

المؤتمر السنوي الدولي للجمعية الرمدية المصرية

INTERNATIONAL CONGRESS OF THE

EGYPTIAN OPHTHALMOLOGICAL SOCIETY

EOS 2023

LIQUID-BUBBLE TECHNIQUE

**for DMEK graft preparation;
A rapid & reliable technique**

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Cairo University



Tear-free preparation of the delicate DM remains a critical step

Having to prepare and transplant
a delicate 8–10- μm -thin membrane and the
adjacent endothelial cell layer,

transplant survival greatly depends on the
skill of the surgeon while manipulating the
tissue.



The ideal preparation Technique

Tissue opening with

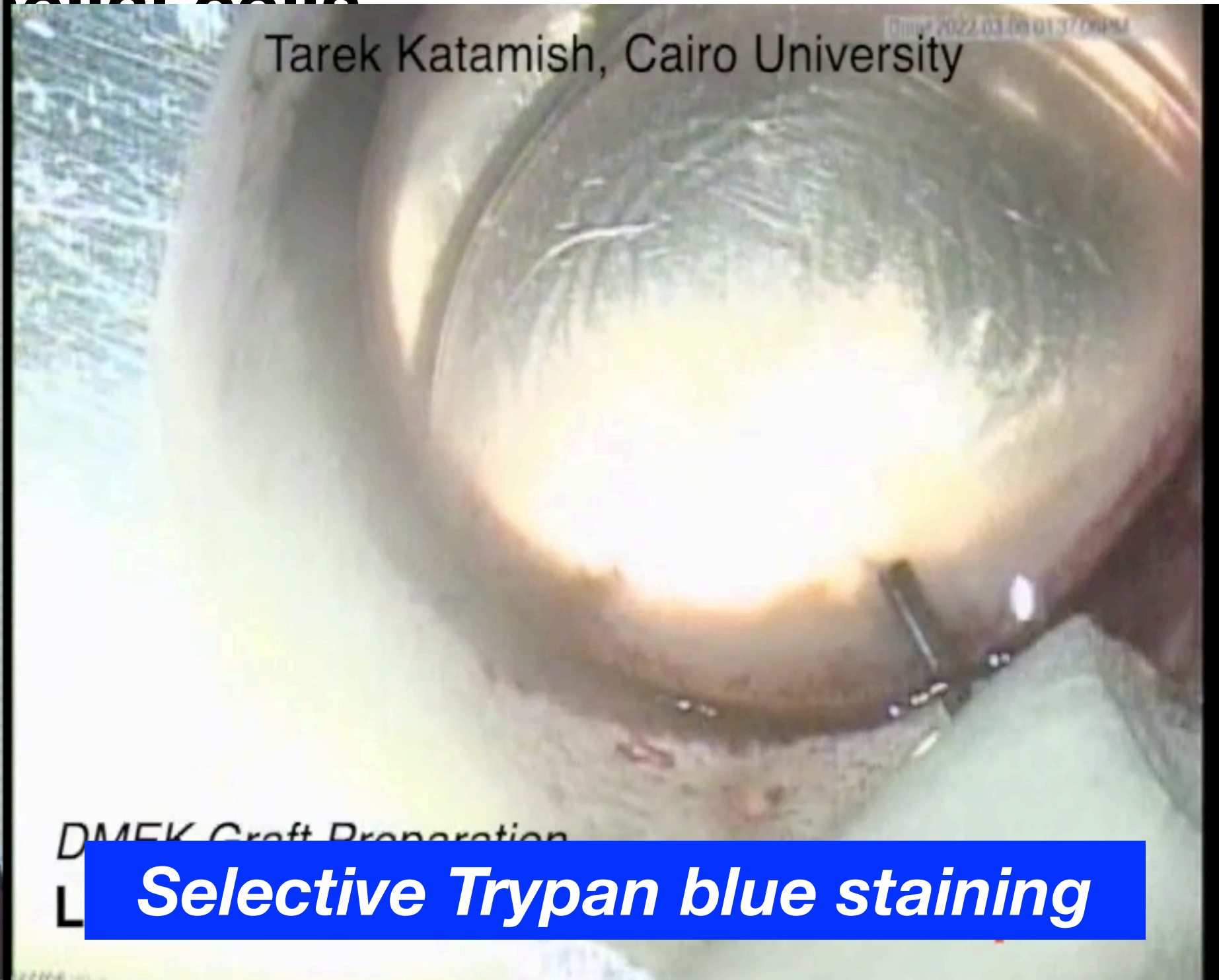
endothelial cells



Non-selective Trypan blue staining



DM



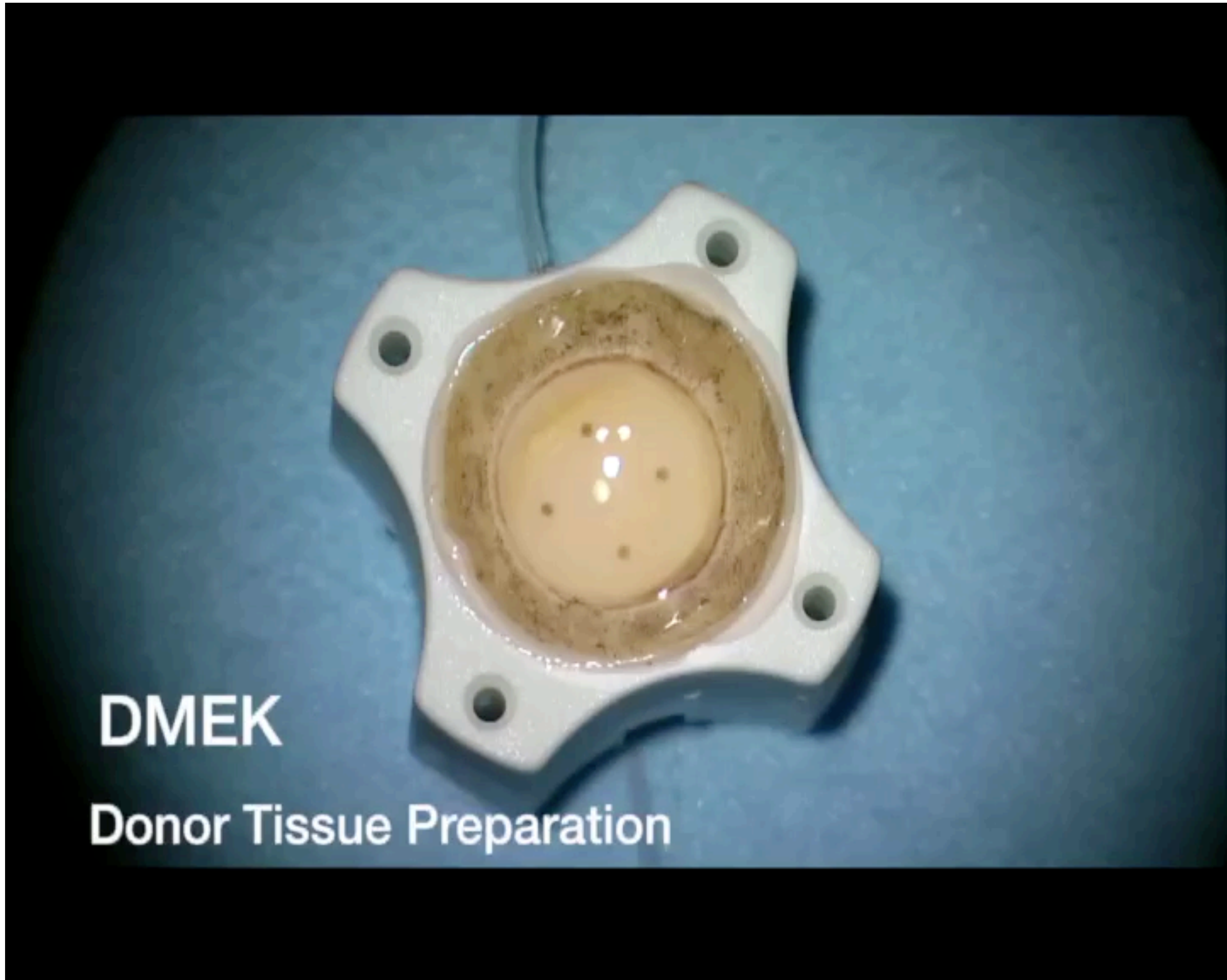
Selective Trypan blue staining

- **Selective staining of endothelial cells (hence avoiding any contact of the staining dye with the vulnerable endothelial cells).**

STANDARD TECHNIQUE

for DMEK graft preparation





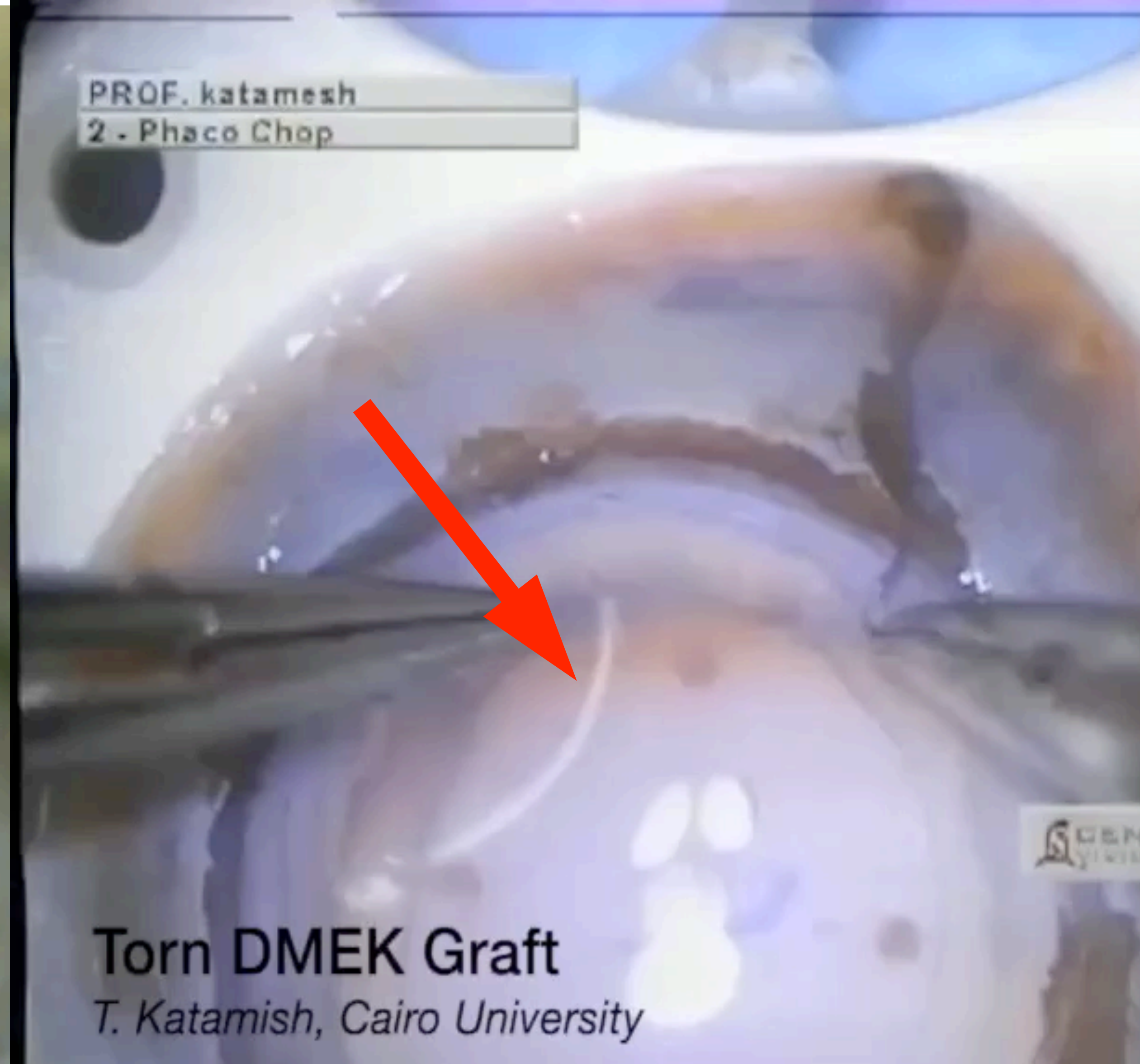
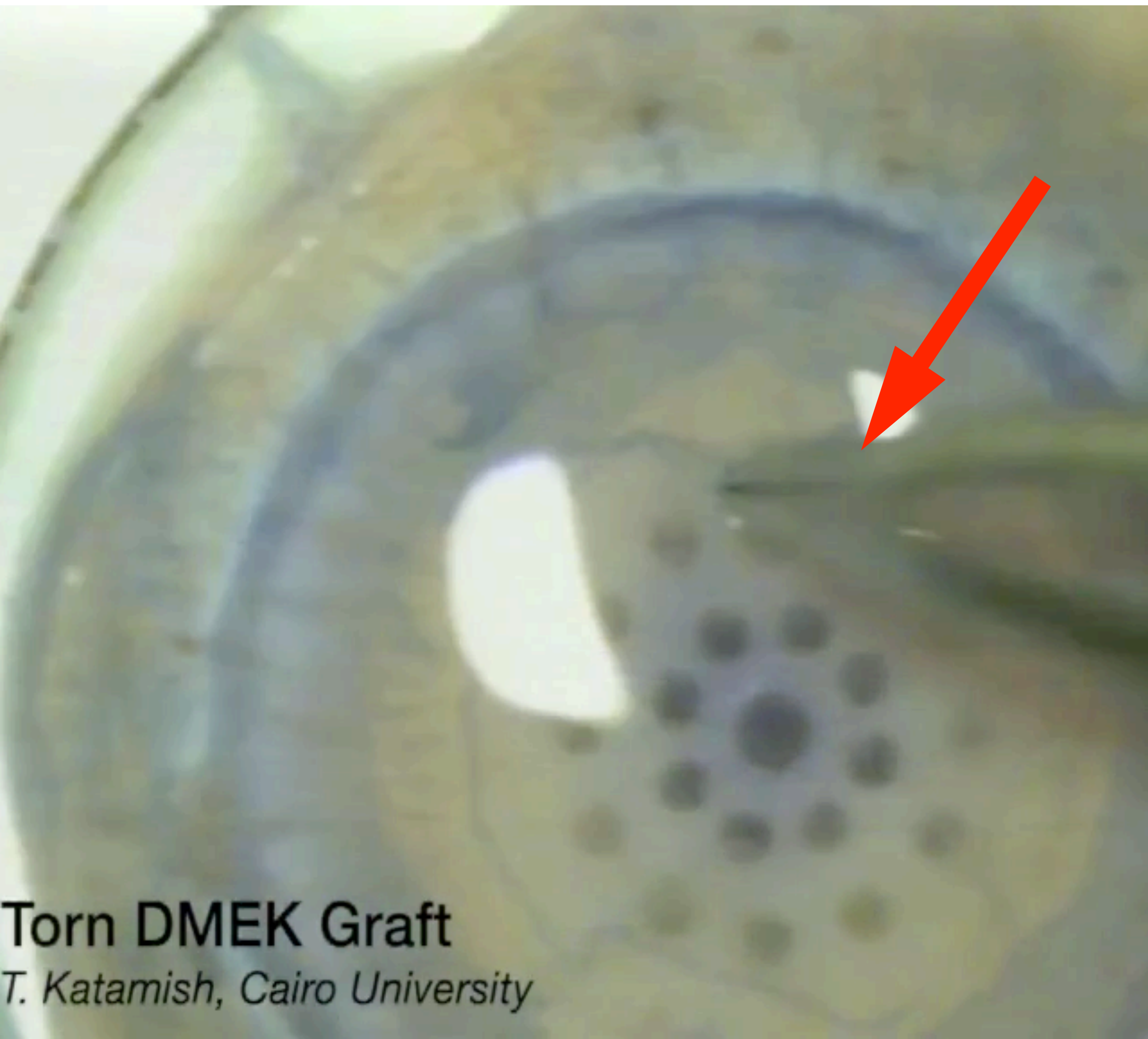
DMEK

