#### No Trouble With The Bubble

Ahmed Sherif ,MD
Associate Professor of Ophthalmology
Cairo University



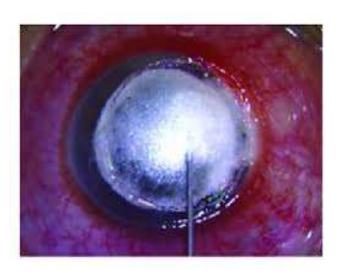
### **Advantages of DALK**

- Preserves host endothelium → no rejection
- Extra-ocular procedure → no bleeding no endophthalmitis, no cataract..
- Does not need high quality donor tissue
- One Graft for 2 patients: DALK+ DMEK

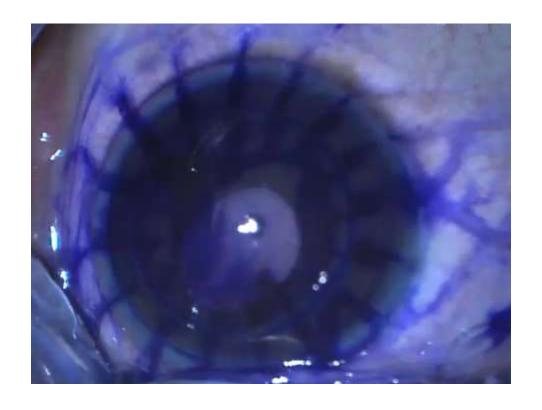
# Why do we fear DALK?

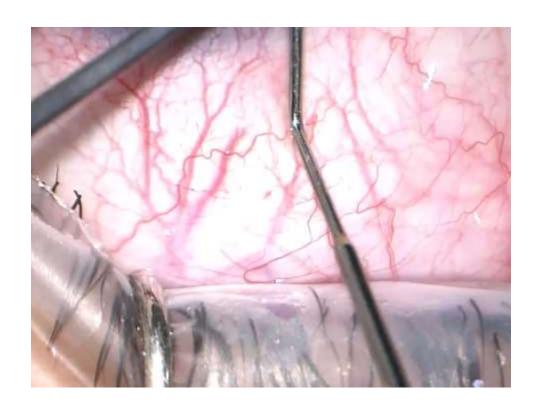
- Difficult technique with steep learning curve.
- Not all cases are suitable candidates
- Unfamiliarity with management of its complication.
- Fear of graft failure \$\$\$

