Transition to DMEK
Donor Insertion Technique
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Disclosure
Brandon D. Ayres, MD
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I have no financial interest in the subject matter of this talk
• Alcon
• Allergan
• Bausch and Lomb
• Bio-Tissue
• Tear Science
• Nicox

General Steps of DMEK
• Is DMEK worth the time and effort
• Patient selection factors
• Donor preparation

General Steps of DMEK
Donor Insertion
Donor Insertion Technique

- Insertion of the endothelial graft is one of the most challenging steps of the surgery.
- Donor orientation can be difficult.
- Visualization in the anterior chamber.
- Unscrolling of the graft can be difficult...but not impossible.

Using an injector to insert DSAEK graft

Endoserter by Ocular Systems Inc.
Donor Insertion Technique

Using an injector to insert DMEK tissue

Staar ICL injector

Donor Unfolding Technique

Unfolding using air-bubble assist

1 2 3

Donor Insertion Technique

- Unpredictable scrolling of endothelial graft
- Potential for damage or loss of graft in the injector system
- DMEK graft can get damaged or caught by plunger in injector
**Donor Insertion Technique**

Using an glide to insert DSAEK graft

Busin Glide by Moria

**Donor Unfolding Technique**

No air, tap technique

Busin Glide by Moria
Donor Insertion Technique: Glide

- Even with a glide, the orientation of the DMEK tissue is not assured
- It is possible to tear tissue when grabbing with forcep
- Use smooth forceps, no teeth or serrations
- Keep glide wet or DMEK graft will stick and possibly tear

Donor Insertion Technique: Glide

- Tap technique seems to me more reliable than air bubble (in my hands)
- Try and efficiently unfold graft as vision blue will fade

Use of a microscope mounted slit beam may help with orientation of graft

Price in Cornea Feb 2012 described use of hand held slit lamp assistance for DMEK and DALK

Comments