Donor Tissue Preparation

DM Tears (Peripheral)



DM Tears (Central)



Large, multiple tears



Torn DMEK Graft

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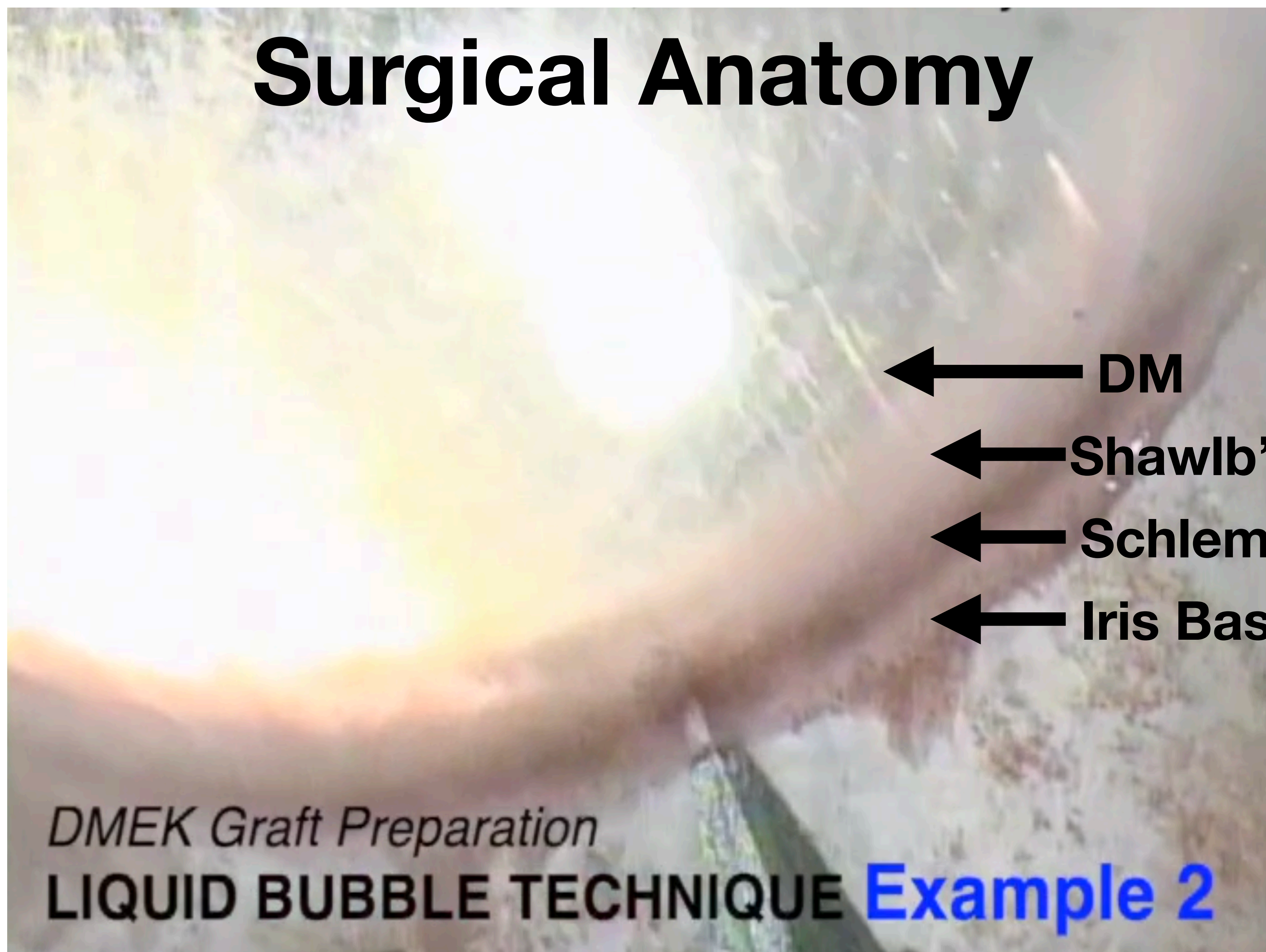