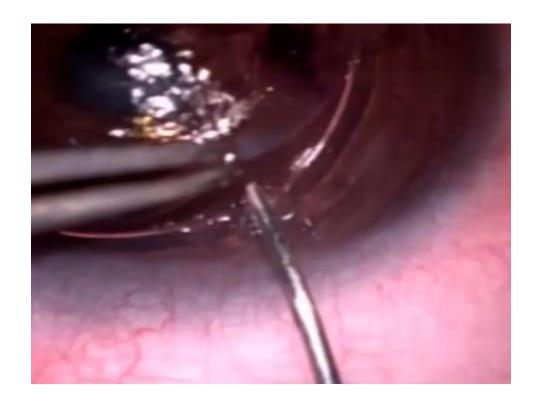
# **Getting the Big Bubble**

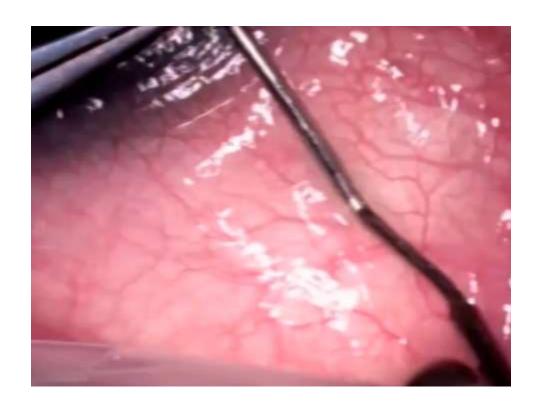




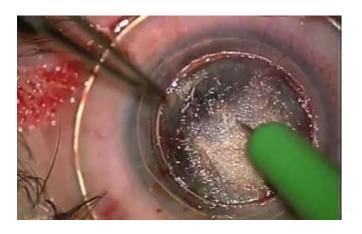




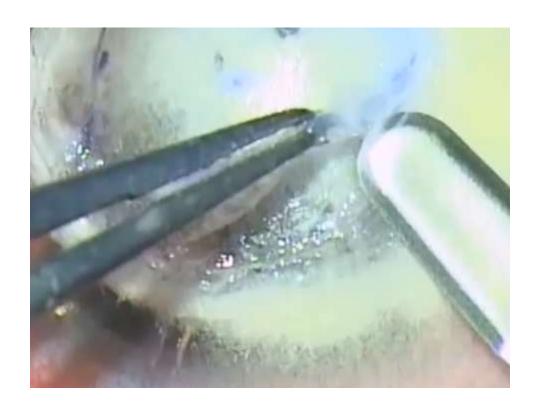


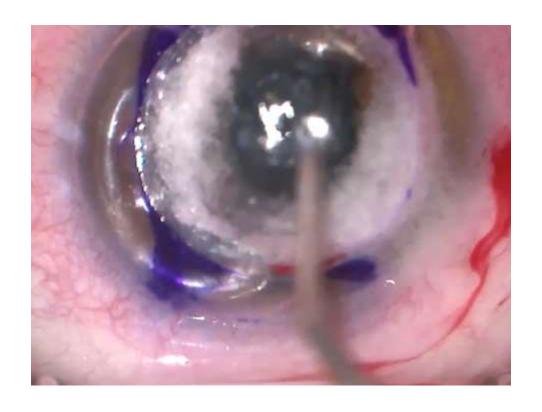


**Deroofing the Big Bubble** 



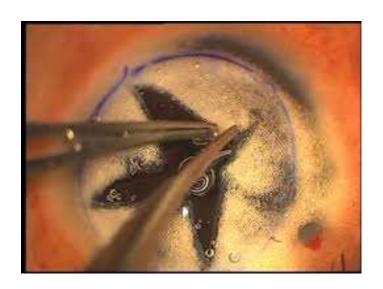


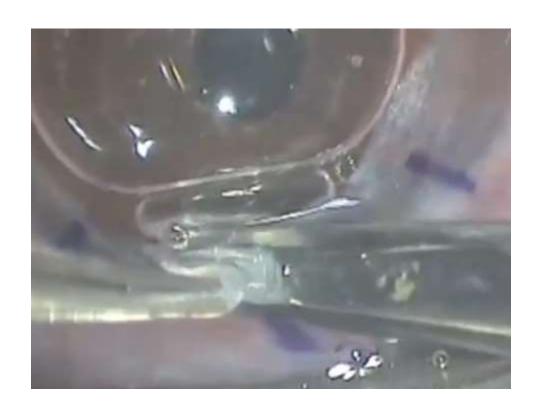




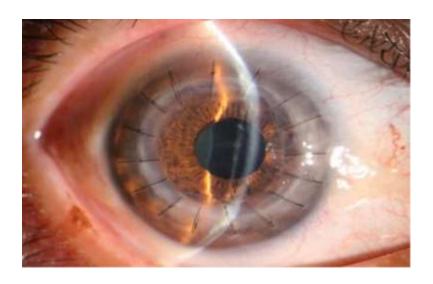


# **Stromal resection**





#### **Double AC after DALK**



#### **Double AC after DALK**

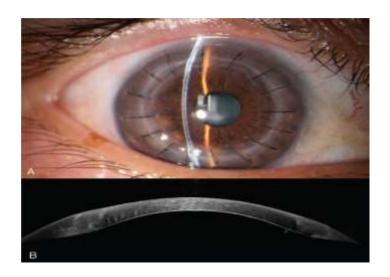
- Due to micro- or macro-perforation of DM during surgery
- Could be due to aqueous misdirection
- Could be due to viable donor endothelium

#### What to Do?

- Re-bubble with air or gas?
- PKP?
- Refer to another specialist?
- Observe?

# Spontaneous resolution of Double AC after DALK

- Spontaneous reattachment of Descemet membrane detachment after deep anterior lamellar keratoplasty: A case report.Lin X, Wu Y, Fu Y, Dai Q.Medicine (Baltimore). 2018 Feb; 97(8):e0032.
- Spontaneous Descemet membrane tear after uneventful bigbubble Deep Anterior Lamellar Keratoplasty. Romano V, Steger B, Kaye SB. Cornea. 2015 Apr; 34(4):479-81.
- Spontaneous resolution of descemet membrane detachment after deep anterior lamellar keratoplasty. Tu KL, Ibrahim M, Kaye SB. Cornea. 2006 Jan; 25(1):104-6.



### Take home message

- You have to start sometime!!
- Practice the steps in planned PKP cases
- Trephine to 50-60 % depth
- Needle does not have to reach the corneal center
- If no BB from 1<sup>st</sup> injection → repeat several times
- If no bubble → lamellar dissection

## Take home message

- · Consider keratome for deroofing
- If microperforation → continue with caution
- If double AC → Don`t panic
- Many DM detachments resolve spontaneously

# Thank you

