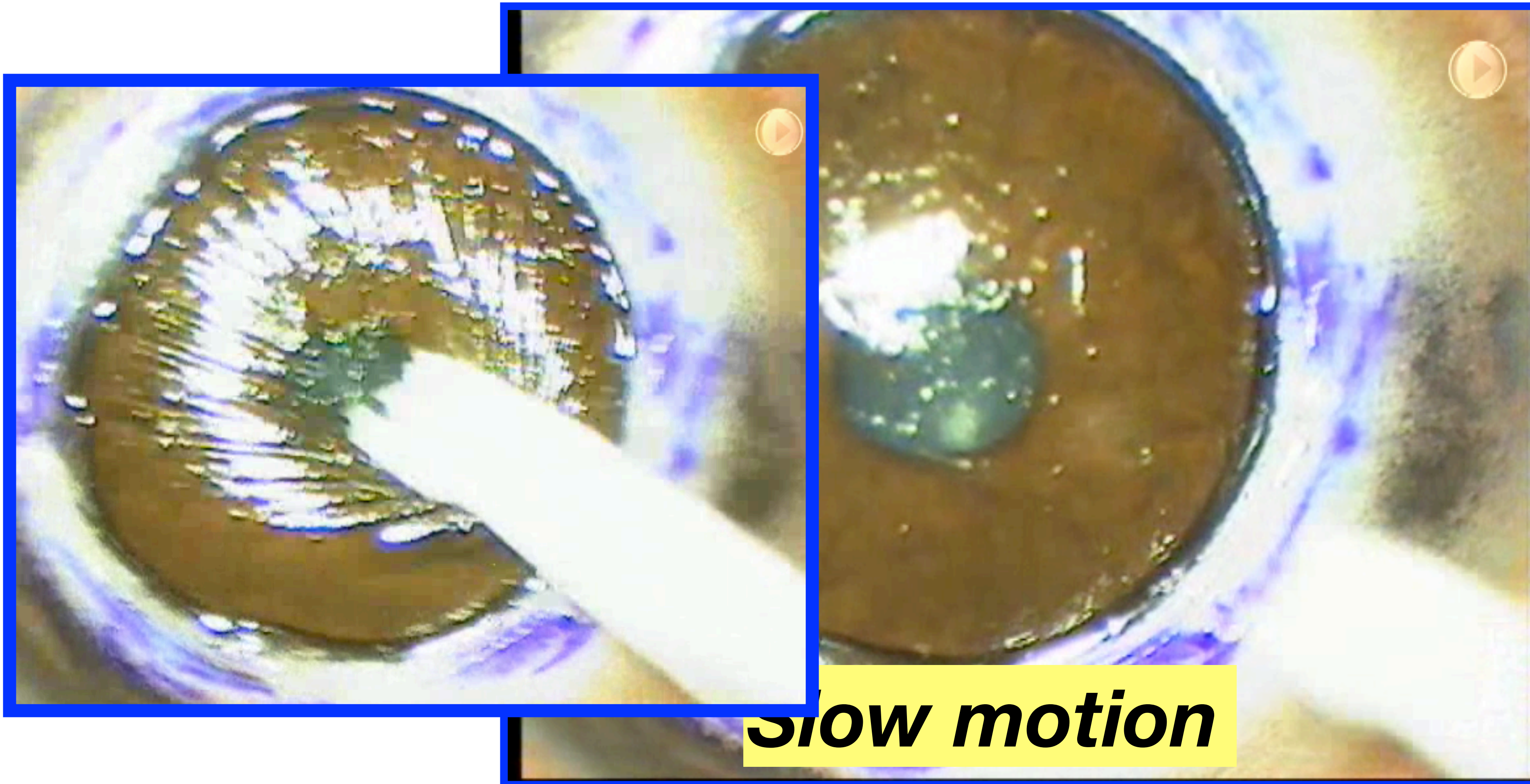
# **TYPE 2 BIG BUBBLE (Pre-Descematic)**