LIQUID-BUBBLE TECHNIQUE

for DMEK graft preparation



Surgical Anatomy



← DM

← Shawlb's Line

← Schlemm's Canal

← Iris Base

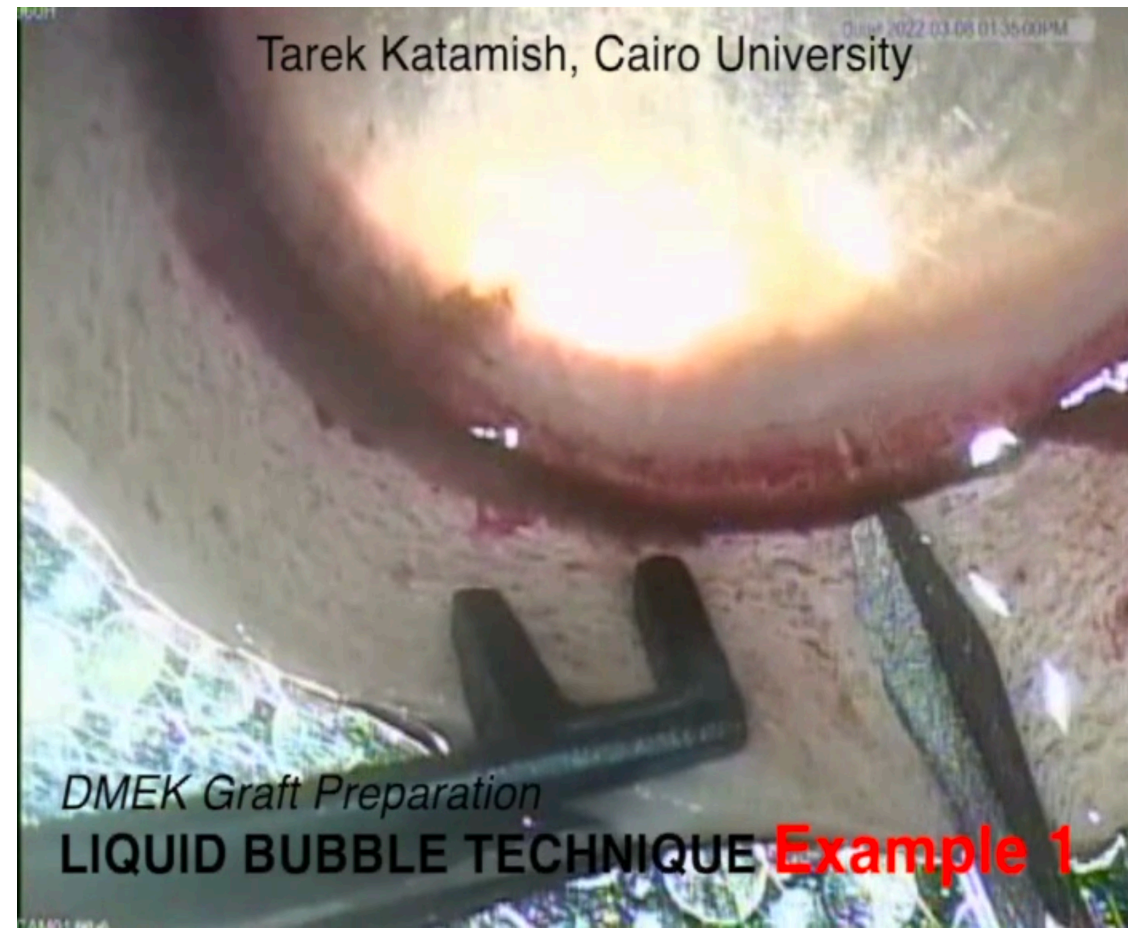
DMEK Graft Preparation

LIQUID BUBBLE TECHNIQUE Example 2

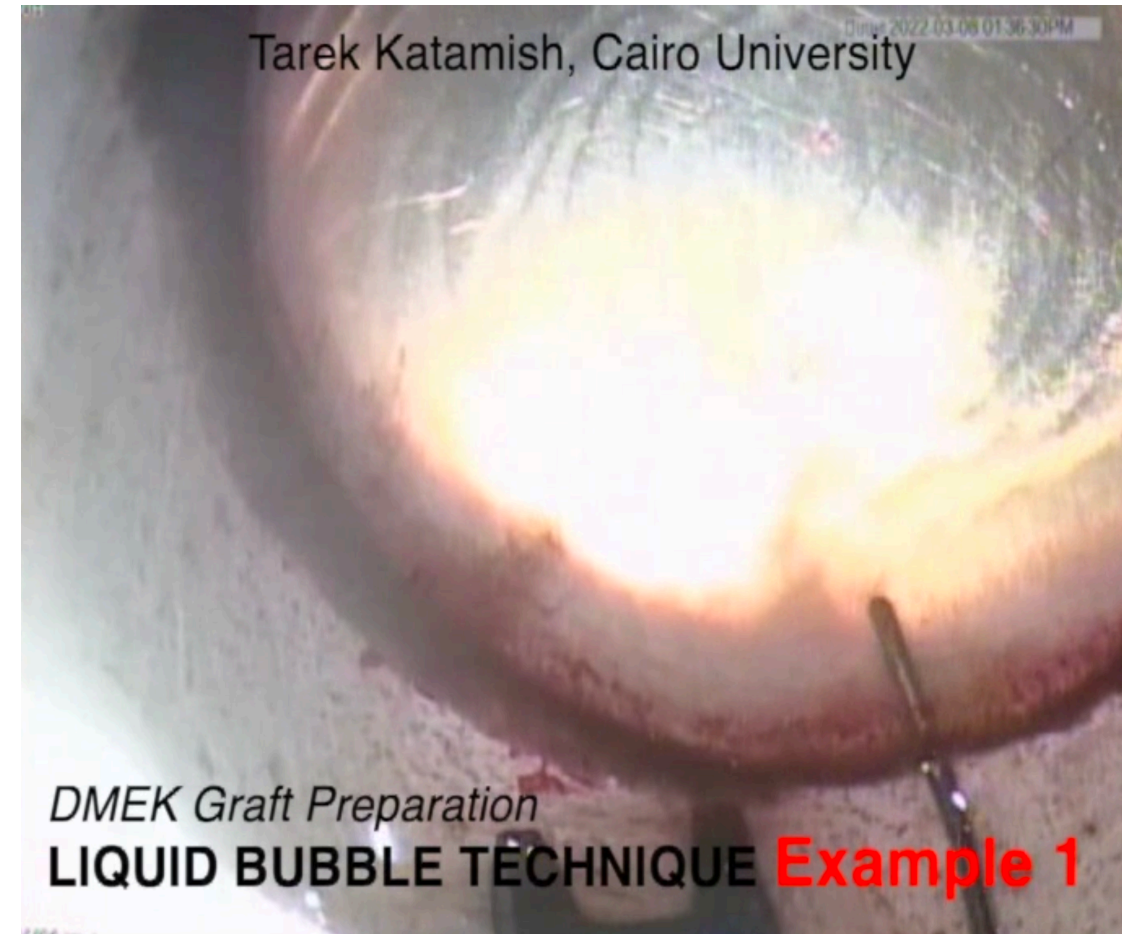
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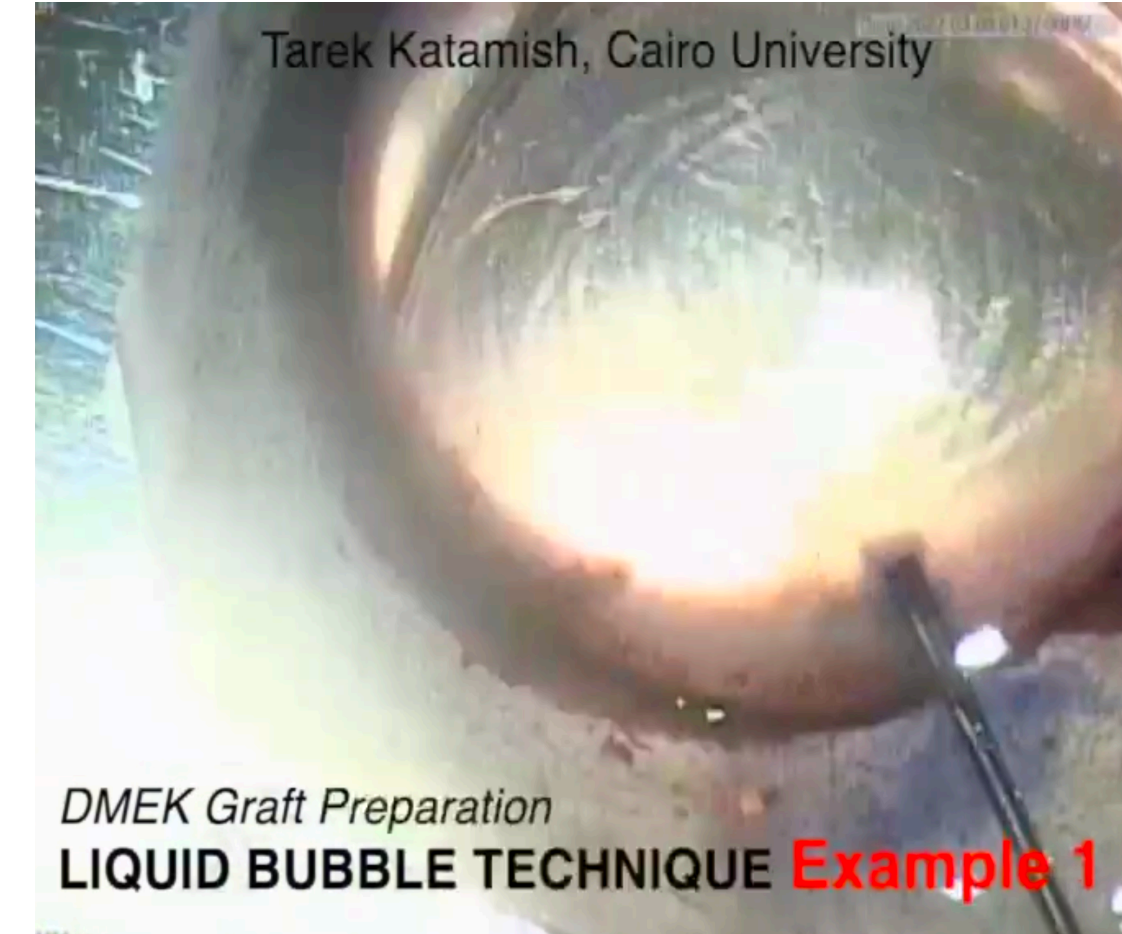
LIQUID-BUBBLE TECHNIQUE



