Transition to DMEK

Course Objectives

• Discuss advantages of DMEK over DSAEK
• Review important steps of DMEK including
  • Patient Selection
  • Donor preparation, insertion techniques, and unfolding techniques
  • Postoperative care

Course Objectives

Give surgeons the information they need to transition from:

DSAEK

ASCRS 2015

ASCRS 2015

ASCRS 2015

ASCRS 2015
Course Objectives

- Faculty members will present different aspects of DMEK
- Discuss how it may differ or be similar to DSAEK
- Give examples
- Give opportunity for other faculty members to comment or show examples

Course Faculty

- Residency training at UMDNJ, New Jersey Medical School
- Fellowship in Cornea, External Disease, and Refractive Surgery at Wills Eye Institute, Philadelphia PA
- Cornea Service at Wills Eye Institute, Philadelphia, PA
- Private Practice at Ophthalmic Partners of Pennsylvania

Neda Shamie, MD
Keck School of Medicine of the University of Southern California
Department of Ophthalmology Doheny Eye Institute
Residency at University of California, Irvine
Fellowship in Cornea and Anterior Segment Refractive surgery with Peter McDonnell @ UCI
Associate Director of the Corneal Services at Devers Eye Institute 5 yrs
Transition to DMEK

Course Faculty

Residency at Washington University in St. Louis
Fellowship in Cornea and Refractive Surgery at Devers Eye Institute, Portland OR
Private practice for one year before returning to Devers Eye Institute
Current Interests include all forms of corneal transplantation, anterior segment reconstruction, and refining posterior lamellar surgery including DMEK

Michael Straiko, MD

Transition to DMEK

Course Faculty

Residency at Wills Eye Hospital
Fellowship in Cornea and External Disease and Uveitis at Francis I. Proctor Foundation UCSF
Clinical Instructor at Jules Stein Eye Institute UCLA
Expertise in premium cataract surgery, cornea and external disease, as well as anterior segment reconstruction

Nicole Fram, MD

Is Thinner Really Better

Brandon Ayres, MD

Disclosure

- Alcon
- Allergan
- Bausch and Lomb
- Bio-Tissue
- Tear Science
- Nicox

I have no financial interest in the subject matter of this talk

Brandon D. Ayres, MD
Cornea Service WEI

ASCRS 2014
What are the Greatest Innovations?

Brandon D. Ayres, MD
Cornea Service WEI
ASCRS 2015

The Airplane/Air Travel

The Internet

The Smartphone
What are the Greatest Innovations?

The Airplane/Air Travel
The Internet
The Smartphone
The Cookie

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Posterior Lamellar Keratoplasty

Descemet's Stripping Endothelial Keratoplasty

Descemet's Membrane Endothelial Keratoplasty

D S E K

D M E K
Posterior Lamellar Keratoplasty

Why Endothelial Keratoplasty?

Surgical Video
**Comparison Photo**

- **D S E K**
- **D M E K**

**DMEK**
- Descemet's Membrane Endothelial Keratoplasty (DMEK)
- Layer for layer endothelial replacement
- Surgically much more challenging than DSEK
- May allow for better vision and faster recovery and reduced rejection rate

**Evidence**

- 9-5%
- 2%
- ?

**DMEK**
- DMEK may allow for reduced risk of rejection (0.7%) as compared to DSEK (9%) and PKP (17%) Price (2012)
- Melles in 2011 Reported 75% of patients seeing 20/25 or better at 6 months
- Only 10-20% of DSEK patients will achieve 20/20 vision
DMEK

- Over the next few years DMEK will gain wider acceptance
- At this time a motivated surgeon and a well selected patient DMEK may be a good option with good reliability
- As surgical techniques evolve DMEK will become more prevalent
- Clinical results are “stunning” with DMEK
- If my mom or dad had Fuchs’ dystrophy, I would perform DMEK

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Thinner is Better

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Parent Test

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Comments

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