# Type **1** Big bubble

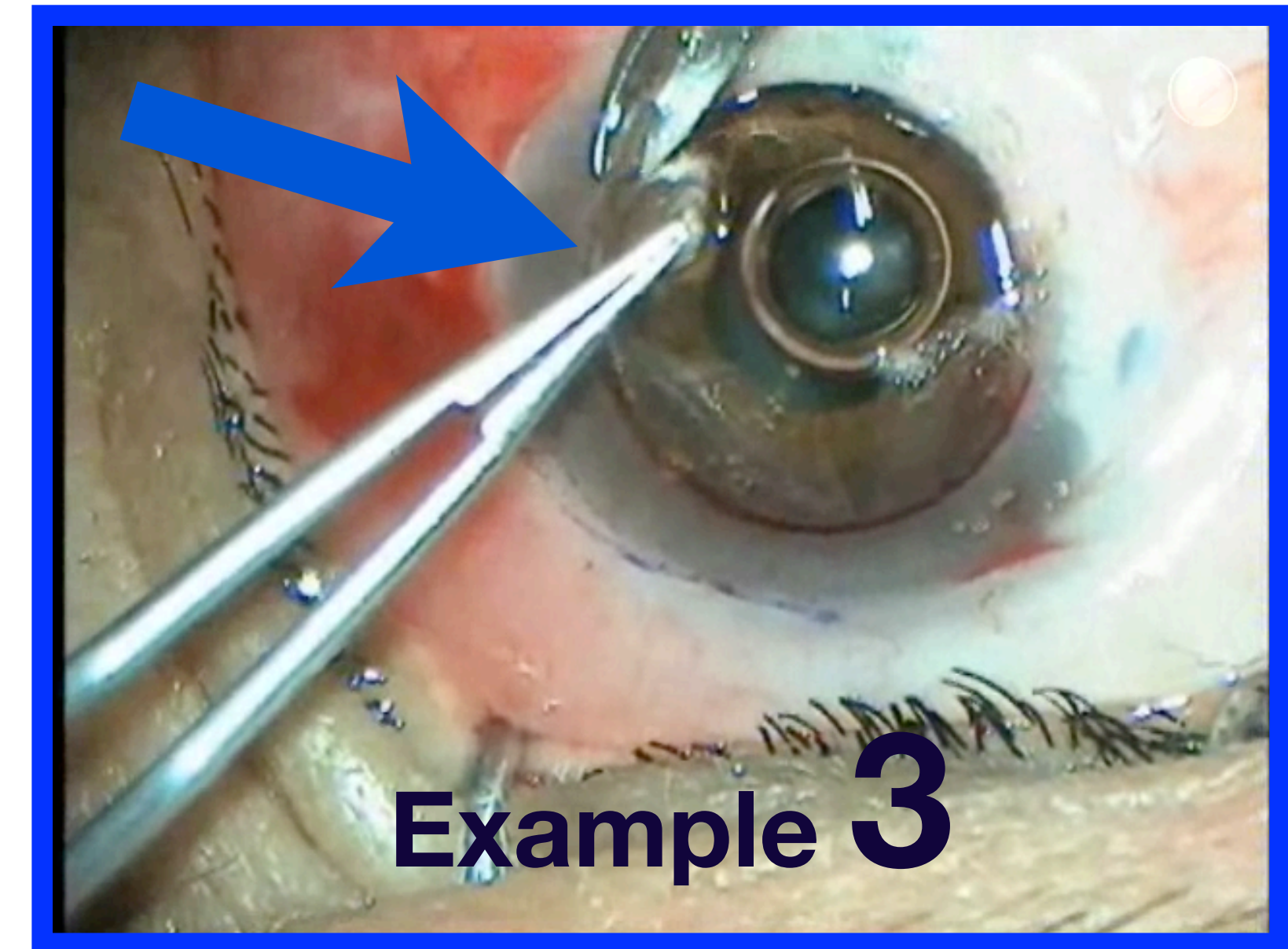