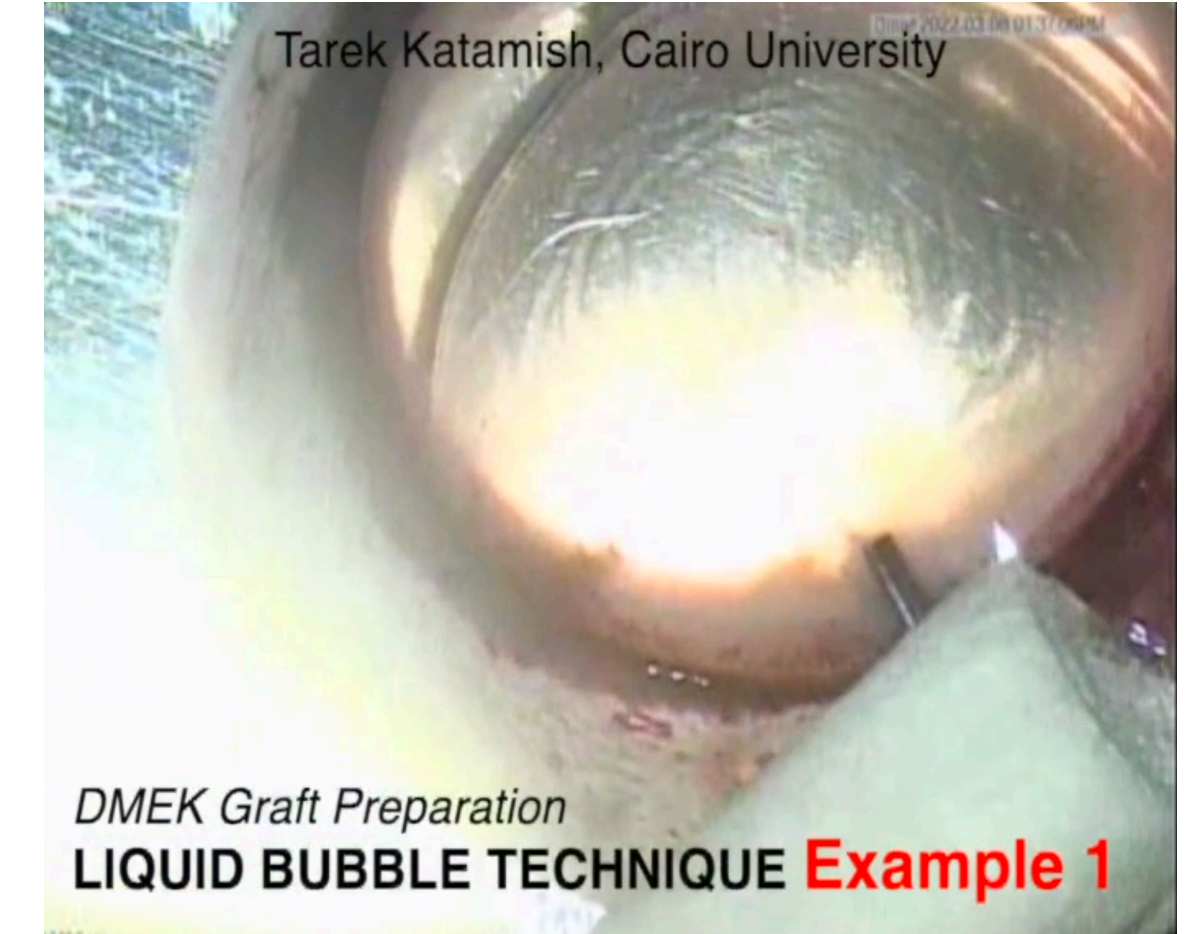
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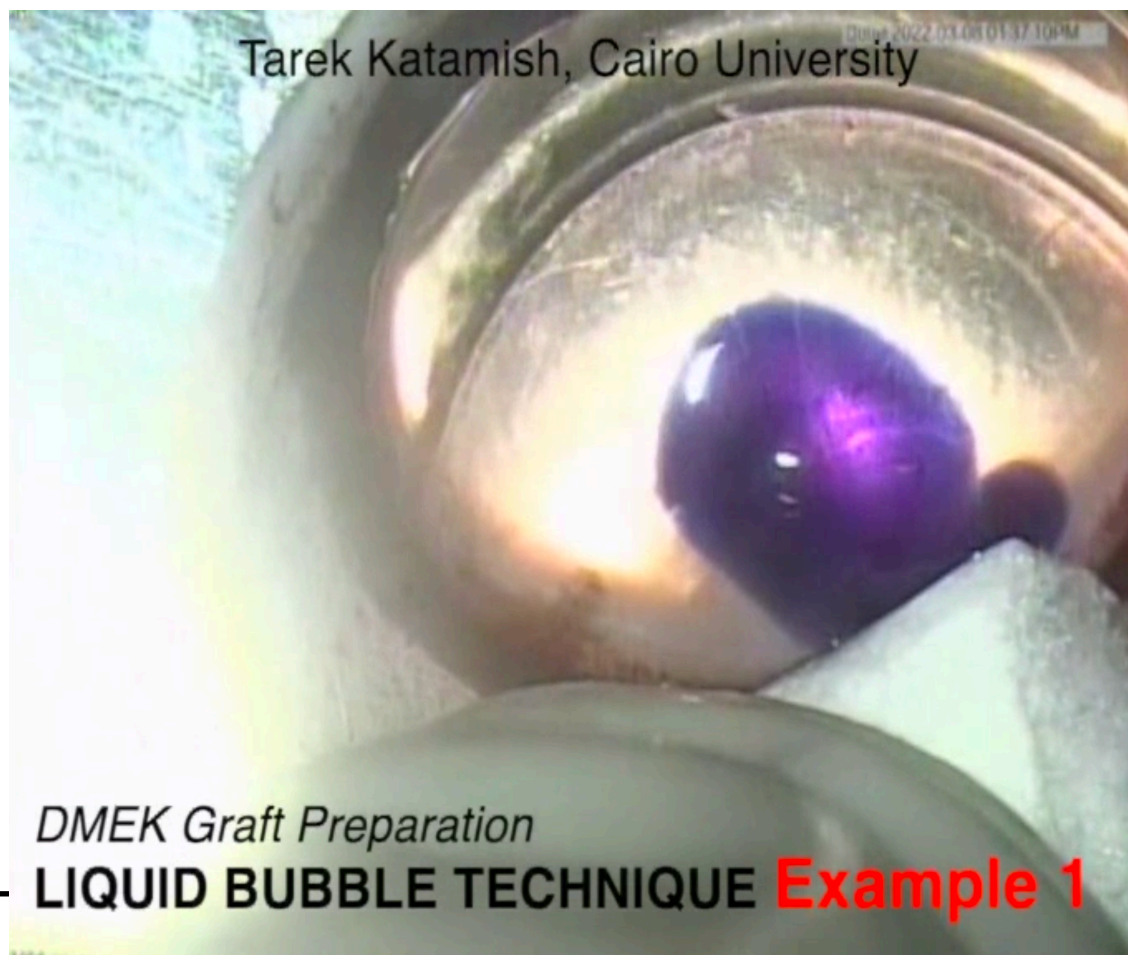
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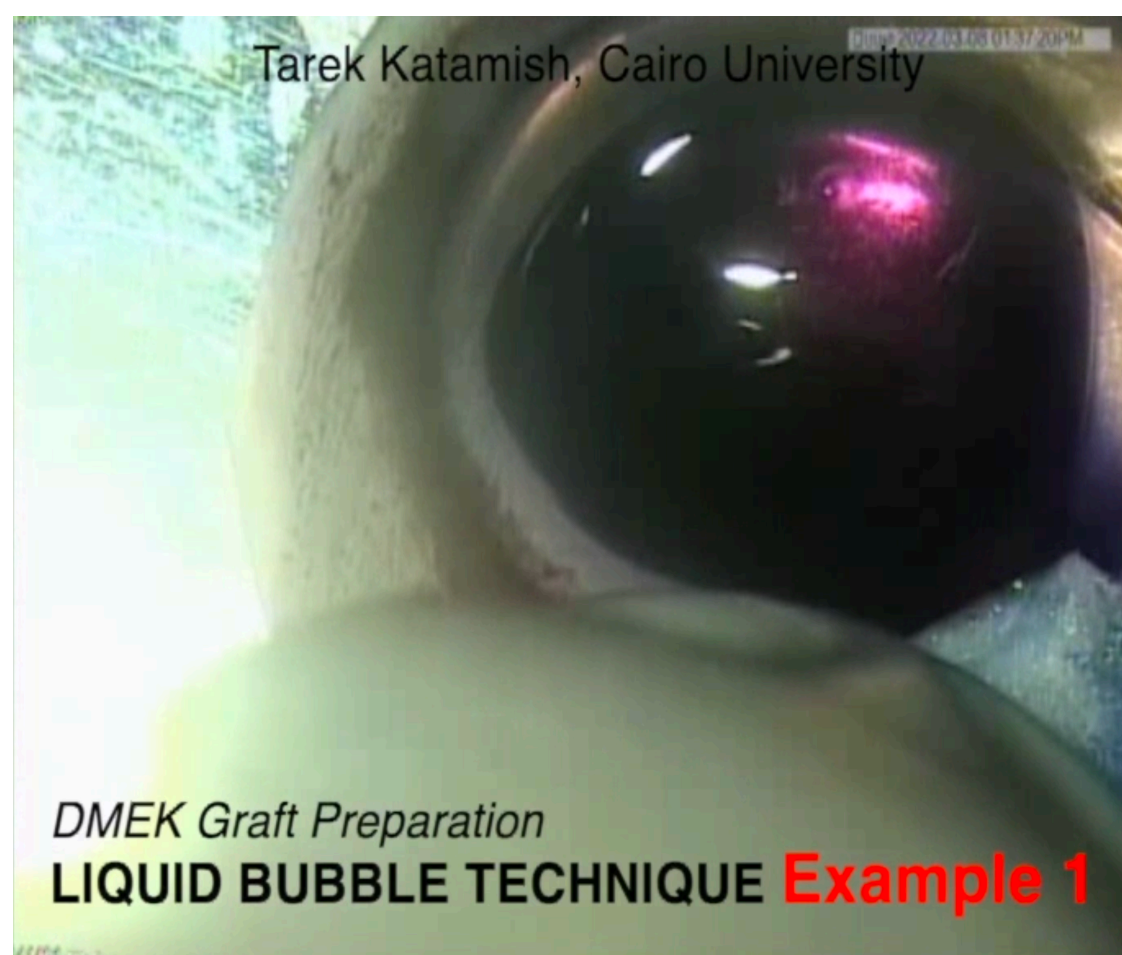
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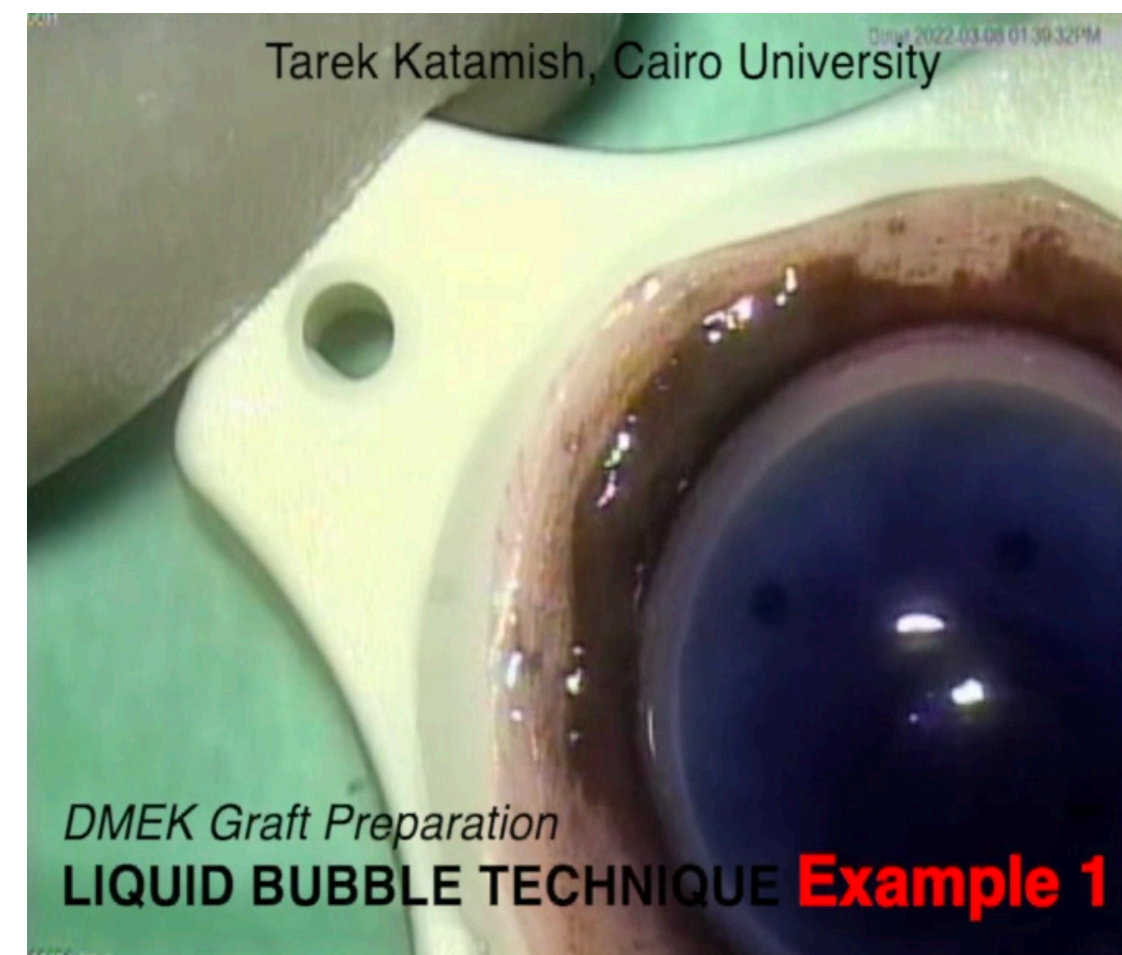
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5