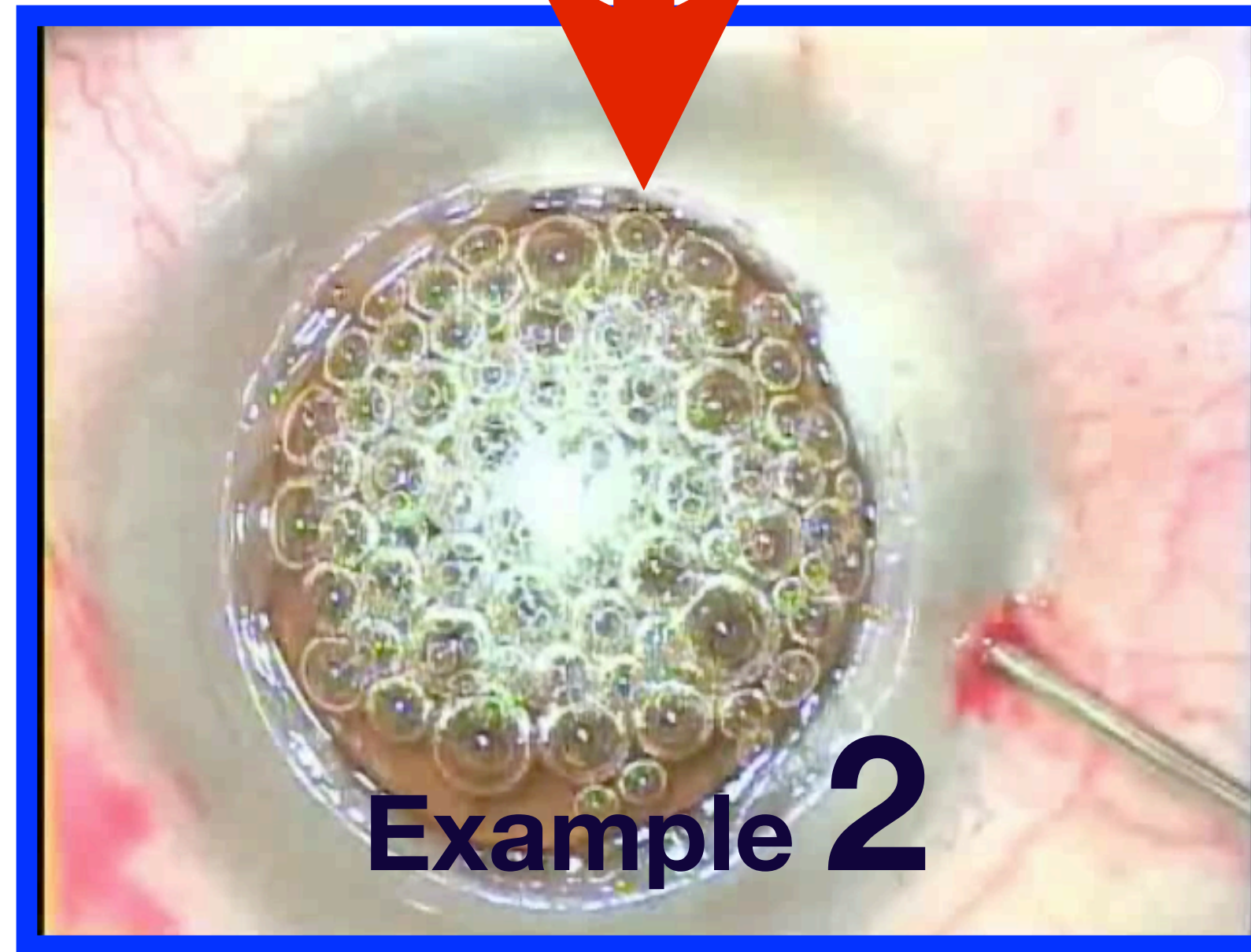