6



7



8

LIQUID-BUBBLE TECHNIQUE

Peter Szurman and Colleagues

Sülzbach, Germany

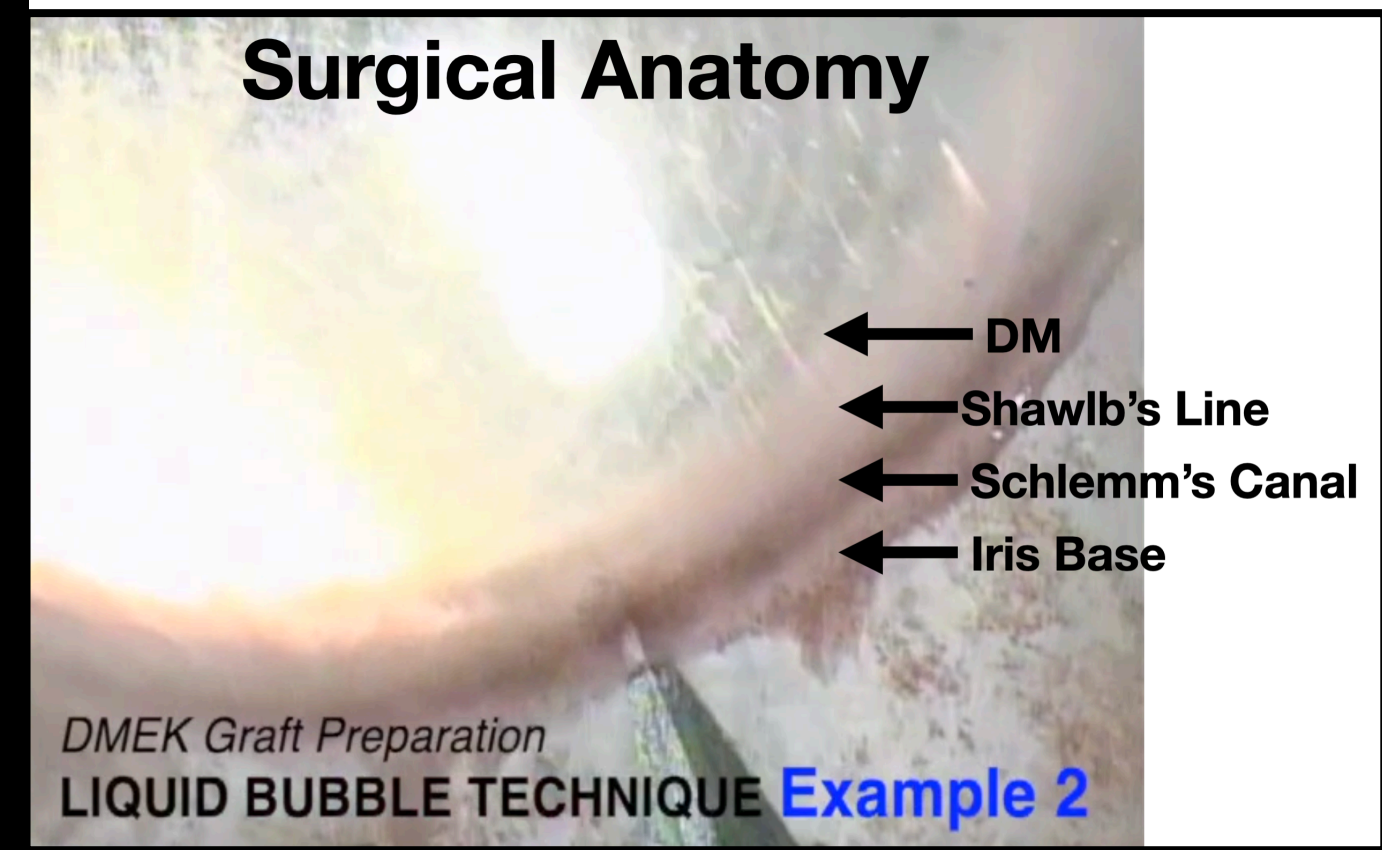


Tarek Katamish, Cairo University

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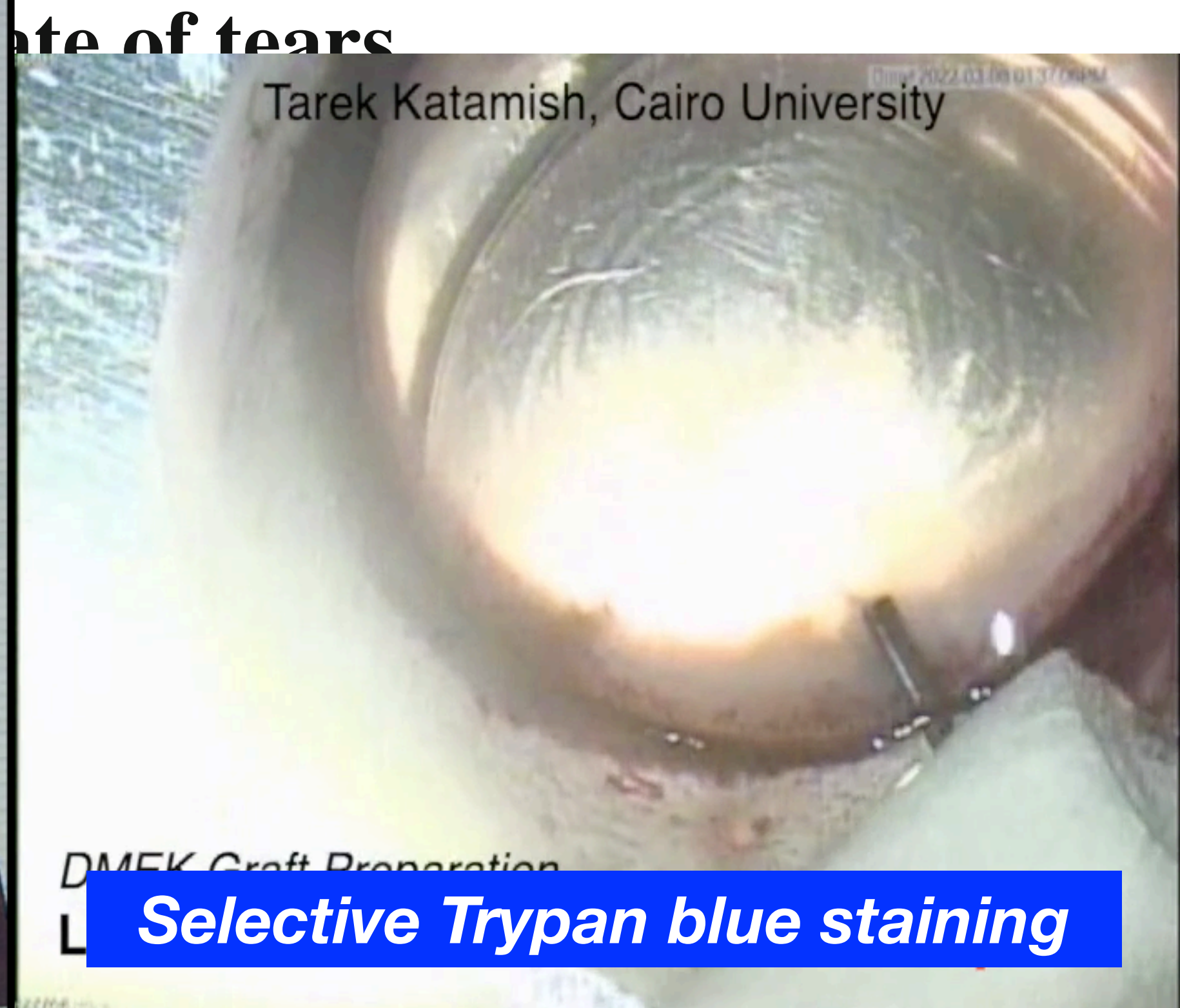
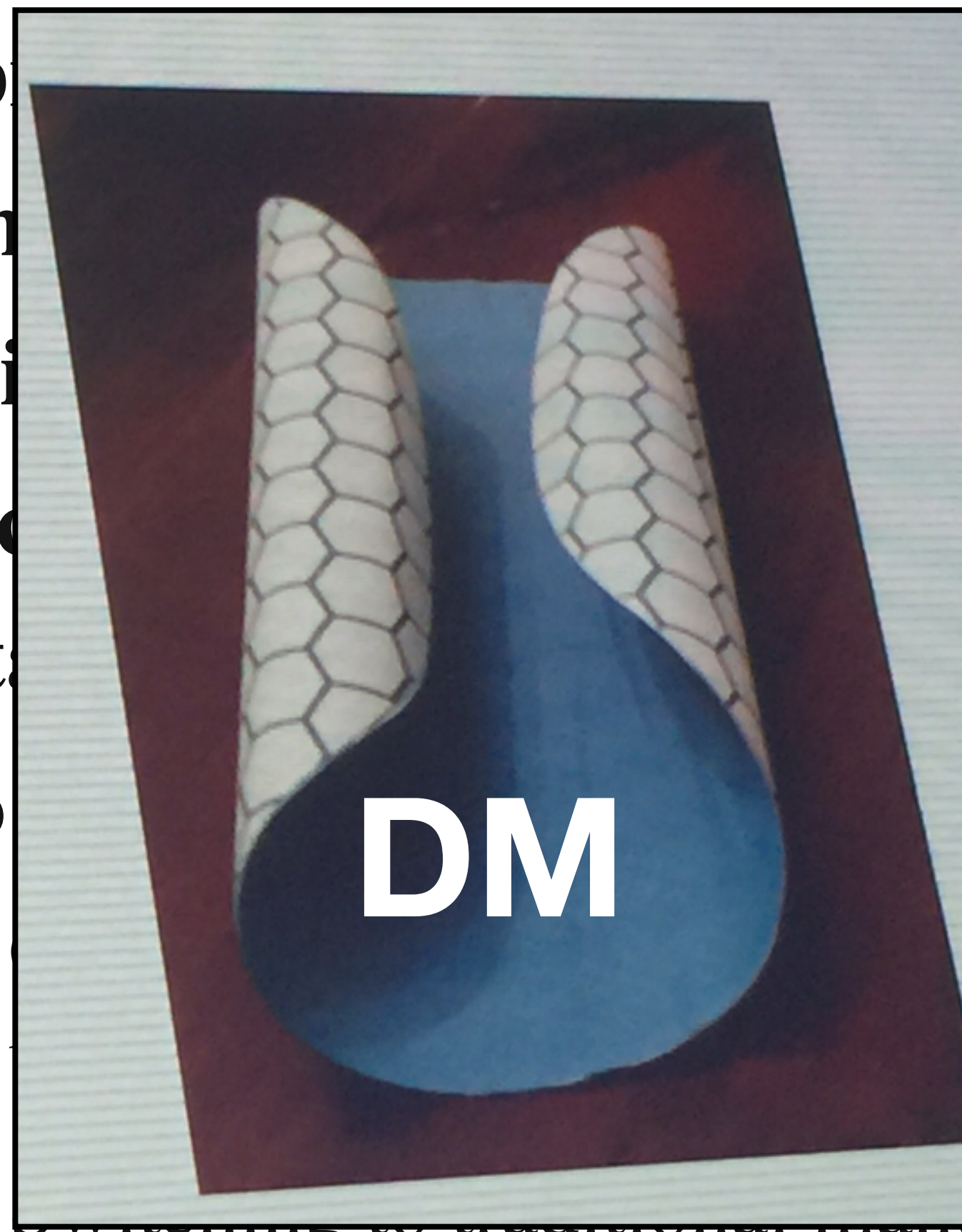


DMEK Graft Preparation
LIQUID BUBBLE TECHNIQUE Example 1



Advantages of Liquid-Bubble Technique

- Rapid
- Comfortable
- Minimal
- Selective
- Contact
- Two



A.

B.

procedure

al dissection is possible at every step of the

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THANK YOU

See you next year

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