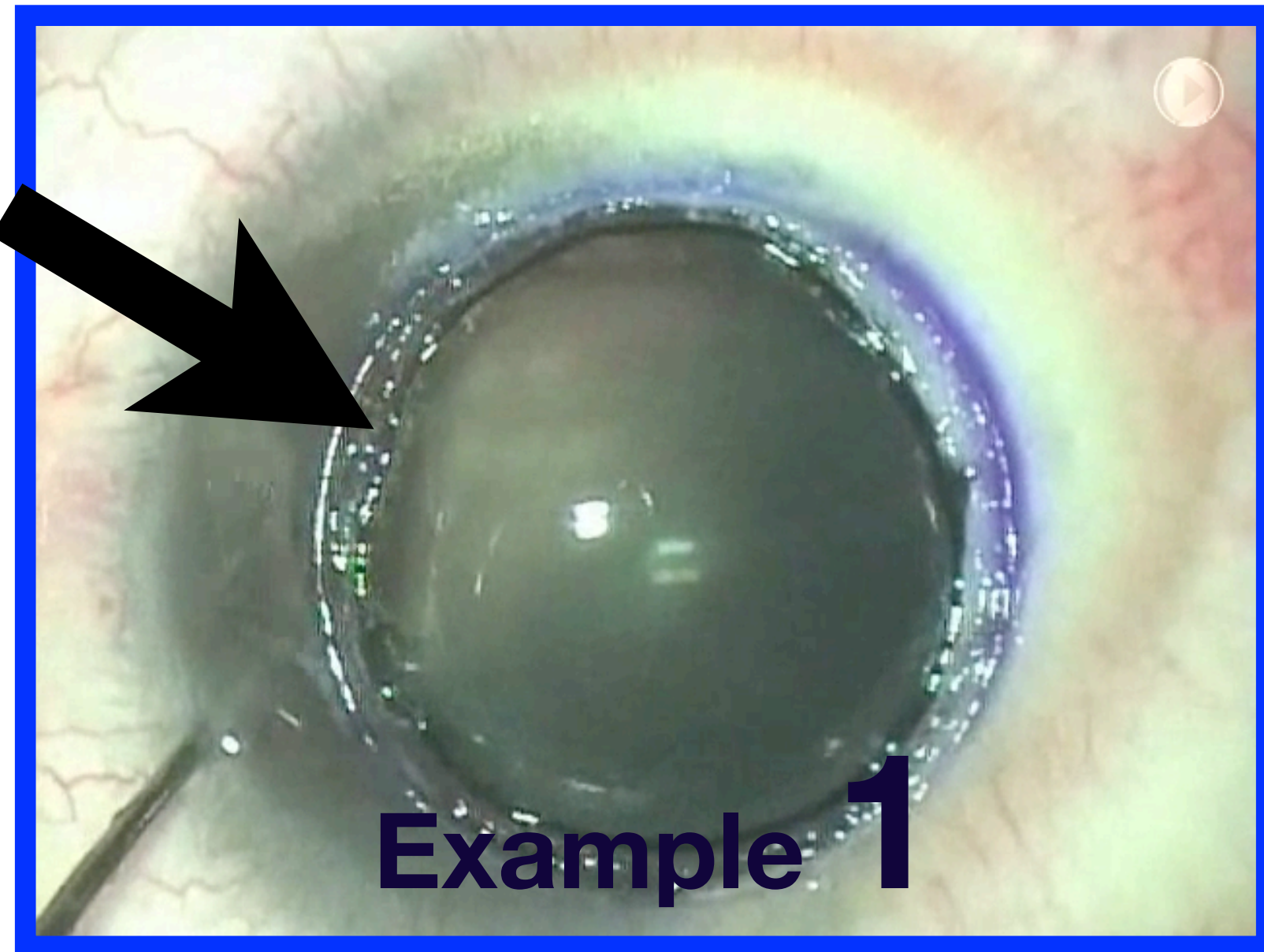
***Very strong Dua's layer***





# Type 2 Big bubble

Very fragile (Rupture D.M.)



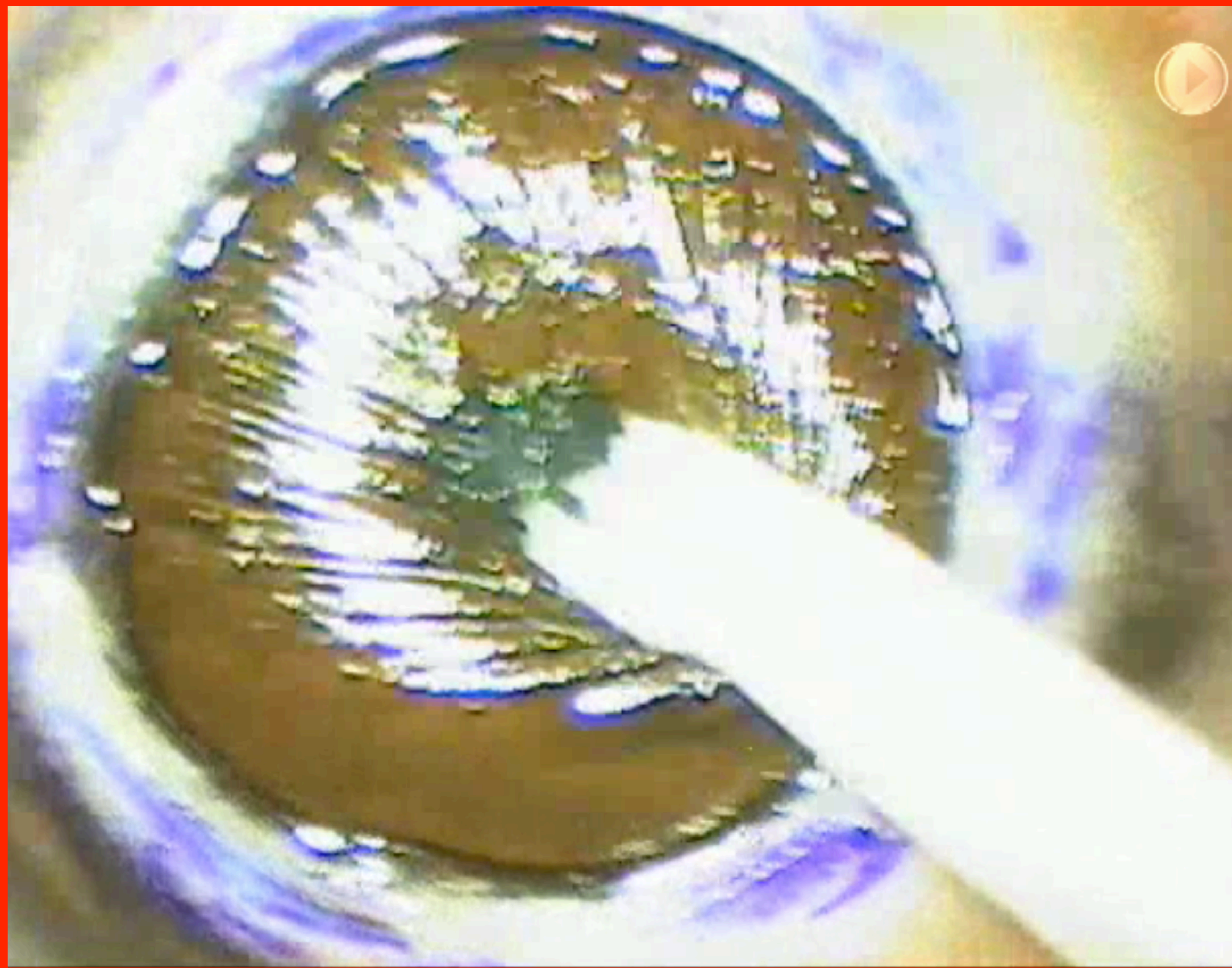


# Case

- 60 years old male patient**
- Single eyed**
- Advanced keratoconus with Nuclear +++ cataract**
- Very sunken globe**
- Very narrow palpebral fissure**

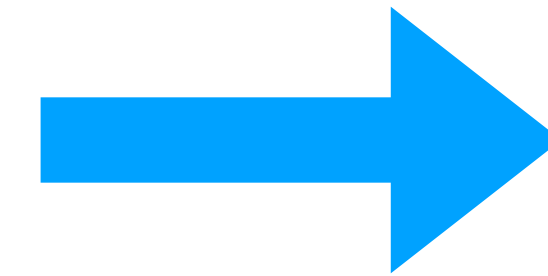


# Treatment Options



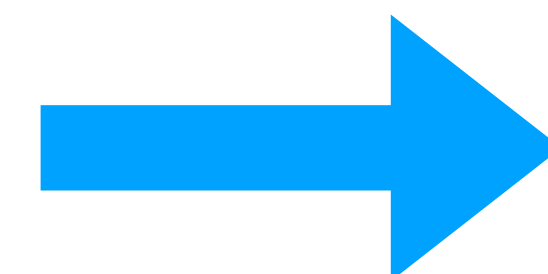
## Simultaneous approach

**DALK**



**Phaco**  
(Dua's)

**Phaco**



**DALK**



# Difficulties

**1- Very sunken globe**

**2- Very narrow palpebral fissure**

**3- DM & Dua layer perforation**

**4- Jet like stream of BSS (visibility)**

**5- Awkward position of IOL**

**6- Post-operative double A. C.**

**Stress of working through DM & Dua's**





**Thank You**